

# RSP Revista de Saúde Pública

Volume 48  
Special Number  
May 2014



IPLeiria International Health Congress

09<sup>and</sup> 10, MAY 2014

CHALLENGES & INNOVATION  
IN HEALTH

**Abstracts**

[www.rsp.fsp.usp.br](http://www.rsp.fsp.usp.br)

**Honorary Editor**

Oswaldo Paulo Forattini  
*In memoriam*

**Editorial board**

Carlos Augusto Monteiro (President) – Universidade de São Paulo – Brasil  
Rita de Cássia Barradas Barata – Santa Casa de São Paulo – Brasil  
Aluísio Jardim Dornellas de Barros – Universidade Federal de Pelotas – Brasil

**Associated Editors**

Ana Bernarda Ludermit – Universidade Federal de Pernambuco – Brasil  
Chester Luiz Galvão Cesar – Universidade de São Paulo – Brasil  
Daniela Riva Knauth – Universidade Federal do Rio Grande do Sul – Brasil  
Euclides Ayres de Castilho – Universidade de São Paulo – Brasil  
Everardo Duarte Nunes – Universidade Estadual de Campinas – Brasil  
Frida Marina Fischer – Universidade de São Paulo – Brasil  
Ivan França Júnior – Universidade de São Paulo – Brasil  
João Luiz Bastos – Universidade Federal de Santa Catarina – Brasil  
José Maria Pacheco de Souza – Universidade de São Paulo – Brasil  
Marly Augusto Cardoso – Universidade de São Paulo – Brasil  
Rosely Sichieri – Universidade do Estado do Rio de Janeiro – Brasil  
Oswaldo Yoshimi Tanaka – Universidade de São Paulo – Brasil  
Vilma Sousa Santana – Universidade Federal da Bahia – Brasil  
Volney de Magalhães Câmara – Universidade Federal do Rio de Janeiro – Brasil

**Editor of Comments**

Eliseu Alves Waldman – Universidade de São Paulo – Brasil

**Editor of Reviews**

José Leopoldo Ferreira Antunes – Universidade de São Paulo – Brasil

**Executive Editor**

Maria Teresinha Dias de Andrade – Universidade de São Paulo – Brasil

**Editorial Advisory Board**

A. Diez-Roux – University of Michigan – USA  
C. Borrell – Agência de Salut Pública – Espanha  
L. Rodrigues – London School of Hygiene and Tropical Medicine – UK  
M. P. Curado – International Agency for Research on Cancer – France  
A. Reingold – University of California at Berkeley – USA  
C. Victora – Universidade Federal de Pelotas – Brasil  
N. Almeida Filho – Universidade Federal da Bahia – Brasil  
M. F. Lima Costa – Fundação Oswaldo Cruz – Brasil  
M. I. Schmidt – Universidade Federal do Rio Grande do Sul – Brasil

Created in 1967, *Revista de Saúde Pública (Journal of Public Health)* is a publication of the Faculdade de Saúde Pública of Universidade de São Paulo. An inter- and multidisciplinary journal open to peer-reviewed research contributions from both national and international scientific communities. Its mission is to publish and divulge scientific production on subjects of relevance to Public Health.

Published bimonthly, in February, April, June, August, October and December.

### INDEXES

All articles are also published in English language.

The on-line abstracting and indexing services that cover the Journal are:

Thomson Scientific (ISI): Web of Science, Current Contents/Social Behavioral Science, Social Science Citation Index; MEDLINE; Biosis; Global Health; EMBASE; HEALSAFE; Health Star; PubMed; POPLINE; Wildlife Worldwide (NISC); Scopus; SciELO; LILACS; PERIODICA.

### FULL TEXTS

Full texts of the complete collection of the articles, from volume 1, number 1 (1967), are available for free in PDF format through the Journal's web site:

<http://www.rsp.fsp.usp.br>

<b>Contact</b>	<b>Revista de Saúde Pública</b> Faculdade de Saúde Pública da Universidade de São Paulo Av. Doutor Arnaldo, 715 01246-904 - São Paulo, SP - Brasil	Fax/Phone: (55 11) 3061-7985 / 3061-7135 E-mail: <a href="mailto:revsp@usp.br">revsp@usp.br</a> <b>Web site</b> <a href="http://www.rsp.fsp.usp.br">http://www.rsp.fsp.usp.br</a> <a href="http://www.scielo.br/rsp">http://www.scielo.br/rsp</a>
<b>Administrative support</b>	Biblioteca/CIR: Centro de Informação e Referência em Saúde Pública da FSP/USP	
<b>Reviewer</b>	Odinéia C. Gregio	
<b>Secretary</b>	Maria do Carmo Silva de Oliveira	
<b>Editorial and DTP</b>	<b>CABOVERDE</b> <a href="http://www.caboverde.com.br">www.caboverde.com.br</a>	

© Copyright – Faculdade de Saúde Pública da Universidade de São Paulo.

All rights reserved.

# RSP

# Revista de Saúde Pública

**Volume 48**  
**Special number**  
**May 2014**



IPLeiria International Health Congress

09<sup>and</sup> 10, MAY 2014

CHALLENGES & INNOVATION  
IN HEALTH

## Abstracts

Congress Organization:



Financial Support:

**FCT** Fundação para a Ciência e a Tecnologia  
MINISTÉRIO DA EDUCAÇÃO E CIÊNCIA

---

## WELCOME LETTER

---

Dear participant,

The Health Research Unit (UIS) of the School of Health Sciences of the Polytechnic Institute of Leiria (ESSLei-IPL) is extremely pleased to welcome you to the 2<sup>nd</sup> IPLeiria International Health Congress, which is once again held at the Polytechnic Institute of Leiria School Campus. Conveniently located at the heart of Portugal, Leiria holds the outstanding magic of an historical city, which also presents a gracious and sociable modernity that can be easily stated by the friendliness of the people, the tasty gastronomy and the joyous environment.

The 2<sup>nd</sup> IPLeiria International Health Congress, held under the theme of “Challenges & Innovation in Health” offers the delegates and participants a program of excellence that comprises plenary sessions, specialized short-communications and poster sessions, along with workshops on hot and current issues on health. This year’s program features more than 600 communications, divided in several symposia under the subjects of: RD&T in Health; Health Literacy; e-Health and e-Therapy; Quality of Life and Well-Being; Health Interventions in the Community; Measurement and Decision Making; Ethnicity and Health; Technological Platforms for Communication and Simulated Practice for Clinical Education.

Health is adaptability, and science is permanently challenged to efficiently promote life, by means of research and innovation. Therefore, under the theme of “Living with chronic disease” we intend to provide a reflexion on the practices of health care given to the patient with chronic disease. Also, new perspectives and approaches will be debated in order to promote a more active and sustainable aging, that brings actual gains in health and walks hand-in-hand with an improved living. Regarding e-Health, we will get to know and discuss some of the new methodologies that have been put forward to more adequately respond to the various and specific needs of the individuals, guarantying more quality of life among the populations.

Hence, during two days in May, a month also known by the Portuguese as the month of Mary, chosen by the pilgrims to annually visit the Sanctuary of Fatima/Leiria, the region is honored to simultaneously receive in the city of Leiria, health professionals and researchers from all continents to participate in this thrilling Scientific Meeting. Participants can also enjoy a relaxing moment of gathering and fruitful discussions during a dinner at the medieval castle of Leiria (a Romanesque-Gothic castle built during the first dynasty of Portuguese kings). Furthermore, we strongly recommended you to stay until the end, in order to benefit from all the activities enclosed in the congress program, and to take part in the awards ceremony!

The Health Research Unit is deeply thanked to the President of the Polytechnic Institute of Leiria and to all the operative units that have actively collaborated and worked towards the organization of the meeting. Likewise, UIS is grateful to the Mayor and board of the city council of Leiria, as well as, to the tourism region of Leiria-Fátima, and to all the institutions and companies that have sponsored and supported the event. We also want to show our appreciation to the board of directors and editors of “Revista de Saúde Pública” and to the untiring and committed members of both the Scientific and of the Organizing Committee.

Graciously we intend to receive you in the city of Leiria, in what promises to be a fantastic scientific meeting surrounded by the unique beauty and history of the coastline and region of Leiria, Portugal.

**Maria dos Anjos Coelho Rodrigues Dixe**  
**Congress President and**  
**Head Coordinator of the Health Research Unit of ESSLei-IPL**

---

## **PROGRAM**

---

May 09, 2014 (Friday)

### **Morning**

---

#### **9h00 – Opening session**

*Nuno Mangas, President of the Polytechnic Institute of Leiria (IPL)*

*José Carlos Gomes, Director of the Superior School of Health of Leiria (ESSLei)*

*Maria dos Anjos Dixe, Head Coordinator of UIS/ESSLei-IPL*

#### **09h30 – Session 1 -Theme: Chronic diseases**

##### **“Living with chronic disease”**

*Antonio Torres de Oliveira, Agencia de Calidad Sanitaria de Andalucía*

*António Bugalho de Almeida, Fac. Medicina, Univ. Lisboa*

*Ester Gama, Paediatric Service, CHLP e UIS/ESSLei-IPL*

*Chairwoman: Maria Pedro Sucena Guarino*

#### **11h00 – Coffee break**

#### **11h30 – Poster** (Session I-1, J-1, L-1)

#### **11h30 – Free communications** (Session: A-1, B-1, C-1, D-1, E-1, F-1, G-1, H-1)

Synchronous sessions under the following themes:

- RD&T– Research, Development & Technology in Health
- Health literacy
- e-Health and e-Therapy
- Quality of life and well-being
- Health Interventions in the community
- Measurement and decision making
- Ethnicity and Health
- Technological platforms for communication building and sharing
- Simulated practice for clinical education

### **Afternoon**

---

#### **14h00 – Session 2 – Theme: Demographic changes in the population/Ageing**

##### **“Ageing at home”**

*Fernando Alonso López, Universidad Autónoma de Barcelona*

*Cândida Soares e Sousa Fialho, Catholic University of Portugal (CUP)*

*Baltazar Ricardo Monteiro, UIS/ESSLei-IPL*

*Chaiman: José Alves Guerreiro*

#### **15h30 – Coffee break**

#### **16h00 – Poster** (Session I-2, J-2, L-2)

#### **16h00 – Free communications** (Session: A-2, B-2, C-2, D-2, E-2, F-2, G-2, H-2)

#### **17h30 – Coffee break**

#### **18h00 – Poster** (Session I-3, J-3, L-3)

#### **18h00 – Free communications** (Session: A-3, B-3, C-3, D-3, E-3, F-3, G-3, H-3)

Synchronous sessions under the following themes:

- RD&T– Research, Development & Technology in Health
- Health literacy
- e-Health and e-Therapy
- Quality of life and well-being
- Health Interventions in the community
- Measurement and decision making
- Ethnicity and Health
- Technological platforms for communication building and sharing
- Simulated practice for clinical education

#### **20h30 – Congress Dinner**

May 10, 2014 (Saturday)

## Morning

---

### 09h00 – Session 3 - theme: e-health

#### “E-health in response to the health challenges”

*Gisele Roesems-Kerremans, Unit for Health and Well-being, EC*

*Josep Maria Monguet, Universitat Politècnica de Catalunya (UPC)*

*Pedro Miguel Sousa, UIS/ESSLei-IPL*

*Chairman: Pedro Soares Gaspar*

### 11h00 – Coffee break

**11h00 - Poster** (Session I-4, J-4, L-4, M-4)

**11h00 – Free communications** (Session: A-4, B-4, C-4, D-4, E-4, F-4, G-4, H-4)

Synchronous sessions under the following themes:

- RD&T – Research, Development & Technology in Health
- Health literacy
- e-Health and e-Therapy
- Quality of life and well-being
- Health Interventions in the community
- Measurement and decision making
- Ethnicity and Health
- Technological platforms for communication building and sharing
- Simulated practice for clinical education

## Afternoon

---

**14h00 - Poster** (Session I-5, J-5, L-5)

**14h00 – Free communications** (Session: A-5, B-5, C-5, D-5, E-5, F-5, G-5, H-5)

Synchronous sessions under the following themes:

- RD&T – Research, Development & Technology in Health
- Health literacy
- e-Health and e-Therapy
- Quality of life and well-being
- Health Interventions in the community
- Measurement and decision making
- Ethnicity and Health
- Technological platforms for communication building and sharing
- Simulated practice for clinical education

### 15h30 – Coffee break

**16h00 - Poster** (Session I-6, J-6, L-6)

**16h00 – Free communications** (Session: A-6, B-6, C-6, D-6, E-6, F-6, G-6)

Synchronous sessions under the following themes:

- RD&T – Research, Development & Technology in Health
- Health literacy
- e-Health and e-Therapy
- Quality of life and well-being
- Health Interventions in the community
- Measurement and decision making
- Ethnicity and Health
- Technological platforms for communication building and sharing
- Simulated practice for clinical education

### Satellite courses: 14h – 18h (limited vacancies)

- Central auditory processing
- Neuromuscular Bands
- Sensory Integration
- Communicating Science
- Looking for your inner Clown (Session A – 14h-16h/ Session B – 16h–18h)

**19h00 – Closing session and awards ceremony**

---

## 2<sup>nd</sup> IPLEIRIA INTERNACIONAL HEALTH CONGRESS

---

### CHALLENGES & INNOVATION IN HEALTH

#### SCIENTIFIC COMMITTEE

President: **Maria dos Anjos Dixe** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

**Alfredo Bruto da Costa** (Comissão Nacional Justiça e Paz)

**Angela Kydd** (Universidade de West Scotland, Reino Unido)

**António Bugalho de Almeida** (Serviço de Pneumologia – Faculdade de Medicina da Universidade de Lisboa)

**Antonio Torres Olivera** (Agencia da Qualidade Sanitária de Andaluzia, Espanha)

**Baltazar Ricardo Monteiro** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

**Elísio Pinto** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

**Etelvina Lima** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

**Helena Catarino** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

**José Alves Guerreiro** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

**José Carlos Gomes** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

**Josep Monguet** (Universidade Politécnica da Catalunha, Espanha)

**Kristine Sorensen** (Universidade de Maastricht, Holanda)

**Maria Amália Botelho** (Departamento de Medicina – Faculdade de Ciências Médicas - NOVA)

**Maria Dulce Gomes** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

**Maria Pedro Guarino** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

**Maria Saudade Lopes** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

**Patricia Rosado Pinto** (Departamento de Educação Médica – Faculdade de Ciências Médicas - NOVA)

**Paulo Moreira** (Escola Nacional de Saúde Pública)

**Pedro João Soares Gaspar** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

**Samantha Shann** (World Federation of Occupational Therapists)

**Sara Simões Dias** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

#### ORGANIZING COMMITTEE (Escola Superior de Saúde – Instituto Politécnico de Leiria)

President: **Jaime Moreira Ribeiro**

Vice-President: **Catarina Tomás**

**Ana Querido**

**Carla João**

**Carolina Henriques**

**Catarina Lobão**

**Cláudia Vala**

**Daniela Vaz**

**Débora Franco**

**Eva Guilherme**

**Filipa Soares**

**João Frade**

**José Coelho**

**Luis Carrão**

**Pedro Sousa**

**Sandra Amado**

**Sílvia Gonzaga**

**Sónia Pós Mina**

**Sónia Ramalho**

**Susana Custódio**



**EDITORS**

Editor-in-chief: **Jaime Moreira Ribeiro**

**Daniela Vaz**  
**Maria dos Anjos Dixe**  
**Maria Pedro Guarino**  
**Pedro Sousa**

**REVIEWERS**

**Ana Isabel Fernandes Querido** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Angela Kydd** (Universidade de West Scotland, Reino Unido)  
**António Bugalho de Almeida** (Serviço de Pneumologia – Faculdade de Medicina da Universidade de Lisboa)  
**Antonio Torres Olivera** (Agencia da Qualidade Sanitária de Andaluzia, Espanha)  
**Baltazar Ricardo Monteiro** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Carolina Miguel Graça Henriques** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Catarina Lobão** (Escola Superior de Saúde – Instituto Politécnico de Leiria)  
**Daniela Vaz** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Etelvina Lima** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Helena Catarino** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Jaime Moreira Ribeiro** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**José Alves Guerreiro** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**José Carlos Quesma Coelho** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Josep Monguet** (Universidade Politécnica da Catalunha, Espanha)  
**Kristine Sorensen** (Universidade de Maastricht, Holanda)  
**Maria dos Anjos Coelho Dixe** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Maria Dulce Gomes** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Maria Pedro Guarino** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Maria Saudade Lopes** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Patricia Rosado Pinto** (Departamento de Educação Médica – Faculdade de Ciências Médicas - NOVA)  
**Paulo Moreira** (Escola Nacional de Saúde Pública)  
**Pedro João Soares Gaspar** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Sandra Amado** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Sílvia Gonzaga** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Sónia Pós de Mina** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Sónia Ramalho** (Escola Superior de Saúde- Instituto Politécnico de Leiria)  
**Susana Custódio** (Escola Superior de Saúde- Instituto Politécnico de Leiria)

# RSP Revista de Saúde Pública

## CONTENTS

### E-HEALTH AND E-THERAPY

001 Trust and Credibility in e-Health Interface.....	24
002 HAPPY: a Cancer Prevention Mobile App supported by a Qualitative Study .....	24
003 How to adress the prescripion and selection of AAL systems & services for end users.....	25
004 E-health Web based technologies patient adoption.....	25
005 VAST Autismo – innovation and technology in Speech and Language Therapy.....	26
006 From Technology to Health: a risk-benefit analysis of the Mobile Healthcare Applications.....	26
007 Project “Good citizen with ingenuity and education” - prevention and intervention in response to bullying at school .....	27
008 Study of the relationship between sleep quality and bullying behaviors in school age children.....	27
009 Effectiveness of e-health intervention programs in overweight adolescents: systematic review .....	28
010 Who benefits from an e-therapeutic weight management program? .....	28
011 Validation of a Decision Support System in Bariatric Surgery .....	29
012 CareForMe: An application for iOS devices for helping in preventing pressure ulcers.....	29
013 New Therapeutical Systems for Multiple Sclerosis: Patient Perception and Challenges .....	30

### ETHNICITY AND HEALTH

014 Epidemiological aspects of tuberculosis in Brazilian northeastern.....	31
015 Immigrants’ care: from ethnocentrism to ethnorrelativism in nurses.....	31
016 Occupational therapy from an intercultural perspective: a challenge and an opportunity .....	32
017 Psychosocial Correlates of Physical Activity among children and adolescences with spina bifida .....	33

### HEALTH INTERVENTIONS IN THE COMMUNITY

018 Training and Education in health: a Brazilian inter-institutional research for the SUS.....	33
019 The User of Psychoactive Substance to the emergency service: a systematic review.....	34
020 Weight status and jump proficiency: differences between healthy weight and obese children.....	34
021 Does weight status influence the ball throwing skill in children? .....	35
022 Effect of acute caffeine administration on glucose homeostasis and blood pressure .....	35
023 The practice of ethics: report of the experience of students in the professional master’s program.....	36
024 Disposal of unused or unwanted pharmaceuticals as a source of environmental pollution.....	36
025 Evaluation of pharmaceutical experience in dispensing of ophthalmic products in Portugal .....	37
026 An evidenced-based systematic review about the dual-task intervention in decreasing falls on the elderly...37	
027 An evidence-based systematic review on the effectiveness of balance training in decreasing the number of falls in healthy elderly .....	38
028 The importance of the physiotherapy on the treatment of subacromial impingement syndrome: an evidenced base systematic review.....	38
029 Asthenopic symptoms and binocular vision of professional users of optical microscope.....	39
030 Analysis of Binocular Vision on Hospital Administrative Employees computer users .....	39
031 Nursing intervention program for family caregivers.....	40
032 Heath education groups: the need for change.....	40

033	Health and Physical Activity in Community-Dwelling Older Adults.....	41
034	Aging, Physical Activity and Self Perception of Physical Discomfort Manifestations .....	41
035	The importance of nutritional counseling in renal patients.....	42
036	Health Promotion (HP) – ESSS/UMIS community intervention .....	42
037	Diabetes Type 2 and risk of fall: functionality assessment and risk group in diabetic foot.....	43
038	Risk and vulnerability markers of breast cancer in women with HIV/AIDS.....	43
039	Influence of self-efficacy in an educational and exercise program for chronic low back pain.....	44
040	Effects of exercise training on fall prevention in elderly. A randomized controlled trial .....	44
041	Isometric endurance of the spine extensor muscles after applying Global Postural Reeducation .....	45
042	Critical period in preschool children for the development of overweight .....	45
043	Education of nursing students in work with vulnerable groups: Female Prisoner .....	46
044	Body practices and the Amplified Clinic: learning about health education in the Brazilian Health System (SUS) .....	46
045	Impact of a family-based pulmonary rehabilitation program: an exploratory study.....	47
046	Effects of a respiratory physiotherapy session in patients with Lower Respiratory Tract Infections .....	47
047	Audiologic changes in Pilots Aviators.....	48
048	A clinical education project for people with chronic obstructive pulmonary disease .....	48
049	The Perceived Health of Cerebral Palsy People Who Are Ageing .....	49
050	Does 6-minutes walk test predict functional capacity in elderly people? A pilot-study .....	49
051	The program “More Doctors”: the impact on health access in Rio Grande do Sul analysis.....	50
052	Palliative care at home: a right for all, an integrative review.....	50
053	Intervention in adults on a mental health care center – A clinical education project.....	51
054	Com(viver) Mais – Project for Community intervention in the elderly population in Azores .....	51
055	The influence of the ingestion of alcohol on sleep quality.....	52
056	Are skin lesions correctly classified? .....	52
057	Nursing home visit impact in puerperium: systematic review .....	53
058	Qualitative assessment of cardiovascular risk in a community pharmacy in the Algarve.....	53
059	Rehabilitation and Subjectivity: Cartography of a mutilated body by Leprosy.....	54
060	Behaviours and sexual attitudes in higher education students .....	54
061	Physical health and activities of daily living in oldest old community-dwelling assessment .....	55
062	Scales to assess medication adherence in people with chronic disease: a systematic review.....	55
063	Sex education in schools: An interventional project.....	56
064	Association between grip strength, anthropometric data and functional capacity.....	56
065	A community-based exercise program to control cardiovascular risk in type 2 diabetics.....	57
066	Host families targeted for nursing intervention.....	57
067	Evaluation of a protocol exercises for musicians with musculoskeletal problems .....	58
068	Influence of Stretching Program in Factory Workers, Prevalence of Musculoskeletal Symptoms .....	58
069	Prevalence and determinants of gingival recessions in Portuguese adults.....	59
070	Intervention project into Academic Community: a reality .....	59
071	Oral health and the use of dental prosthesis among the institutionalized elderly.....	60
072	The Challenges of Feeding .....	60
073	Voluntary counselling and testing for HIV: an intervention at the University Campus of Évora .....	61
074	Assessment of medication adherence and regimen complexity in hypertensive patients.....	61
075	Effects of the association of cognitive stimulation with motor training in cognitive impairment elderly ....	62
076	Perfil sociodemográfico, hematológico e bioquímico de uma população alcoólica .....	62
077	Alaryngeal Voices under a magnifying glass of the community .....	63
078	Mental Health Intervention in School .....	63
079	Effect of the ergometer cycling on the rehabilitation of the elderly with hip arthroplasty .....	64
080	Denver-II: Portuguese Normative Profile .....	64
081	Analysis of Normal and Pathological Voices for Women dysphonic .....	65
082	Eating habits of children in school age.....	65

083	Intervention Program in children and adolescents to promote Physical Fitness, Physical Activity and Nutritional Knowledge.....	66
084	Community-dwelling Elderly: ineffective management of drug regimen and risk of fall.....	66
085	Object naming: is it a matter of age?.....	67
086	Adolescent Sexuality: Perspective of Teachers.....	67
087	Medication adherence in elderly people: literature review.....	68
088	Determinants of self-medication in elderly people: systematic review.....	68
089	(Re)Think Healthcare to Elderly from their Perceptions.....	69
090	Predictors of postoperative outcomes after surgery for lung cancer.....	69
091	Self-care adherence in type 2 diabetes.....	70
092	Supporting older people's Informal CAREgivers at home through InCARE Programme: the study protocol.....	70
093	Medication Adherence and Cardiometabolic Control in Type 2 Diabetes.....	71
094	Evaluation of Trihalomethanes and Aluminum in Drinking Water in the Northwest of Portugal.....	71
095	Nursing interventions to prevent falls in older people: a systematic review.....	72
096	Guide to preventing falls for older people living in the community.....	72
097	Contamination levels that compromise the hygienic condition in the handling of food.....	73
098	Residual neuromuscular blockade in patients undergoing surgery. Alterations of muscle strength and postoperative respiratory morbidity.....	73
099	ECPICID-AVC: an Instrument for measuring self-care in older people after a stroke.....	74
100	Bibliographic study groups and workshops on mental health praxis of psychology.....	74
101	Lifestyle of Parents With Children in School Age.....	75
102	Providing home counseling for older adults: benefits and challenges.....	75
103	Lifestyles of The School Age Child.....	76
104	Men access to primary health care: discussing difficulties and resistance faced by them.....	76
105	Socioeconomic influence on intestinal endoparasitic diseases in pregnant women in Diamantina, Brazil.....	77
106	Implementation of Single Health System (SUS): analysis of scientific production in Brazil.....	77
107	Characteristics of Vulvovaginitis in Pregnant Women in a USF (Health Unit) in the Municipality of the Interior of Bahia.....	78
108	Application STOPP criteria and beers criteria in the evaluation of the drug pharmacotherapy used in elderly: a comparative study in the Londrina city, Brazil.....	78
109	Knowledge and Practice About the Contraceptive Methods Among Nursing Students of a College of Bahia, Brazil.....	79
110	Health promoting school. Healthy lifestyles: Mental health promotion.....	79
111	The antisocial phenomenon among Portuguese students: Towards healthier social behaviours.....	80
112	The incidence of falls in institutionalized elderly.....	80
113	Assistance for Violence Victims In Stationary Pre-Hospital Units.....	81
114	Exclusive Breastfeeding: Prevalence and Identification of Problems until Four Months.....	81
115	MIDWIFERY EMPOWERMENT: The perception of the nurses' midwives in Portugal.....	82
116	General and Mental Health of Poor and Multiproblematic Families.....	82
117	Music Parodied: Applications In Communitary Health Education.....	83
118	Capsicum annum L. with different colors provide bioavailable phytochemicals with health benefits.....	83
119	Humanization of health education, practice reflection and community empowerment.....	84
120	Characterization of users of Santa Maria Maior Continuous Care Unit (CCU) and Social Response after discharge of users with cerebrovascular accident (CVA).....	84
121	Sexual education and people with intellectual disabilities in residential care: an experience.....	85
122	Factors Associated With Access To The Family Health Strategy Services.....	85
123	Loneliness and depression in the institutionalized elderly.....	86
124	Effectiveness of educational toy in hand hygiene in children of a public school.....	86
125	Health, Speech-Language Therapy and Health Education: (Re)view indirect intervention.....	87
126	Effects of a physical activity program in the workplace: a Sanitation Company case study.....	87

127	Projects of Health Education in school: From evaluation to practice .....	88
128	Most significant socialization agents in adolescent sexuality.....	88
129	Symptoms and Diagnosis of Respiratory Disease in Elderly People - Geria Study.....	89
130	Markers of vulnerability for Bulimia and Anorexia: perceptions of health professional.....	89
131	Prevention of pathological online gambling in adolescents.....	90
132	Respiratory Symptoms In Elderly With Depression And/Or Dementia - Geria Study.....	90
133	The Influence of Obstetric Factors in the Prevalence of Breastfeeding: Weaning Reasons .....	91
134	3rd cycle students' knowledge on dating violence: effectiveness of an education session .....	91
135	Food intake of pregnant adolescents attended at a hospital-school in Colombo, PR, Brazil.....	92
136	Mothers' perception with regard to care in the introduction of supplementary food .....	92
137	Prenatal Health Education: The Nursing Action In Brazilian Community.....	93
138	Love & Violence on dating: perspective of the Adolescents.....	93
139	Knowledge To Intervention In Lifestyles On Hotel Workers.....	94
140	Diagnosis of Lifestyles of Adolescents In Middle School .....	94
141	Risk assessment to Hypertension in a working population in the city of São Paulo.....	95
142	Risk assessment for occupational diseases according to the International Classification of Functioning, Disability and Health .....	95
143	Long-term effectiveness of health education program in security guards: a 12-months follow-up study.....	96
144	Sociodemographic characterization of diabetic patients assisted in primary care.....	96
145	Health profile of diabetics assisted in primary care.....	97
146	Procedure of Nursing and Dentistry in the infant care: A literature review .....	97
147	Body composition assessment in Leiria's 7TH graders – a 5 year comparison (2009-2013) .....	98
148	Parenting in the first years of child's life: areas of nursing intervention .....	98
149	Non-steroidal anti-inflammatory drugs (NSAIDs) pattern use in central region of Portugal .....	99
150	Attitudes towards consumption, recycling and potential of reutilization of medicines.....	99
151	Impact of a walking program on type 2 Diabetic subjects.....	100
152	The Reality of Crack in a Northeastern Brazilian City: The User Look.....	100
153	Physical and sport activities in school and community context: what impact on health indicators?.....	101
154	Prevalence and risk factors for overweight/obesity in Leiria's 7 <sup>th</sup> graders (2009-2013) .....	101
155	Food Supplements Labels and health claims: implementation of European Union Regulation.....	102
156	From meanings of spirituality to the challenges of nurses in family intervention.....	102
157	Behaviors of outdoor workers concerning sun exposure .....	103

## HEALTH LITERACY

158	Stressful situations: diagnosing to educate in Speech Therapy .....	104
159	Strengthen the Maternal and Child Health competency among nurses by blended continuing education program .....	104
160	The nurses' experience on nursing students and their clinical learning process in hospital.....	105
161	A fall prevention manual for older adults according to health literacy demands.....	105
162	Prevalence of urinary incontinence during pregnancy and postpartum in Brazilian women.....	106
163	Risk factors for urinary incontinence in pregnancy and postpartum .....	106
164	Media approaching behaviors in nursing: a descriptive study.....	107
165	Opioid Substitution Programs in Portugal: Understanding the decision making process.....	107
166	Health literacy assessment at the primary health care: a strategy for falls prevention.....	108
167	Hearing Health Promotion in Children Five Years Old: a Need to Undertake!.....	108
168	Health literacy - a pathway to patients' determination .....	109
169	Group chronicles on a CoP: a tool for collaborative analysis and improving reflexion .....	109
170	OT Community of Practice as continuing education: mental health assistance on primary care.....	110
171	Patient care in brain death: weaknesses of a nursing staff.....	110
172	Health illiteracy in students of a polytechnic institute .....	111

173	Influence of the economic scenario in the proliferation of Pharmaceutical Counterfeiting .....	111
174	The Importance of the Electrocardiogram in the Sports Medical Evaluation.....	112
175	Impact of psycho education on anxiety and perspectives face to death among health professionals of a Unit of Primary Health Care.....	112
176	Vulnerable population to low health literacy: a systematic review .....	113
177	Health Literacy and its measurement tools: a systematic review.....	113
178	Health Promotion & Emotional Education: development of a website.....	114
179	Types of Information and Communication Technologies useful to promote health literacy in patients with COPD .....	114
180	Mouth self-examination rates are higher among users of SUS: evaluation based on a model of health literacy .....	115
181	Cross-Infection Risk In Clinical Dentistry Performed by Students .....	115
182	Internet addiction related-symptoms in a sample of young-adults .....	116
183	Young's mental health literacy: a systematic review.....	116
184	Health Education - Analysis of Curriculum Matrix of The Course of Nursing .....	117
185	Water intake as a promoter of health behaviour with children .....	117
186	Communicative styles of a person with aphasia after brain injury .....	118
187	Shame and Social Anxiety in Adolescence: The Experience of Shame Scale for Adolescents .....	118
188	Vestibular Effects of Cochlear Implantation .....	119
189	The Health Literacy and Empowerment of Citizens: Integrative Review .....	119
190	Behaviour Face to Packaging Waste and Drugs out of Use .....	120
191	Knowledges of Brazilian Academics of Nursing on Burns .....	120
192	Fish Consumption in College Students.....	121
193	Body image and body composition in students from two secondary education schools of Braganza city, Portugal.....	121

## MEASUREMENT AND DECISION MAKING

194	The measurement of Adaptive Behaviour in Portugal.....	122
195	Characterization of accidents relating exposure to biological material involving the staff of a university hospital.....	122
196	The use of images in Speech and Language Therapy in Portugal.....	123
197	The web on the decision-making process of pregnant/postpartum women: a Portuguese survey .....	123
198	Patients' preferences and needs: centrality of nursing care .....	124
199	Development of a Geriatric Functionality Scale to screen for functional ability .....	124
200	Muscle co-contraction assessment during walking in clinical practice-a preliminary accuracy and reproducibility study.....	125
201	Comparative analysis of the management of diabetes mellitus in UCSP and USF in the Alto Minho region.....	125
202	Cultural adaptation and validation of the Portuguese version of the Assessment of Chronic Illness Care (ACIC) version 3.5.....	126
203	Knowledge management in public health institutions with different management models .....	126
204	Child development screening system in Portugal - What opportunities? .....	127
205	Eliminating measles in Portugal: The contribution of nurses .....	127
206	Comparative study of Birth and Maternity Indicators.....	128
207	Measuring patient satisfaction with dental care in a University dental clinic background.....	128
208	Development of an instrument for measuring patient satisfaction with dental care .....	129
209	Root caries: a problem in institutionalized elderly .....	129
210	Intrarater reliability and agreement of chest wall mobility in patients with COPD.....	130
211	The use of trademarks in the Brazilian market by pharmaceutical companies .....	130
212	Confirmatory Factor Analysis of the Portuguese Version of the Peritraumatic Dissociative Experiences Questionnaire.....	131
213	Accuracy of nurses in risk classification of an adult emergency in south of Brazil .....	131

214	Nurses and assessment cardiovascular risk in people hospitalized by non-cardiac causes .....	132
215	Physical activity predicts self-reported disability and performance in adults aged ≥60 .....	132
216	Disability and healthcare consumption among older adults.....	133
217	Results from a 9-month physical activity intervention in physical fitness of older women .....	133
218	Measures to assess the suitability of quantitative compound tests with the dilution effect .....	134
219	Teenagers and drugs: subsidy for decision making in educational intervention in health .....	134
220	Cryotherapy impairs proprioception function? .....	135
221	Muscular strength and endurance: effects of ice application .....	135
222	National Health Service: Qualitative and financial assessment of a decade of co-payments.....	136
223	Health professionals' commitment: a management tool.....	136
224	Formulation of a nurse's clinical judgment about the potential of autonomy reconstruction .....	137
225	Physical activity estimates in COPD rehabilitation: self-report vs. objective measures .....	137
226	Compound clinical trials: a comparative simulation study of its accuracy and cost.....	138
227	Decision making in intensive care at the end of life.....	138
228	Resistance bacterial profile in positive urine cultures: Nosocomial Infection vs Community acquired Infection.....	139
229	Falls in elderly community residents. An underdiagnosed problem .....	139
230	Evaluation of the use of bundle of prevention of ventilator-associated pneumonia .....	140
231	Bundle of infection primary prevention of bloodstream as a management tool in Brazilian hospital ....	140
232	Techniques for counting bacteria in a pooled sample.....	141
233	Short form 6D: can measure health in patients with systemic lupus erythematosus? .....	141
234	National humanization policy: conceptions of health professionals.....	142
235	Finding an instrument to assess fall risk in acute patients in hospital setting.....	142
236	Integrating Evidence-Based Practice in the Training Programme Bachelor's Degree in Nursing, University Jaume I .....	143
237	Assessment of prenatal under the perspective of management and family health teams .....	143
238	Analysis of the working process of nurses and doctors in the prevention of risk factors of gestational hypertension .....	144
239	Is Infant mortality an evidence of economic development?.....	144
240	Peer feedback: online model for developing metacognitive skills in students .....	145
241	Construction and Validation of a Reference Matrix for Large Scale Cognitive Assessment of the Biological-Functional Dimension in School Physical Education .....	145
242	The Attention to Elderly Health: indicators of performance evaluation and decision making in local management .....	146
243	Association of Obstetric Variables with Route of Childbirth .....	146
244	The Anxiety Disorders Interview Schedule for DSM-IV:Child Version(ADIS-C) in Adolescents .....	147
245	Comparing the psychometric properties of the instruments used in the economic evaluation of Parkinson's disease .....	147
246	Assessing ceiling effects in the EQ-5D and the SF-6D instruments in patients with Parkinson's disease ....	148
247	Organizational Stress: Development of a multidimensional measure .....	148
248	Perceived health status in people over 65 years .....	149

#### MEDICAL EDUCATION – SIMULATED PRACTICE

249	Mentors' implication in clinical learning and assessment of nursing students.....	150
250	Prevention of drug abuse: practices developed by counselors and community leaders in Brazil .....	150
251	Attention given to users of substances psychoactive in units of service ready for nurses and doctors....	151
252	What does the body have to do with it? Motion extrapolation in individuals with cerebral palsy .....	151
253	Simulated laboratory practice: impact on the student in preparation for the real context of clinical practice.....	152
254	The use of clinical simulation with actors: an action research in nursing.....	152
255	Health Promotion: Concepts and Actions of Nurses Teachers.....	153
256	Clinical training in surgery: developing nursing students skills.....	153

257	Care for the person in critical condition in the context of simulated practice .....	154
258	Academic opinion about the about the National Curriculum Guidelines in health.....	154
259	Augmented reality for improving clinical decision skills .....	155
260	Debriefing in the simulation contexts .....	155

#### **OTHER RELATED TO THE THEMATIC TABLES AND CONGRESS**

261	Implementation of Brazilian National Policy on Oral Health in a Regional Health Department .....	156
262	Psychological Consultation-Liasion: Methodological and Technical Aspects .....	156
263	Communication in Health .....	157
264	The finitude and aging: perceptions of the caregivers of institutionalized aged.....	157
265	Popular education, an interdisciplinary practice in the formation of health professionals.....	158
266	Human resources training for health teaching: characteristics and perspectives .....	158
267	Nursing management: activities performed for quality care .....	159
268	Advanced nursing education and professional development: master`s course students perceptions .....	159
269	Consonant perception and overall auditory performance in Cochlear Implant users .....	160
270	Evaluation of balance and postural control in seniors with thoracic hiperkyphosis.....	160
271	Levodopa controlled release from alginate membranes .....	161
272	Is dissociation in psychiatric and non-psychiatric Portuguese samples explained by intensity of psychopathology? .....	161
273	Evaluation of functional performance of patients with patellofemoral pain .....	162
274	Diabetes, therapeutic adherence and depression .....	162
275	Life expectancy of modern times: public policies of modern health? .....	163
276	Semantic processing in subjects with and without auditory processing disorders: case study .....	163
277	Hemodynamic changes in vacuum endotracheal in the elderly hypersecretion with dementia .....	164
278	Overload on perception of informal caregivers of dependent elderly with dementia.....	164
279	Polypharmacy in the elderly with dementia nursing home residents .....	165
280	Caring self-care dependents in home environment .....	165
281	Functional and cognitive decline in hospitalized elderly .....	166
282	User satisfaction with Primary Health Care: an analysis of the Emergency Care attendances .....	166
283	Dementia care: a focus on direct care workers` attitudes, burnout and job satisfaction .....	167
284	Attachment levels to the mother, the father and the peers, in institutionalized youngsters .....	167
285	Perception of Threat, Stress, and Anxiety in Athletes of Portuguese Football Championships .....	168
286	Prescription of antibiotics by dentists: a pilot study.....	168
287	Reconciling Operational and Organisational Logics in Hospital Change Management .....	169
288	Weight loss may be accelerated through a chrononutrition-based protein diet.....	169
289	Association between perceived competence, autonomy and physical activity.....	170
290	Constraint-induced aphasia therapy: effectiveness of a program in chronic aphasic patients.....	170
291	Learning meetings in the formation through work – the construction of Health Residencies .....	171
292	Nursing interventions to prevent pressure ulcers in intensive care units: systematic review.....	171
293	Health education and sexuality during pregnancy .....	172
294	Ageing and social informatics: a case study .....	172
295	Beliefs and stereotypes in human aging .....	173
296	Auditory electrophysiological evaluation in individuals with type 2 Diabetes Mellitus.....	173
297	Intensive Care Nursing: Portuguese Scientific Production: A Bibliometric study .....	174
298	Sports injuries characterization occurring in mountain sports .....	174
299	Cardiovascular risk factors found in stroke patients.....	175
300	Bilateral cochlear implantation in a patient with bilateral temporal bone fracture.....	175
301	Auditory long latency potentials before and after cochlear implantation .....	176
302	MDAIF: Training Transfer to the professional performance of family nurses .....	176
303	Sequential liver transplantation - ethical issues .....	177



304	Humanization of Nursing Care in Surgical Center: an Everyday Search .....	177
305	Self-criticism, body esteem and eating disorders symptoms in a sample of female adolescents, practitioners of ballet and handball.....	178
306	Preventing pressure ulcers: the knowledge of the nursing students from the Azores and Canary Islands .....	178
307	Public health policies in Brazil under the aspect of ethics and management.....	179
308	Pedagogical training teacher's: a challenge in nursing education.....	179
309	MAL: Instrument Rating Paretic Upper Member .....	180
310	Dental and Periodontal Complications Arising from the Use of Oral Piercings – Cases Reports.....	180
311	Tobacco Use Among Students In The Marajó Archipelago, Northern Brazil .....	181
312	There is more than underweight in pediatric Crohn's disease .....	181
313	Binge Drinking Among Students in the Marajó Archipelago, Northern Brazil.....	182
314	The learning process of the student care: starting of critical reflections.....	182
315	Sociodemographic and gynecological obstetric characteristics of Italian Nursing academics .....	183
316	Sexual profile of nursing students about your sexual behaviors .....	183
317	Patients undergoing chemotherapy: effect of a high-calorie supplement on nutritional status .....	184
318	Analysis of Maternal Self-Efficacy In The Process of Teenage Mothers' Breastfeeding.....	184
319	Analysis of the Development of Children in the Northeastern Region of Brazil .....	185
320	Infections, Resistance and antibiotic therapy in an Internal Medicine Service .....	185
321	Parental Stress in Parents of Children with Developmental Disorders .....	186
322	Marijuana Use Among Students in the Marajó Archipelago, Northern Brazil .....	186
323	Perceptions of Aider Nurses About the Assistance to Women Victims of Violence In Brazil .....	187
324	Nursing Care Systematization in a Psychiatric Hospital In The Brazilian Northeast .....	187
325	Lunch eating habits in Portuguese college students considering the location of meal.....	188
326	Eating attitudes and risk of eating disorders in adolescents: role of the thinness stereotype .....	188
327	Teaching and learning in family nursing: from theoretical framework to experiential reflection.....	189
328	Profile of the women who repeat an induced abortion .....	189

## QUALITY OF LIFE AND WELL-BEING

329	Acne and Public Health.....	190
330	Effect of massage therapy in cancer patients in palliative situation .....	190
331	Benefits of Physical Activity in Cholesterol and Triglycerides in the elderly .....	191
332	Comparison of functional fitness between sedentary and active elderly with AAHPERD tests .....	191
333	Psychometric Properties of Portuguese version of Personal Outcomes Scale: EPR .....	192
334	Assessing Quality of Life on Adults with Intellectual Disability: Escala Pessoal de Resultados versus WHOQOL-Bref.....	192
335	Herb-drug interactions among commonly used psychoactive substances by healthcare students .....	193
336	Communication with elderly patients – a weakness or an opportunity to young nurses? .....	193
337	The child with HIV/AIDS: Truth Disclosure .....	194
338	Infertility in males.....	194
339	Emotional changes in postpartum women .....	195
340	Effects of two exercise training programs and detraining in older women .....	195
341	Mother-Infant relationship with mothers suffering from anxiety and mood amendment .....	196
342	Influence of health indicators in prevalence of HTA and obesity in higher education.....	196
343	Cocaine, Crack and Multiple Drugs Consumption: Interface with Users' Quality of Life .....	197
344	The influence of weight status on physical fitness of primary school children.....	197
345	Education for health: Alcohol and young aged school teenagers.....	198
346	Reliability of a comprehensive fitness test battery in persons with fibromyalgia .....	198
347	Translation and Spanish cultural adaptation of the fibromyalgia knowledge questionnaire (FKQ).....	199
348	Eight weeks of vigorous exercise are enough for a significant reduction in blood pressure.....	199
349	Management of Family Caregivers' Emotions: a challenge in pediatric intensive care nursing.....	200

350	Assessment of nutritional status of elderly patients with hip fracture .....	200
351	Health Promotion in Higher Education: Resilience and Quality of Life .....	201
352	Well-being and academic success in elementary school.....	201
353	Health-related quality of life in elderly in primary care.....	202
354	Effect of Listerine® mouthrinse against oral microorganisms.....	202
355	How different is this boy in my class? Asking peers of children with cerebral palsy.....	203
356	Study of drug addiction and pregnancy newborn death .....	203
357	Social support of men living with human immunodeficiency virus/AIDS .....	204
358	Presence of parents in neonatal units: First stage of the Kangaroo method .....	204
359	The relation between functional performance and satisfaction with life in elderly.....	205
360	Communication of bad news to the elderly patient/his family, in critical situation .....	205
361	Exploring the healthcare needs of patients with mild chronic obstructive pulmonary disease.....	206
362	Student Support Service: promoting well-being of students of Polytechnic Institute of Leiria .....	206
363	Characterization of the sun-protection practices in higher education students .....	207
364	Use of emergency contraception in higher education students.....	207
365	Analysis of Postural habits in primary school children in a private and public institution .....	208
366	Characterization of the functional capacity of the elderly: effects of age and health status .....	208
367	Happiness and subjective health status among older adults in Southern Europe and Scandinavia .....	209
368	Physical activity and sleep – baseline results from an intervention study .....	209
369	Physical activity in healthy children and children with Acute Respiratory Infections .....	210
370	Family care at early COPD: Is there any risk for caregivers’ mental well-being? .....	210
371	Virtual communication and relationship between nurse and elderly person .....	211
372	A systematic review of nursing interventions on adaptation in women with breast cancer .....	211
373	Self-perception of desirable behaviors for a healthy aging in adults with cerebral palsy .....	212
374	Exploring life satisfaction and depressive symptoms in older people receiving family care.....	212
375	Carers Burnout and Values: it’s relation with the wellbeing of people with dementia.....	213
376	Relationship between balance and fear of falling in elderly people.....	213
377	Mental health, strengths and social support of single mothers.....	214
378	The State of Health of Teachers Exposed to Noise in the School Context .....	214
379	School, Family Support, Illness Representations and Quality of Life In Type 1 Diabetes .....	215
380	Professional Identity and the Psycho-Social Contract: The ideological link to commitment in Health Workers.....	215
381	Building Instrument to assess user satisfaction in communicating with health professionals based on the consensus of the Delphi method .....	216
382	Global geriatric evaluation of the Algarve population .....	216
383	Noise in an intensive care unit as a factor of discomfort: a descriptive exploratory study .....	217
384	Sleep and quality of life in college students: comparison between sexes.....	217
385	Relationship Between Motor Coordination and Physical Fitness of Prepubertal Children .....	218
386	Psychometric Study of the Adolescent Social Comparison Scale-Revised.....	218
387	Mobbing/psychological aggression in nursing profession.....	219
388	Quality of life in older people and Hospitalization .....	219
389	Effects of an exercise program on physical fitness in patients with type 2 diabetes .....	220
390	Specific schooling care for children with disabilities from a nursing perspective.....	220
391	Quality of life, concerns and therapeutic needs in parents of children with special needs .....	221
392	Burnout Among Nurses .....	221
393	Inventory of bullying in nursing students: final results.....	222
394	Quality of life in the elderly: a comparative study between two different care giving services.....	222
395	Quality of life in pediatric cancer: Illness perceptions of children and parents.....	223
396	Ageing and mild hearing loss .....	223
397	Quality of life after liver transplant in familial amyloidotic polyneuropathy patients .....	224

398	Early experiences with caregivers, school bullying and negative affect in Adolescence.....	224
399	Relationship between leisure activities and cognitive performance in older adults.....	225
400	Structural approach to the quality of life of teenagers .....	225
401	Unconventional therapeutic modalities in nursing practice.....	226
402	Knowledge of HIV amongst residents of the University of Évora Campus.....	226
403	(In)dependence from a gender perspective: A study of elderly people with social care services .....	227
404	Association between psychosocial aspects of work and quality of life of motorcycle taxi drivers .....	227
405	Personal social networks of elderly and mental health: preliminary results .....	228
406	Nomination and Identification of the Six Basic Emotions by Elderly people .....	228
407	A generic and a modular approach to children's quality of life self-assessment .....	229
408	Quality of life of the elderly with hip arthroplasty: comparison between two instruments.....	229
409	The voice as symbolic activity in the elderly .....	230
410	Quality of life: perspective of portuguese seniors .....	230
411	Experiencing anxiety: clinical indicators in nursing diagnosis .....	231
412	Caring patients with impaired verbal communication: nursing diagnosis .....	231
413	Teachers' perceptions about health promotion in pre-school: Exploratory study .....	232
414	Cardiogenic shock clinical indicators in nursing diagnosis .....	232
415	The impact of infertility on couples' dyadic adjustment and intimacy .....	233
416	Religiosity and spirituality in older persons: a challenge for nursing practice .....	233
417	Quality of Life In Pre-Lingual Deaf Children .....	234
418	Life quality of individuals in radiotherapeutic treatment lodged at a hostel.....	234
419	Physical exercise programme for institutionalized elderly: improving quality of life.....	235
420	Perceptions of sons about close relationships, life satisfaction and parent`s marital satisfaction .....	235
421	Nursing care for patients with a stoma: a quasi-experimental study .....	236
422	Resilience in adolescents and their perception of the parenting styles.....	236
423	Better quality of life determinants. A correlational study in a drug addicts community.....	237
424	Family quality of life in families of people with intellectual disabilities: a new concept .....	237
425	Well-being in very old age: Valuation of life and health at one century of life.....	238
426	Maternal postpartum quality of life questionnaire - MAPP-QOL: validation of the Portuguese version in first-time mothers.....	238
427	First-time parents: quality of life and adjustment to the parental role in postpartum period.....	239
428	Psychometric studies of the Other as Shamer Scale for Adolescents - brief version (OASB-A).....	239
429	Analysis among elderly institutionalized and non-institutionalized in a city of Brazil.....	240
430	The family of a hospitalized adult in ICU: Transitions in quality of life and well-being .....	240
431	Systematization of the Care System Nursing for Type II Diabetes Mellitus: Study of Case .....	241
432	Change in functional status and body composition in institutionalized elderly .....	241
433	Blow gun training enhances the ventilatory capacity in patients with Down syndrome: a pilot study.....	242
434	Intergenerational relations – grandparents and grandchildren's: A well-being factor? .....	242
435	Polypharmacy in the elderly: therapy adherence.....	243
436	Optimism, resilience and family impact in parents of disabled child .....	243
437	Medicines out of use and waste of medicines in a northern city of Portugal.....	244
438	Passion and satisfaction with life in disabled athletes.....	244
439	Quality of Life of Women with Urinary Incontinence, Using ICIQ-SF .....	245
440	Perceived Social Support in Adult Celiac Persons.....	245
441	Nursing clinical supervision: support strategies.....	246
442	Pain and Quality of Life in Patients with Diabetic Foot Ulcer: Preliminary Results.....	246
443	Effects of Physical Activity on Mental Health in Patients with Depression .....	247
444	Ageing of people with disability: Identification of risk factors related to falls.....	247
445	The grieving process: young adults strategies after the loss of a parent .....	248
446	Passion, Motivation and Subjective Well-Being in Leisure Surf.....	248

447	Back pain characteristics of university students.....	249
448	Conception of Persons With 65 Years of Age or Older to be Old or Aging.....	249
449	Psychological Wellbeing, Satisfaction with Life and Optimism in Sports Managers.....	250
450	(Ex)Users of Injectable Drugs Seropositives For HIV and Quality of Life.....	250
451	Participation Of The Family Caregiver In Adhesion of Hypertensive Person to Treatment - analysis of the impact of health promotion.....	251
452	HOST: Oral Health Care in a Public Hospital in .....	251
453	The Family Caregiver's Knowledge About the Treatment of Hypertensive Personal: analysis focusing on health education.....	252
454	From The Desire of Having a Child to The Desired Child: The Dream Come True for the Couple .....	252
455	Informal caregivers of Portuguese centenarian :a first glance from the Oporto Centenarian Study .....	253
456	Profile of the cervical spine of academic professors.....	253
457	The buffering effect of warmth and safeness memories and feelings against shame on depression.....	254
458	Self-Care Profile in Haemodialised Clients.....	254
459	Impact of lifestyle, quality of life and treatment adherence among overweight adolescents .....	255
460	Health-promoting lifestyle profile in Portuguese academic community.....	255
461	Do thought suppression tendencies strengthen the link between social rank and depressive symptoms?.....	256
462	Person dependent on invasive ventilation at home: caring in partnership with family .....	256
463	How body image inflexibility impacts on disordered eating attitudes and behaviours.....	257
464	Standards of sleep quality in hospitalized patients on medical surgery context .....	257
465	Stress in context Perioperative .....	258
466	What practices and behaviour after the fall of the elderly, in residential structures for seniors?.....	258
467	Anthropometric measures, eating habits and performance of Portuguese soccer players .....	259
468	Harmful Effects of The Use of Psychoactive Substances in Perception of Users.....	259
469	"My body, my shame": Does body image shame plays a specific role in binge eating? .....	260
470	The psychometric properties of the Body Image Shame Scale for adolescents (BISS-A).....	260
471	Amyotrophic Lateral Sclerosis: Knowledge of the Quality of Life of People Affected .....	261
472	Children with Neurological Disease: Mishel's Theory and Maternal Behavior .....	261
473	Being fused with body image: The impact on one's quality of life .....	262
474	Experiential avoidance amplifies the impact of body image-related experiences on quality of life .....	262
475	Insomnia: Prevalence and associated factors .....	263
476	Accidents at work by excessive efforts/inappropriate movements in nurses .....	263
477	The implications of Emotional Intelligence in Self-esteem.....	264
478	Comfort in a permanent care unit/emergency service: Patients perception .....	264
479	Physical dependence elderly informal caregiver's mental health, living in Coruche County .....	265
480	Experiences of Patients Undergoing Renal Dialysis: Integrative Literature Review .....	265
481	Improper use and abuse of vocal cords among teachers: Intervention of the speech and language therapist .....	266
482	Educational Strategies for the Prevention of Amputation in People With Diabetes.....	266
483	Diabetic Health Profile.....	267
484	Translation, Adaptation and Cultural Validation of the Workstyle Short Form for Portuguese Population...	267
485	What was the cause of skin rashes on Carcavelos and Costa da Caparica beaches last summer?.....	268
486	The life-world of aged in homes: ethnographic perspective.....	268
487	Quality of life, nutritional status and individual perceptions of working conditions of employees working in a food company .....	269
488	Intake Diet and Quality of Life in Diabetic Patients Admitted in a University Hospital in Southern Brazil .....	269
489	Somatotype and Body Mass Composition in European Portuguese Adult Speakers.....	270
490	Food Intake Quality in the Preoperative and Postoperative of Bariatric Surgery .....	270
491	Predictors of Postpartum Quality of Life in Brazilian Mothers .....	271
492	Average of Sodium Intake of Meals Supplied to Workers.....	271
493	Strategies used by caregivers in communication with person with aphasia .....	272

494	Body Practice's Effects of Lian Gong in Health Promotion: a Literature Review .....	272
495	The motivational factors of college students to engage in a physical activity program .....	273
496	Correlation between fine and gross motor coordination in children .....	273
497	Stress in University students and cardiovascular response to academic stressors .....	274
498	Quality of Life of Palliative Patients – Differences Between Men and Women .....	274
499	Caring for someone with advanced disease at home: the caregiver's perceptions.....	275
500	Caring for people with dementia in the community: Caregiver's burden and quality of health .....	275
501	Anxiety Disorders: A study with Patients in a Brazilian Psychiatric Hospital .....	276
502	Relationship Between Mental Illness and Work: Study in a Brazilian Psychiatric Hospital.....	276
503	Vaginal Parturition, Sexuality And Episiotomy: an Integrative Review .....	277
504	Theory of Diversity and Universality in Cultural Care: in Focus the Feminine Sexuality.....	277
505	The Terminal Illness within the Family System: A Critical Review of Literature .....	278
506	Perception of the person with Aphasia and its caregiver about the difficulties and conversational changes in the communication patterns in the post-morbid period.....	278
507	Performance Status of Palliative Patients.....	279
508	Generic drugs and brand name products: an approach about excipients .....	279
509	Difficulties, Concerns and Needs In Pediatric Oncology: The Reality of Pediatric Patients and Their Families Under the View of Hospital Clowns' .....	280
510	The impact of lifestyle on health and functional independence in the elderly.....	280
511	Prevalence and Determinants of Breastfeeding in Portugal.....	281
512	Photopolymerizable hydrogels containing drug-loaded particles for biomedical applications.....	282

#### **RD&T – RESEARCH, DEVELOPMENT & TECHNOLOGY IN HEALTH**

513	Analysis of the alterations induced by working memory tasks in the electroencephalogram.....	282
514	Using video games to combat childhood obesity: an integrative literature review .....	283
515	Photodynamic therapy in retinoblastoma: Cell proliferation and oxidative stress effects.....	283
516	Photodynamic therapy in retinoblastoma: Effects in cell viability, cell cycle and P53 .....	284
517	Comparison Study of Procedures for Aspiration of Biopsy Samples .....	284
518	The contribution of Cellblock – Histogel – in bronchial washing samples .....	285
519	Vertebral Metrics: a non-invasive instrument that evaluates the spine.....	285
520	Health Promotion (HP) in nursing curriculum and learning contexts – 1st and 2nd cycles.....	286
521	Nursing aid provided for families of children with leukemia.....	286
522	S/N Ratio on Perception of the Word in European Portuguese in Normal-Listener.....	287
523	CogniPlus® software as Occupational Therapy adjuvant in the training of working memory: an experimental single subject design.....	287
524	Growth model in melanocytic skin lesions: a geometric look to skin pigmented lesions .....	288
525	Patient Safety in Pre-amputation Communication .....	288
526	Instrument for Measuring Patient Safety Culture in Nursing.....	289
527	Autonomic nervous system balance: Classic analysis versus time-frequency analyzes.....	289
528	Characterization and evaluation of skin lesions using symbolic dynamics .....	290
529	Continuous Autonomic Nervous System Evaluation and Inertial Analysis.....	290
530	University of Aveiro's Advanced Voice Function Assessment Databases (AVFAD).....	291
531	Aphasia Assessment by the Portuguese Speech and Language Therapists.....	291
532	Children's Auditory Processing Performance Scale: parents versus teachers .....	292
533	A novel method for skin lesion segmentation using a multi-scale Local Normalization .....	292
534	Language development in children with cochlear implant.....	293
535	Profile of Nursing research in Intensive Therapy on Brazilian Post-graduation .....	293
536	Central Auditory processing evaluation – normative data for portuguese pediatric population .....	294
537	Soap formulation with coffee grounds. A new concept of food by-products valorization and health promotion .....	294
538	Hair extractive and microbial contamination in the surgical preparation of animal skin.....	295

539	Hall Effect as alternative system for upper prosthetics control- a preliminary test .....	295
540	Effects of inhaled lavender oil ( <i>Lavandula angustifolia</i> ) in response to agitation in people with dementia: intervention study .....	296
541	Nursing Care in Control of Infection in Newborn Intensive Care Unit: Systematic Review .....	296
542	University of Aveiro's Standardised Voice Case History Form .....	297
543	Impact of Ionizing Radiation on Lymphoma Cell Line -Cell Death, Bax/Bcl-2, P53 Expression.....	297
544	Ionizing radiation induce DNA damage and cell cycle arrest in a lung cancer cell line .....	298
545	Radiotherapy in Lymphoma and Lung Cancer patients - TNF-Alpha levels and T Cell subsets .....	298
546	Construction and validation of instruments for systematization of nursing care in person during hemodialysis.....	299
547	Modelling a Software for Qualitative and Quantitative Analysis of Oropharyngeal Swallowing by Videofluoroscopy.....	299
548	Discrimination in professional musicians and non musicians .....	300
549	Hazard Analysis and Critical Control Points (HACCP): still a public health effective tool? .....	300
550	Clinical trials of blood-borne and vector-borne diseases: An European cross-analysis.....	301
551	Extrusion Processes to Fabricate Biodegradable 3D Scaffolds for Tissue Engineering .....	301
552	Biomechanical Analysis of the Cartilage .....	302
553	Development of a computational tool for characterization of thermal images in medical applications ....	302
554	Implementation project of infection prevention bundle related to central venous catheter.....	303
555	Evolution of dependence in self-care, in a sample of customers, three months after discharge.....	303
556	Integrative rehabilitation device – exoskeleton.....	304
557	Study the healing effect of creams <i>Inga subnuda</i> in skin lesions.....	304
558	Effects of <i>Vernonia Polyanthus'</i> dry extract ointment on wound healing in rats.....	305
559	Adaptation and validation of Mini-Mental State Examination for individuals with aphasia .....	305
560	Potential of the platforms for assessment/monitoring the health of the elderly at distance .....	306
561	The nurse's experience about adolescent's with CF care – a qualitative approach .....	306
562	Information and communication technology in higher education in nursing: for an innovative praxis ....	307
563	Nursing: reasons for a choice .....	307
564	Integration in family emergency service: integrative review .....	308
565	Characterization women who had cesarean conducted in a state of Northeast Brazil .....	308
566	Growth and development of Brazilian children and institutionalized assumpti .....	309
567	Illness risk in nursing work in mobile emergency service.....	309
568	Trauma and Life Events: Contribution to a risk model of depressive symptoms in adolescents.....	310
569	Prototype of litter: technologies in health in transportation of persons .....	310
570	Robotic surgery: new horizons in gynecological surgery.....	311
571	Prevalence of low back pain in children and adolescents from the Algarve region.....	311
572	Experiences of pleasure and suffering in Brazilian mental health care services .....	312
573	Psychological Impact of diagnostic exams .....	312
574	The effects of smoking in the auditory system .....	313
575	Validation of Scales of Chronic Wound Healing for Portugal and Spain: Project of a Shared Methodology .....	313
576	Modular Biomedical Signal Registration System .....	314
577	Evaluating phosphate concentration throughout the production of dried and salted cod.....	314
578	Relationship between articulatory disorders and orofacial anomalies in Elementary School.....	315
579	Relationship between articulatory disorders and family history in Elementary School .....	315
580	Mean Length Utterance in children (3:6 to 4 years): contribution to normative data in Portuguese language.....	316
581	The economic-industrial health care complex in Brazil: challenges of contemporary health care and national development.....	316
582	Characterization of children's vocal profile ageing between 0 to 9 years and identification of their normal patterns. ....	317

583	Expectation of Women by Conducting Hysterectomy .....	317
584	Is 18F-Fdg Uptake Affected by Incubation with Sodium Butyrate in Colon Cancer Cell Lines? .....	318
585	Butyrate and Irinotecan: a New Approach for Colon Cancer.....	318
586	Can Photodynamic Therapy Make a Diference in Retinoblastoma? .....	319
587	An Orthotopic Animal Model of Retinoblastoma .....	319
588	Management Competences in Nursing .....	320
589	Thermal profile of the knee and pain location in young people with and without knee pain .....	320
590	Masseter's electromyographic assessment in different consistencies' food swallowing .....	321
591	Acoustic and Temporal Analysis of swallowing sounds: use of electronic stethoscope on cervical auscultation.....	321

#### **TECHNOLOGICAL PLATFORMS AND SHARING CONSTRUCTION OF COMMUNICATION**

592	Acute confusion in Portuguese Hospital.....	322
593	The information systems integration for a better caring and chronic patients' empowerment. ....	322
594	Information and Communication Technologies in Cerebral Palsy: What is its relevance for the development of communication and learning?.....	323
595	HealthCare Information System to all Health professionals - Portuguese insight.....	323
596	Virtual Learning Environment: development of model and script for semi in person and distance learning .....	324
597	Issues and specifications on a prescription system for controlling patient takes and drugs usage.....	324
598	Comforting Geriatric Care: Ways of being/acting of care role players.....	325
599	Communication Design a tool for health literacy promotion: designing information health to empower patient with Chronic Pain.....	325

# **Subject Abstracts**

---



## E-HEALTH AND E-THERAPY

001

### TRUST AND CREDIBILITY IN E-HEALTH INTERFACE

Andreia de Sousa<sup>1,a</sup>, Ana Almeida<sup>1,b</sup>

<sup>1</sup>Universidade de Aveiro. Universidade do Porto. Porto, Portugal

<sup>11</sup>Departamento de Comunicação e Arte. Universidade de Aveiro. Aveiro, Portugal

**Introduction:** Internet became one of the most important sources to search for health information. In this scenario it's fundamental to investigate the processes used by e-health users to select information and make decisions. There are multiple dimensions involved in these processes and, concerning e-health, the trustworthiness of information is one of the most important.

**Objective:** This study aims to contribute to deepen knowledge on credibility and trust perception and to investigate design principles for trust in e-health in order to propose a set of guiding principles of interface design for trust in e-health that can contribute to credibility and trust perception.

**Methods:** Our methodological approach is oriented by a User Centered Design (UCD) methodology. As shown in other studies, we believe that this is the more appropriate to use in the context of developing trustworthy systems from users perspective. We are already working in the first step of this study that combines an online questionnaire with a focus group targeting users credibility and trust perceptions in health information websites. Based on the analysis of the collected data we will start the interface redesign and evaluate them with same instruments used before. We believe that, at this point, we will be able to present a first version of the design principles for credibility and trust to be discussed with a focus group composed by user interface experts and users.

**Results:** As an outcome of this discussion we foresee to accomplish our main objective that is the proposal of a set of Design Principles for Credibility and Trust.

**Descriptors:** User Interface. Credibility. Trust. e-Health. Design Principles.

002

### HAPPY: A CANCER PREVENTION MOBILE APP SUPPORTED BY A QUALITATIVE STUDY

Nuno Ribeiro<sup>1,II,a</sup>, Ana Barros<sup>1,III,b</sup>, Ana M. Almeida<sup>1,IV,c</sup>, Filipe Santos-Silva<sup>1,V,d</sup>

<sup>1</sup>Instituto de Patologia e Imunologia Molecular. Universidade do Porto. Porto, Portugal

<sup>11</sup>Departamento de comunicação e arte. Universidade de Aveiro. Aveiro, Portugal

<sup>111</sup>Faculdade de Ciências. Universidade do Porto. Porto, Portugal

<sup>1111</sup>Centro de Estudos das Tecnologias e Ciências da Comunicação. Universidade do Porto. Porto, Portugal

<sup>11111</sup>Faculdade de Medicina. Universidade do Porto. Porto, Portugal

**Introduction:** More than half of cancer cases are due to bad behavioural options. If everyone adopted a healthier lifestyle, cancer incidence would fall dramatically. Mobile devices, due to its portability and built-in sensors, can be helpful aids in this behavioural change. A well conceived mobile app could help prevent cancer through behaviour change.

**Objective:** The current study sought to explore young adults' views and experiences of health-related apps to identify features that might be relevant in a cancer prevention app aimed at behaviour change.

**Methods:** Three focus groups were conducted with 16 pre- and post-graduate students from Aveiro and Porto Universities. Participants included 10 females and 6 males (mean age: 24.50 – SD 2.87). The focus group discussions were centred on participants' views and experiences using health apps. The focus groups were recorded, transcribed and analysed using inductive thematic analysis.

**Results:** Study findings suggest that young adults are interested in health-related apps. Behaviour tracking, goal definition and customized information acquisition were valued. Easiness of use, user-friendly interface and the influence of peers emerged as important factors for long-term app usage. Privacy concerns also emerged as very important issues. Social media features were viewed as potential benefits but should be optional due to the sensibility of health data.

**Conclusions:** This study provided an insight about the features that should be included in a cancer prevention app. Based on these findings and supported by Fogg's Behaviour Model, a cancer prevention app named HAPPY (Health Awareness and Prevention Personalized for You) is being developed.

**Descriptors:** Mobile devices. Smartphones. Cancer. Cancer Prevention. Behaviour change.

<sup>a</sup> andreia.sousa.pinto@ua.pt

<sup>b</sup> marga@ua.pt

<sup>a</sup> nribeiro@ipatimup.pt

<sup>b</sup> abarros@ipatimup.pt

<sup>c</sup> marga@ua.pt

<sup>d</sup> fsilva@ipatimup.pt

003

### HOW TO ADRESS THE PRESCRIPTION AND SELECTION OF AAL SYSTEMS & SERVICES FOR END USERS

Joaquim Alvarelhão<sup>a</sup>, Alexandra Queirós<sup>b</sup>, Nelson Rocha<sup>b,c</sup>

<sup>a</sup>*Escola Superior de Saúde. Universidade de Aveiro. Universidade de Aveiro. Aveiro, Portugal*

<sup>b</sup>*Secção Autónoma de Ciências da Saúde. Universidade de Aveiro. Aveiro, Portugal*

**Introduction:** The complexity inherent to Ambient Assisted Living raises some of issues not yet quiet solved within similar fields like Assistive Technology, namely those related with prescription and selection.

**Objective:** This paper aims to identify models of frameworks for the prescription of AT that may serve as a foundation to develop comprehensive models for the selection, prescription and counselling process of ALL solutions.

**Methods:** A systematic literature search was conducted in PubMed, Eric and CiteSeerX databases using a predefined strategy. The relevant literature extracted was screened and a list of models and frameworks was elaborated.

**Results:** Seven models or frameworks were included for analyses. It was possible to find ICF components in all of the models or frameworks. The results showed a shift between the models from the end of last century, based in an instrumental description of components involved to a predictive end users behaviour concern.

**Conclusion:** Future work should deepen the conceptual issues about the selection, prescription and counselling process of AAL systems and services.

**Descriptors:** Ambient Assisted Living; Assistive Technology; Technology Selection and Prescription Models.

004

### E-HEALTH WEB BASED TECHNOLOGIES PATIENT ADOPTION

Jorge Tavares<sup>a</sup>, Tiago Oliveira<sup>b</sup>

*Instituto Superior de Estatística e Gestão de Informação. Universidade Nova de Lisboa. Lisboa, Portugal*

**Introduction:** Understanding the acceptance and use of e-health technology by health care consumers is a very relevant topic with clear benefits for the society and future sustainability of the Health Care System. The warning signs are that the number of patients with chronic diseases is projected to grow by 45% between 2007 and 2025 and the workforce will be 10% smaller than in 2007. Combining these two trends, there will be less health professionals available in the future to support patients. E-health Web based technologies may help patients carry out self-management activities making the use of the healthcare system more effective.

**Objective:** The aim of this study is to identify a set of determinants of adoption of e-health web based technologies by patients.

**Methods:** We made an extensive review of the existing literature concerning both information technology adoption models and consumer healthcare adoption models.

**Results:** We identified specific theories in the field of consumer IT adoption that together with specific theories in healthcare related with patient empowerment, confidentiality, health condition patient self-perception, led us to propose a new framework that can explain the usage and adoption of e-health web based technologies.

**Conclusions:** Our goal is to test the new framework that should help us identify the critical factors for adoption of e-health web based technologies.

**Descriptors:** Web-Technologies; E-health; Healthcare; Adoption Models; Patient Empowerment.

<sup>a</sup> jalvarelhao@ua.pt

<sup>b</sup> alexandra@ua.pt

<sup>c</sup> npr@ua.pt

<sup>a</sup> tavares.jorge@gmail.com

<sup>b</sup> toliveira@isegi.unl.pt

005

### VAST AUTISMO – INNOVATION AND TECHNOLOGY IN SPEECH AND LANGUAGE THERAPY

João Canossa Dias<sup>1,a</sup>, Juliana Sá Rico<sup>1,b</sup>

<sup>1</sup>*Associação para a Recuperação de Cidadãos Inadaptados da Lousã. Lousã, Portugal*

<sup>11</sup>*Agrupamento de Escolas Guilherme Correia de Carvalho. Seia, Portugal*

**Introduction:** VAST Autismo – Base provides unprecedented support for Portuguese spoken language acquisition, combining some of the evidence-based best practices and technology to deliver remarkable results.

**Objective:** Provide a state-of-the-art therapy tool to users with autism spectrum disorders and motor speech programming disorders, such as apraxia/dyspraxia.

**Methods:** Combining the highly effective concept of video modeling along with written words and auditory cues, this iOs application aims to help individuals acquire relevant syllables, words, daily expressions and sentences so that they can speak and advocate for themselves. Each video is intentionally short to keep the user's attention and focus only on the content of each one of the levels. All the syllables, diphthongs, onomatopoeias, words, polysyllabic words, expressions of daily life and usual phrases were selected according to developmental and functional criteria and incorporate meanings that can be generalized and practiced in contexts beyond therapy.

**Results:** Ongoing research indicates that users are highly interested in the VAST videos, and will almost immediately attempt oral movements or touch their face and mouth in response to the models. After some time using the VAST technology, combined with adequate therapy, many users who were essentially non-oral communicators began word approximations and word attempts more readily.

**Conclusions:** The videos' sequence as well as the content of this application were defined according to literature review on child development. Functionality was also a criterion in the choice of vocabulary potentially useful in varied daily life situations. More studies are necessary to support the efficacy of this technology.

**Descriptors:** Speech training, Video Assisted Therapy, Autism Spectrum Disorders, Dyspraxia.

006

### FROM TECHNOLOGY TO HEALTH: A RISK-BENEFIT ANALYSIS OF THE MOBILE HEALTHCARE APPLICATIONS

Francisco Caldeira<sup>1</sup>, Rita Luís<sup>1</sup>, Bruno Mendes<sup>11,a</sup>

<sup>1</sup>*Escola de Ciências e Tecnologias da Saúde. Universidade Lusófona de Humanidades e Tecnologias. Lisboa, Portugal*

<sup>11</sup>*Grupo de Gestão de Qualidade e Estratégia em Saúde. Escola de Ciências e Tecnologias da Saúde. Universidade Lusófona de Humanidades e Tecnologias. Lisboa, Portugal*

**Introduction:** The expansion of mobile technologies and their interactive tools (Mobile Healthcare Applications, MHA) have a remarkable contribution for the growing of health literacy, patient empowerment and allow a gradual support to the healthcare professionals activity. The global industry landscape reflects this adherence, that represents 500 million users in 2015 and, expect 1,700 million for 2018.

**Objective:** Like other health technologies, the MHA need an assessment of their quality and risk-benefit profile, and need to define responsibilities in the regulatory field, which are the project objectives.

**Methods:** The analysis included an universe of 75 MHA integrated in categories: Medical (57%), Pharmacy (18%), Nutrition (12%), Nursing (6%), other disciplinary areas (5%). The group performed a matrix of retrospective analysis based on quality attributes (accessibility, adequacy, continuity, patient involvement and effectiveness), characterized by a set of indicators and criteria. Following a structure: attribute> indicator> criteria, any MHA complying with 60% of the indicators (majority measure), fulfilled the attribute or attributes.

**Results:** Regarding the MHA evaluated, we observed the following attributes versus number of applications relation: accessibility (30), adequacy (35), continuity (20), involvement (30) and effectiveness (61). Only one MHA cumulatively fulfill all the attributes. We also registered the existence of regulatory projects about MHA, but lack of regulation in place in Europe.

**Conclusions:** The regulatory bodies do not follow the MHA technological developments and market. Only 1.3% MHA provides quality assurance and, for that reason the MHA availability can be an opportunity for the installation of public health risks.

**Descriptors:** Health; Technologies; Applications; Regulation; Risks.

<sup>a</sup> joão.canossa.dias@clix.pt

<sup>b</sup> julianasa25@gmail.com

<sup>a</sup> bruno.mendes@ulusofona.pt

007

### PROJECT “GOOD CITIZEN WITH INGENUITY AND EDUCATION” - PREVENTION AND INTERVENTION IN RESPONSE TO BULLYING AT SCHOOL

Ana Maria Gomes<sup>1,a</sup>, Ana Cláudia Filipe<sup>1,b</sup>

<sup>1</sup>*Superior Institute for the Health Sciences and Interdisciplinary Research Center in Health. Portuguese Catholic University of Lisbon. Lisboa, Portugal*

<sup>11</sup>*Parents Association. Basic School of Engenho. Marinha Grande, Portugal*

**Introduction:** Creating conditions for children to become actors and authors in the construction of their own health and wellness school is crucial.

**Objective:** To promote health education and citizenship at school by stimulating prevention of aggression among children attending the 1st cycle of basic education. To reduce risk behaviors; encourage children, parents, teachers to take an active role in improving the health and well-being at school; promote the empowerment regarding the promotion of their health, access to information, inclusion and participation as citizens.

**Methods:** Implementation at the beginning and end of project of a questionnaire on bullying; training of teachers, education assistants, parents and students on the topic; Encourage school moments of relationship, sharing, cooperation, activities inside and outside the classroom to educate for empathy, “change skin” with colleague; Working values of respect with parents participation during lunch time. Working the concept “Do not do to others what you do not want or do not like others to do to you” and, incorporate these dynamics in the discipline of Environmental Studies; Construction of the Tree of Feelings and an “anti-bullying brigade”.

**Results:** The children shared the feelings and emotions of colleagues, such being expressed in less aggressive behaviors.

**Conclusions:** There was empowerment through shared emotions and feelings of belonging. This has led to a greater respect for colleagues and the feelings and emotions of others.

**Descriptors:** Bullying. School. Empowerment.

008

### STUDY OF THE RELATIONSHIP BETWEEN SLEEP QUALITY AND BULLYING BEHAVIORS IN SCHOOL AGE CHILDREN

Ana Maria Gomes<sup>a</sup>

*Superior Institute for the Health Sciences and Interdisciplinary Research Center in Health. Portuguese Catholic University of Lisbon. Lisboa, Portugal*

**Introduction:** Bullying takes on a central theme in our society nowadays, it must be expressed in behaviors increasingly visible among children and youth. We seek to contribute to the understanding not only of this phenomenon, but of the relationship between bullying and sleep characteristics and quality.

**Objective:** The general objective is there is a relationship between features and quality of sleep and the existence of bullying behaviors? And to what extent does sleep quality influence school performance and behavior in the classroom. The specific objectives are to confirm, a) whether there is a relationship between the characteristics and quality of sleep and the existence of bullying behaviors in children; b) whether there is a relationship between sleep quality and academic performance of children; c) whether there is a relationship between sleep quality and behavior of the children in the classroom; d) whether there is a relationship between sleep quality and the child’s socio-cultural environment.

**Methods:** The participants are a group of children from 6 to 10/11 years of age. Data was collected on the 1st cycle schools, obtaining 400 participants for the preliminary results.

**Results:** The preliminary results reveal that there are in fact bullying behaviors in school-age children and in both sexes. Revealing a direct link between poor sleep quality and aggressive behaviors, such as poor school performance and restlessness in the classroom.

**Conclusions:** The quality of sleep during childhood influences the lives of aggressive behavior among peers, school performance and quality of behavior in the classroom.

**Descriptors:** Bullying. Sleep quality. Behaviors. School-age children. Academic performance.

<sup>a</sup> ana.m28.gomes@gmail.com

<sup>b</sup> anaclaudiasantosfilipe@gmail.com

<sup>a</sup> ana.m28.gomes@gmail.com

009

### EFFECTIVENESS OF E-HEALTH INTERVENTION PROGRAMS IN OVERWEIGHT ADOLESCENTS: SYSTEMATIC REVIEW

Pedro Sousa<sup>a</sup>

*Unidade de Investigação em Saúde. Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

**Introduction:** The high prevalence of obesity in adolescents is a serious public health problem. The implementation of e-health strategies on the weight control treatment have potential benefits that need to be analyzed.

**Objective:** This study aims to systematize the state of knowledge about the effectiveness of e-health intervention programs in weight reduction in overweight adolescents.

**Methods:** We conducted a systematic review on electronic databases (Academic Search Complete, CINAHL Plus, Cochrane Database of Systematic Reviews, ISI Web of Science, Medline, Psychology and Behavioral Sciences Collection, SPORTDiscus) using various combinations of relevant search terms according to the PICOD method. The records were screened and assessed for inclusion in the review based on pre-established criteria.

**Results:** From the 86 references initially identified, four randomized clinical trials from USA were selected. Altogether 299 overweight adolescents were studied, aged between 11 and 18 years. Intervention programs ranged between 16 weeks and 2 years, including several behavioral, motivational and cognitive strategies. One study addressed not only the individual but also his family. All studies presented significant results in post-intervention on weight reduction but they fail to shown significant long-term effects.

**Conclusions:** There are still few studies on the effect of e-health therapeutic interventions in the treatment of overweight adolescents. Further research is necessary to determine the potential of e-health interventions as a viable component of weight management programs.

**Descriptors:** obesity; adolescent; effectiveness; e-health; internet.

010

### WHO BENEFITS FROM AN E-THERAPEUTIC WEIGHT MANAGEMENT PROGRAM?

Pedro Sousa<sup>1,a</sup>, Helena Fonseca<sup>1,III,b</sup>, Pedro Gaspar<sup>1,c</sup>, Filomena Gaspar<sup>IV,d</sup>

*<sup>1</sup>Unidade de investigação em Saúde; Escola Superior de Saúde de Leiria, Instituto Politécnico de Leiria. Leiria. Portugal*

*<sup>II</sup>Faculdade de Medicina da Universidade de Lisboa. Lisboa. Portugal*

*<sup>III</sup>Clinica de Obesidade pediátrica, departamento de pediatria, Hospital de Santa Maria. Lisboa. Portugal*

*<sup>IV</sup>Escola Superior de enfermagem de Lisboa. Lisboa. Portugal*

**Introduction:** Adolescent obesity is a major health problem, being urgent to find effective interventions that induce behavioral change.

**Objective:** This study aims to evaluate the predictors of effectiveness of an e-therapeutic platform (Next.Step), aiming to promote weight management skills and the adoption of health-promoting lifestyles through increased and interactive contact between the adolescent and the clinical staff.

**Methods:** This study is part of a larger clinical trial, with a sample of adolescents (12-18 years) who attended a Pediatric Obesity Clinic during 2012. Participants (N=48) were invited to access, during 24 weeks, the e-therapeutic case management multidisciplinary platform (Next.Step) in addition to the standard treatment program. Program effectiveness was evaluated at intermediate (12 weeks) and post intervention evaluation (24 weeks). Statistical analysis was performed using nonparametric tests (Spearman correlation, Mann-Whitney U test and Kruskal-Wallis test).

**Results:** The e-therapeutic program was shown to have significant impact in promoting a healthy lifestyle, a better quality of life and a lower BMI z-score. Several predictors of the Next.Step effectiveness were found among the demographics, anthropometric, behavioral and clinical variables.

**Conclusions:** More interactive and dynamic interventions in adolescent obesity are needed. Findings suggest that adolescents may benefit from an e-therapeutic weight management program. Several predictors of the Next.Step effectiveness were found. These results should promote reflection on new approaches directed to the obesity treatment and promotion of salutogenic skills.

**Descriptors:** Overweight; Adolescents; Internet-based; Weight management; Predictors.

<sup>a</sup> pedro.sousa@ipleiria.pt

<sup>b</sup> helenaregalofonseca@gmail.com

<sup>c</sup> pedro.gaspar@ipleiria.pt;

<sup>d</sup> mfgaspar@esel.pt

<sup>a</sup> pedro.sousa@ipleiria.pt

011

**VALIDATION OF A DECISION SUPPORT SYSTEM IN BARIATRIC SURGERY**

Magda Rosa Ramos da Cruz<sup>1,a</sup>, João da Silva Dias<sup>1,b</sup>,  
Cristina Martins<sup>1,c</sup>, José Simão de Paula Pinto<sup>1,d</sup>

<sup>1</sup>*Pontifícia Universidade Católica do Paraná. Paraná, Brazil*

<sup>11</sup>*Universidade Federal do Paraná. Paraná, Brazil*

<sup>111</sup>*Institute and Pro Renal Foundation. Brazil*

**Introduction:** Bariatric surgery is an important method for treatment of morbid obesity. It is known that significant nutritional deficiencies might occur after the surgery. Among them are the calorie-protein malnutrition, iron-deficient anemia and lack of vitamin B12, thiamin and folic acid.

**Objective:** to validate a Computerized Intelligent Decision Support System which suggests nutritional diagnosis of patients submitted to bariatric surgery.

**Methods:** It was developed 15 clinical cases, and sent to three dietitians in order to evaluate and define nutritional diagnosis. After this phase, the cases were sent to four bariatric surgery specialist dietitians, with the objective to elaborate a gold-standard. Nutritional diagnosis were asked to be defined individually, and the problems were solved through a consensus. The final result was used as gold-standard. Bayesian Networks were used to implement the system. Database training was made at shell Netica®. For the system validation, a similar answer rate was calculated, as well the specificity and sensibility. ROC curves were projected to each nutritional diagnosis.

**Results:** Among the four specialists, the rate of similar answers found was 80% to 93.33%, according to the nutritional diagnosis. The rate of similar answers of the system, compared to the gold-standard, was 100%. The system sensitivity and specificity were 95%. The ROC curves projection demonstrated that the system was able to represent the specialist knowledge (gold-standard) and to help them in their daily tasks.

**Conclusions:** the system developed was validated to be used in the decision-making support for nutrition diagnosis of patients submitted to bariatric surgery.

**Descriptors:** Obesity; Bariatric surgery; Nutrition diagnosis; Artificial intelligence; Decision support system.

012

**CAREFORME: AN APPLICATION FOR IOS DEVICES FOR HELPING IN PREVENTING PRESSURE ULCERS**

Francisco Santana Pérez<sup>1</sup>, Rodrigo Chacón Ferrera<sup>1</sup>, M. Pino Quintana Montesdeoca<sup>11</sup>, Bienvenida Rodríguez Pérez<sup>1</sup>, Juan F. Jiménez Díaz<sup>11</sup>

<sup>1</sup>*Department of Computer Sciences. Universidad de Las Palmas de Gran Canaria. Las Palmas de Gran Canaria, Spain*

<sup>11</sup>*Department of Nursing. Universidad de Las Palmas de Gran Canaria. Las Palmas de Gran Canaria, Spain*

<sup>111</sup>*Department of Maths. Universidad de Las Palmas de Gran Canaria. Las Palmas de Gran Canaria, Spain*

**Introduction:** As shown in previous research on a population of 1186 people, that represent the three regions Madeira, Azores and Canary-Islands within the ICE Project (“Enfermería e Úlceras por presión: de la reflexión sobre la disciplina a las evidencias en los cuidados” – ICE Project – 2011), the prevalence of having pressure ulcers is 14,8%, majority on people embedded at home. There are no specialized apps that help carers prevent from patient pressure ulcers.

**Objective and Methods:** We have developed an iOS App (CareForMe) that controls the setting of alarms that go off once an activity comes to an end. Considering collections of activities as what we call routines, changing of postures for embedded people can be programmed as routines in order to permit nurses be aware of when a posture must be changed. CareForMe also includes managing patient records in order to control different aspects of their illness as well as control postures to be applied. CareForMe also can measure pressure ulcers by using the Braden Scale. Routines can be used as reminders for sick people as diabetics, or as control in a diet.

**Results:** We have tested our App on several people in homes with great results that could be increased by testing in homes and hospitals.

**Conclusions:** Preventing pressure ulcers should be learnt against automatic tools that control changing of postures for embedded people, even at home, and apps are a great for that. Our app can be improved by including new features for automatical measuring of ulcers areas by taking pictures.

**Descriptors:** pressure sores, pressure ulcers, apps, iOS.

<sup>a</sup> [nutriclinmagda@bol.com.br](mailto:nutriclinmagda@bol.com.br)

<sup>b</sup> [joao@joaodias.eng.br](mailto:joao@joaodias.eng.br)

<sup>c</sup> [crismar@institutocristinamartins.com.br](mailto:crismar@institutocristinamartins.com.br)

<sup>d</sup> [simao@ufpr.br](mailto:simao@ufpr.br)

013

**NEW THERAPEUTICAL SYSTEMS FOR MULTIPLE SCLEROSIS: PATIENT PERCEPTION AND CHALLENGES\***

Maximiano Ribeiro<sup>1,II,a</sup>, Sílvia Farias<sup>II,b</sup>, Ana Torres<sup>II,c</sup>,  
Carolina Sousa<sup>II,d</sup>, Sofia Barros<sup>II,e</sup>, Fátima Roque<sup>II,f</sup>,  
Paula Coutinho<sup>II,g</sup>

<sup>I</sup>*Escola Superior de Saúde. Instituto Politécnico da Guarda. Portugal*

<sup>II</sup>*Unidade de Investigação para o Desenvolvimento do Interior. Instituto Politécnico da Guarda. Portugal*

**Introduction:** Multiple Sclerosis is a chronic, progressive, autoimmune disease characterized for damage of myelin and axons. This disorder has a considerable social and economic impact. The prevalence of Multiple Sclerosis in Portugal is estimated to be approximately 50/100,000 inhabitants, according to the Portuguese Multiple Sclerosis Society. In order to minimize the problems created by this disease some treatments are being used, although the ideal treatment has not been yet developed.

**Objective:** The aims of this study were to ascertain the most widely used treatment for the different types of Multiple Sclerosis and to identify the most relevant parameters that may influence treatment adherence.

**Methods:** From September to December 2013, data of 60 patients from Portuguese Multiple Sclerosis Society were collected by an online questionnaire. Demographic, disease and therapy related data were collected and statistically analyzed.

**Results:** About 55% of respondents had Relapsing-Remitting Multiple Sclerosis. Interferon  $\beta$  was the drug most used in the treatment of all types of multiple sclerosis in monotherapy (56,7%) or in combination with other drugs (5%). 58,3% of patients mention appeal to nonpharmacological therapies such as adapted food and nutrition and physiotherapy. Difficulties related to intravenous drug administration was the most relevant factor identified by patients (50%).

**Conclusions:** The convenience of drug administration is a factor to take in account for the developing of new therapeutic systems due to its role in treatment adherence. Biotechnology and its tools should have an important role in the improvement/refinement of therapy in the near future.

**Descriptors:** Multiple Sclerosis; Survey; Treatment; Adherence; Challenges.

\*This work was supported by Foundation for Science & Technology (Fundação para a Ciência e Tecnologia - FCT) grant [Pest-OE/EGE/UI4056/2014] from the Portuguese Ministry of Science & Education.

<sup>a</sup> mribeiro@ipg.pt

<sup>b</sup> silvia\_farias17@hotmail.com

<sup>c</sup> anatorres200@hotmail.com

<sup>d</sup> ana\_karolina\_4@hotmail.com

<sup>e</sup> sofiabarros\_0307@hotmail.com

<sup>f</sup> froque@ipg.pt

<sup>g</sup> coutinho@ipg.pt

## ETHNICITY AND HEALTH

014

### EPIDEMIOLOGICAL ASPECTS OF TUBERCULOSIS IN BRAZILIAN NORTHEASTERN

Francisco Rodrigues<sup>1,a</sup>, Mônica Ferreira<sup>1,b</sup>, Nathalia Ribeiro<sup>1,c</sup>, Priscila Souza<sup>1,d</sup>, Saulo Oliveira<sup>1,e</sup>

<sup>1</sup>*Instituto de Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto, Portugal*

<sup>11</sup>*Universidade Estadual do Ceará. Fortaleza, Brasil*

**Introduction:** The northeast of Brazil is the second region with highest number of cases for tuberculosis in the country.

**Objective:** To identify the epidemiological characteristics of tuberculosis in the northeastern region of Brazil.

**Methods:** The study is descriptive. The data were obtained from the Brazilian System of Disease Surveillance. The sample consisted of 122,008 cases of tuberculosis in the northeastern region of Brazil, from 2008 until 2012. The results are presented using descriptive statistics.

**Results:** 65.2% were males. 43% with age between 20 and 39 years old. 56.2% had four to seven years of schooling. 10.2% were institutionalized, the majority (51.1%) in prisons. 86.5% had pulmonary tuberculosis. 77.1% of the cases did sputum smears. 9% were HIV infected. 64.7% were cured, 4.1% died, 10.4% abandoned treatment, 3.7% were deaths from other causes and 0.4% had multidrug resistance.

**Conclusions:** The disease can hinder the development this region. The institutionalization and low education are important risk factors, they are contributing to non-adherence to treatment and to the increase the dropout rate. Pulmonary illness remains the most frequent. HIV infection prevalence is high, which decreases the chances of cure and increased the mortality. The cure remains below the level recommended by WHO. These are some markers of vulnerability for this population, associated with early diagnosis, helping to reduce: the risk of exposure and transmission risk, multidrug resistance and mortality per tuberculosis.

**Descriptors:** Epidemiology. Tuberculosis. Public health. Communicable disease prevention. Community medicine.

015

### IMMIGRANTS' CARE: FROM ETHNOCENTRISM TO ETHNORRELATIVISM IN NURSES

Alcinda Reis<sup>1,11,a</sup>, Maria Costa<sup>1,b</sup>

<sup>1</sup>*Instituto de Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto, Portugal*

<sup>11</sup>*Escola Superior de Saúde de Setúbal. Instituto Politécnico de Setúbal. Setúbal, Portugal*

**Introduction:** The process of caring immigrants promotes nurses' professional development. Alongside the monitoring of health-illness transitions in immigrants, cultural skills are built into the professionals. With the nurses' awareness process of their own ethnocentrism in multicultural contexts of care, they overtake construction stages of those skills.

**Objective:** Characterize nurses' ethnic awareness process while simultaneously building of cultural skills.

**Methods:** Qualitative, ethnographic study, in family health units and immigrants' households. Study subjects: nurses and immigrants in a total of 52. We developed participant observation, ethno-biographical interviews and narratives and focus group.

**Results:** After data and techniques' triangulation, cultural domains emerged from nurses – conduct of encounters, involvement in action and mobilization of knowledge and beliefs. While identifying categories of similarity and contrast within the cultural scene – interaction and care with immigrants – we characterized the nurses' ethnic awareness process.

**Conclusions:** There are two distinct phases in this awareness process and in building cultural skills into the professionals. According to Bennett's model (2004), we characterized both stages: the minimization of cultural differences (last phase of ethnocentrism) and its acceptance (first phase of the ethnorrelativism). We validated the interpretative analysis in two focus groups (with immigrants and with nurses). We identified a dialectical relationship between the nurses' ethnical awareness and the achieved cultural coherence in immigrants' care.

**Descriptors:** Ethnocentrism. Ethnorrelativism. Nurses. Immigrants. Cultural skills.

<sup>a</sup> rafaelrodrigues.rf1@gmail.com

<sup>b</sup> taynara\_mf@yahoo.com.br

<sup>c</sup> nathaliaribeiro@yahoo.com.br

<sup>d</sup> priscilaferriramed@gmail.com

<sup>e</sup> sauloaires1@gmail.com

<sup>a</sup> alcinda.reis22@gmail.com

<sup>b</sup> arminda@esenf.pt



016

## OCCUPATIONAL THERAPY FROM AN INTERCULTURAL PERSPECTIVE: A CHALLENGE AND AN OPPORTUNITY

Inmaculada Zango Martín<sup>1,a</sup>, Juan Antonio Flores Martos<sup>1,b</sup>, Pedro Moruno Millares<sup>11,c</sup>

<sup>1</sup>*Departamento de Terapia Ocupacional. Universidad Católica San Antonio de Murcia. Murcia, Spain*

<sup>11</sup>*Departamento de Filosofía. Universidad de Castilla-La Mancha. Talavera de la Reina, Spain; <sup>111</sup>Departamento de Terapia Ocupacional. Universidad de Castilla-La Mancha. Talavera de la Reina, Spain*

**Introduction:** The processes of globalization have a clear impact in occupational therapy. For that, there is a growing interest in aspects related to culture and its relationship to health and well-being. As other healthcare professions, occupational therapy is also a culture and it is influenced by social, political, economic and legal environment; that means different modes of thinking and doing.

**Objective and Methods:** The aim of this research was to propose an occupational therapy approach from an intercultural perspective, taking into account the ethnography developed in Honduras, Morocco, Burkina Faso, Tanzania and Ecuador.

**Results:** The results showed that the universality of occupational therapy needs to be questioned. Moreover, to analyze deeply the knowledge construction and how is transmitted is needed. For that, we propose a critical thinking between occupational therapist and people from diverse cultural context and for this we focused in theory, practice and institutional domain.

**Conclusions:** To develop an occupational therapy culture more flexible with the different occupational situations around the world is the main challenge today. At the same time, occupational therapy from an intercultural perspective is an opportunity to focus the intervention in therapeutic effectiveness and in a culture safe care, promoting community health through occupation. A vision of the occupation on economic, social and political aspects which aims at social transformation is proposed.

**Descriptors:** culture; critical thinking; ethnography; interculturality, occupation.

<sup>a</sup> izango@ucam.edu

<sup>b</sup> JuanAntonio.Flores@uclm.es

<sup>c</sup> Pedro.Moruno@uclm.es

## HEALTH INTERVENTIONS IN THE COMMUNITY

017

### PSYCHOSOCIAL CORRELATES OF PHYSICAL ACTIVITY AMONG CHILDREN AND ADOLESCENCES WITH SPINA BIFIDA

Sofia Santos<sup>1,a</sup>, Inês Maldonado<sup>1,b</sup>, A. Marques<sup>1,c</sup>

<sup>1</sup>*Centro de Estudos de Educação Especial. Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal*

<sup>1</sup>*Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal*

**Introduction:** Physical inactivity and obesity are a public health problem. Their increase emphasizes the need to create conditions to promote, adopted and maintained behaviors promoting health. Children and adolescents with physical disabilities (PD) practice less physical activity (PA) than non-disabled peers. However, the majority of studies is based on adult populations and is not specific to PD.

**Objective:** The goal is to understand factors related with PA practice by children and adolescents with spina bifida, in order to develop intervention programs.

**Methods:** A questionnaire of lifestyles to students was elaborated and validated previously and applied to a sample of 25 children, between 10 and 17-years, in regular schools, with spina bifida. The 29-question questionnaire was answered individually (self-administered).

**Results:** Results pointed out the lack of PA by participants: not only PA is not emphasized, as also children with spina bifida are not, generally, included in classes with their peers; only around 40% participate in PA. There were no correlations between PA and psychosocial correlates (unadjusted and adjusted binary logistic regressions), except perception of competence.

**Conclusions:** Although scientific evidence based for PA practice in people without diagnosis, there is a lack of research in the special population field. School offer is often limited due to the difficulty of children with motor disability keeping up with other children. Others barriers were identified on the study. The promotion of healthy and active lifestyles in special populations, outlining the best and more appropriate intervention strategies for this population, is one of the future goals in this field.

**Descriptors:** Lifestyles. Spina bifida. Psychosocial correlates. Physical disability. Physical activity.

018

### TRAINING AND EDUCATION IN HEALTH: A BRAZILIAN INTER-INSTITUTIONAL RESEARCH FOR THE SUS

Yara Carvalho<sup>1,a</sup>, Alex Fraga<sup>1,b</sup>, Ivan Gomes<sup>1,c</sup>

<sup>1</sup>*Universidade de São Paulo. São Paulo, Brasil*

<sup>1</sup>*Universidade Federal do Rio Grande do Sul. Porto Alegre, Brasil*

<sup>1</sup>*Universidade Federal do Espírito Santo. Goiabeiras, Vitória, Brasil*

**Introduction:** The inter-institutional research “Policies of training in physical education and public health” aims to problematize the training in health, to call the attention specially of physical education students for the importance of the work with public health, and also to analyze the process of implementing government public policies geared to physical activity/bodily practices in Brazilian Unified Health System (SUS).

**Objective:** to evaluate the “Education Program for Health Work” which is a public policy to approximate undergraduate students, lecturers, professionals from all fields of health and users with the purpose of health care education and training in health.

**Methods:** The theoretical-conceptual and methodological framework is situated within the scope of public health and human and social sciences. The studies entailed the focus on complex themes, around competences and skills and on different theoretical perspectives underlying the thinking and acting in health, especially the “Amplified Clinic”.

**Results:** The results confirm a gap between the undergraduate education in health and the principles of SUS, and the lack of responses to the health needs of users of SUS.

**Conclusions:** The initiatives with bodily practices as health practices/care practices can be potent strategies in health – with a participative and democratic focus – and in the production of health – with an emphasis on care and building bonds.

**Descriptors:** Education in health. Policies of training. Intervention in health. Health policies. SUS.

<sup>a</sup> sofiasantos@fmh.ulisboa.pt

<sup>b</sup> maldonado.ines@gmail.com

<sup>c</sup> amarques@fmh.ulisboa.pt

<sup>a</sup> yaramc@usp.br

<sup>b</sup> branco.fraga@gmail.com

<sup>c</sup> ivanmgomes@hotmail.com

019

### THE USER OF PSYCHOACTIVE SUBSTANCE TO THE EMERGENCY SERVICE: A SYSTEMATIC REVIEW

Fatima Büchele<sup>a</sup>, Marcelo Stuart Barreto

*Universidade Federal de Santa Catarina. Florianópolis, Brasil*

**Introduction:** The psychoactive substances are a public health problem. In Brazil, 6% of the population (11 million people) have substance use disorders. At the emergency services, alcohol is associated with 70% of homicides, 40% of suicides, 50% of automobile accidents, 60% of fatal burns, 60% of drownings and 40% of fatal falls.

**Objective:** To perform a systematic review between 2002 and 2012, linking the consumption of psychoactive substances and the emergency services in a city of southern Brazil.

**Methods:** A systematic literature review was performed in the period between 2002 to 2012. The searches in publications were performed at the databases: LILACS, BDENF, SciELO and MedLine. The selection of the articles was performed by reading the title, abstract and content of selected articles.

**Results:** 417 articles were found in the databases listed, 375 were excluded for duplicity or for being out of the inclusion criteria that were, journals addressing the theme psychoactive substance, urgency and emergency. The analysis was performed from 42 articles. The results pointed the relationship between psychoactive substances, accidents and violence, the treatment and approach of the user of psychoactive substances.

**Conclusions:** The accomplishment of this study simultaneously gathered data about drugs and the emergency services. The relevance of this study serves as theoretical support and reflection about the existing problems related to drugs at the emergency units. We emphasize the small amount of publications involving psychoactive substances and emergency services and this imposes the accomplishment of new studies of this size and others related.

**Descriptors:** Drugs. Alcoholism. Urgency. Emergency.

020

### WEIGHT STATUS AND JUMP PROFICIENCY: DIFFERENCES BETWEEN HEALTHY WEIGHT AND OBESE CHILDREN

Gabriela Almeida<sup>a</sup>, Carlos Luz<sup>b</sup>, Rui Martins<sup>c</sup>, Rita Cordovil<sup>d</sup>

*<sup>I</sup>Universidade Fernando Pessoa. Porto, Portugal*

*<sup>II</sup>Escola Superior de Educação. Instituto Politécnico de Lisboa. Lisboa, Portugal*

*<sup>III</sup>Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal*

**Introduction:** Fundamental movement skills (FMS) proficiency is positively associated with physical activity, fitness levels, and inversely associated with weight status. If a child cannot run or jump proficiently, it will have limited skills to engage in physical activities.

**Objective:** The aim of this study was to compare the levels of proficiency in two FMS (standing long jump and one-leg obstacle jump) of overweight/obese and of normal weight children from Lisbon, Portugal.

**Methods:** The sample consisted of 271 typically developing children (141 male, 130 female) with a mean age of  $8.55 \pm 1.16$  and a mean body mass index (BMI = weight/height<sup>2</sup>) of  $17.87 \pm 2.58$  kg/m<sup>2</sup>. To determine motor skill proficiency in the standing long jump, children were requested to jump as far as possible with their feet together from a stationary position. For the one-leg obstacle jumping, children were asked to hop on one leg over a pile of pillows that increased in height with consecutive steps of 5 cm per pillow.

**Results:** Based on international BMI cut-offs values, 26.9% of the children were considered overweight/obese and 73.1% normal weight. The group of overweight/obese children showed lower scores in both motor skill competences ( $p < 0.001$ ).

**Conclusions:** The development of motor skill competences is a key mechanism to promote an active lifestyle. Motor skill development and improvement should be a primary goal during childhood and adolescence in order to mitigate the health risks of inactivity and obesity and to promote short and long term health benefits.

**Descriptors:** Child obesity. Motor skills. Jump proficiency.

<sup>a</sup> fatima.buchele@ufsc.br

<sup>a</sup> gabrielasna@hotmail.com

<sup>b</sup> carlosmigueluz@gmail.com

<sup>c</sup> rmartins@fmh.ulisboa.pt

<sup>d</sup> ritacordovil@fmh.ulisboa.pt

021

**DOES WEIGHT STATUS INFLUENCE THE BALL THROWING SKILL IN CHILDREN?**Gabriela Almeida<sup>1,a</sup>, Carlos Luz<sup>1,b</sup>, Rui Martins<sup>1,c</sup>, Rita Cordovil<sup>1,d</sup><sup>1</sup>Universidade Fernando Pessoa. Porto, Portugal<sup>11</sup>Escola Superior de Educação. Instituto Politécnico de Lisboa. Lisboa, Portugal<sup>111</sup>Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal

**Introduction:** The majority of studies on movement skills competence in overweight/obese children focus exclusively on locomotor skills (e.g., running, jumping), but information concerning object-control skills (e.g., throwing, catching, kicking) is lacking.

**Objective:** In this study we measure and compare the ball velocity in one object-control skill (throwing), and the hand strength for the dominant hand, in overweight/obese and normal weight children.

**Methods:** Portuguese children (N=271, 6.48-11.08 years-old) were assessed for body mass index (BMI), handgrip strength, and ballistic skills of throwing. According to the International BMI cut-offs 198 children were categorized as normal weight and 73 as overweight/obese. The static strength of the dominant hand was measured using a hand dynamometer. Ball velocity was evaluated using a speed radar while the children threw a ball at a wall as fast as possible with their preferred hand.

**Results:** Hand strength's scores ( $p < 0.001$ ) were significantly better in overweight/obese children as compared to their counterparts, however no difference was found for the one-hand throwing task ( $p = 0.929$ ).

**Conclusions:** Children's motor proficiency is associated with physical activity. Helping children become more active provides public health benefits. Although overweight/obese children were stronger in this study they did not perform better in a functional task that requires strength. Proficient throw reflects not just strength but also other factors that can be influenced by body size and proportions, such as movement coordination. Physical activity interventions targeted to overweight/obese children should focus not only in improving their physical fitness but also their motor skills.

**Descriptors:** Children. Obesity. Object control skills. Throwing. Hand strength.

<sup>a</sup>gabrielasna@hotmail.com  
<sup>b</sup>carlosmigueluz@gmail.com  
<sup>c</sup>rmartins@fmh.ulisboa.pt  
<sup>d</sup>ritacordovil@fmh.ulisboa.pt

022

**EFFECT OF ACUTE CAFFEINE ADMINISTRATION ON GLUCOSE HOMEOSTASIS AND BLOOD PRESSURE\***Joana Sacramento<sup>1,a</sup>, Maria João Ribeiro<sup>1,b</sup>, Sílvia V. Conde<sup>1,c</sup>, Maria Guarino<sup>1,d</sup><sup>1</sup>Faculdade de Ciências Médicas. Universidade Nova de Lisboa. Lisboa, Portugal<sup>11</sup>Unidade de Investigação em Saúde. Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal

**Introduction:** Caffeine is the behaviorally active substance most widely consumed in the world. When consumed regularly, it has minor negative consequences on human health and even protective effects, as shown by several epidemiological studies where chronic caffeine intake decreased the risk of type 2 diabetes. This effect contrasts with the action of acute caffeine administration that has been associated with deleterious changes in glucose homeostasis.

**Objective:** The aim of this work was to test the effect of acute administration of increasing caffeine doses on insulin sensitivity, fasting glucose and insulin and blood pressure.

**Methods:** In vivo experiments were performed in fasted Wistar rats, aged 3 months (200-350 g), anaesthetized with pentobarbital (65 mg/kg). The animals were submitted to intravenous administration of caffeine (Dose: 0.001-5 $\mu$ M), 15 minutes prior to insulin sensitivity evaluation. A blood sample was collected to evaluate fasting glucose and insulin and, afterwards, insulin sensitivity was determined by means of an insulin tolerance test. Blood pressure was continuously measured. Data were analyzed using Two-Way ANOVA with multicomparison post-tests.

**Results:** Acute administration of caffeine did not modify either fasting glucose or fasting insulin but it decreased insulin sensitivity in a dose dependent manner with a maximal effect of 61.95% ( $p < 0.001$ ) and an IC50 of 6.98 nM. Blood pressure was not affected by caffeine.

**Conclusions:** Our results suggest that acute caffeine administration significantly decreases insulin sensitivity without causing significant changes in plasma glucose.

**Descriptors:** Caffeine. Insulin sensitivity. Blood pressure. Fasting glucose. Fasting insulin.

\*Supported by Portuguese Foundation for Science and Technology - PTDC/SAU-ORG/111417/2009; Bolsa Nuno Castelo Branco SPD/Lilly 2009

<sup>a</sup>joanasacra@gmail.com  
<sup>b</sup>mj.rribeiro@gmail.com  
<sup>c</sup>silvia.conde@fcm.unl.pt  
<sup>d</sup>maria.guarino@ipleiria.pt

023

### THE PRACTICE OF ETHICS: REPORT OF THE EXPERIENCE OF STUDENTS IN THE PROFESSIONAL MASTER'S PROGRAM

Letícia Dutra<sup>a</sup>, Marta Dias<sup>b</sup>, Karla Damaceno<sup>c</sup>, Haline Ornelas, Érica Furforo<sup>d</sup>, Fernanda Marques<sup>e</sup>, Thamar Alves<sup>f</sup>

*Universidade Federal Vales de Jequitinhonha e Mucuri. Minas Gerais, Brasil*

**Introduction:** Ethical conduct in professional practice is one of the challenges in public services, especially in health. This often happens because the schools do not consider ethics as an essential practice within courses. Ethical aspects need to be treated as an integral part of the technical disciplines. This is critical for strengthening the principles of the Unified Health System (SUS) of equity, integrality and universality.

**Objective:** Our study aims to discuss topics, problems and concepts related to ethics in the daily practice of health professionals, and their impact in the formulation of public health policies.

**Methods:** We elaborated a report based on data collected during the interdisciplinary class on Ethical Issues in Education, Health and Public Policy at the Professional Masters in Education, Federal University of Vale Jequitinhonha and Mucuri.

**Results:** Topics such as education, ethics, moral, social participation, and public health were studied and analyzed. The class was composed of occupational therapists (17%), pedagogue (17%), nurses (33%) and physical education (33%) professionals. It was a consensus that ethical practices should be integrated in all technical disciplines and that the training professionals need to be exposed to highly ethical educators to learn the use of ethical practices.

**Conclusions:** Topics such as ethics must not be considered separately, since they are fundamental in all practices in health-related activities. This is critical for the democratic process and citizenship, and for obtaining a SUS of excellent quality. Thus, ethics should be a transdisciplinary process, as it is essential to the formation of health professionals committed to the SUS.

**Descriptors:** Health. Ethical. Education. Interventions. Community.

024

### DISPOSAL OF UNUSED OR UNWANTED PHARMACEUTICALS AS A SOURCE OF ENVIRONMENTAL POLLUTION

Rosa Pereira<sup>1,II</sup>, Margarida Gomes<sup>II</sup>, Lílíana Barros<sup>II</sup>, Ana Gonçalves<sup>II</sup>, Renata Fernandes<sup>II</sup>, Orelbe Medina<sup>1,II</sup>, Fernando Azevedo<sup>1,II</sup>

*<sup>1</sup>Centro Interdisciplinar de Ciências da Saúde. Póvoa de Lanhoso, Portugal*

*<sup>II</sup>Instituto Superior de Saúde do Alto Ave. Póvoa de Lanhoso, Portugal*

**Introduction:** Pharmaceutical residues are of high economic and social importance since they can cause negative effects on the environment and in human health when improperly disposed.

**Objective:** This study aims to identify the motivations that lead the population of Póvoa de Lanhoso, located in Northern Portugal to generate these wastes, as well as check their attitudes, behaviors and knowledge towards this matter.

**Methods:** The objectives were achieved through the implementation of a questionnaire designed for self-completion, in order to investigate a sample of 145 users belonging to the population of Póvoa de Lanhoso. All respondents purchased drugs for the past 12 months.

**Results and Conclusions:** The results showed that the generation of drug wastes resulted from excess of drugs existing in the medications packages. The preferential disposition is accomplished through the delivery of waste medicines in the pharmacy, after their expiration date or by direct deposition in the trash. The environmental factor is the main reason for the delivery of drugs in the pharmacy, but there is a misunderstanding by most of the respondents about the fate of drug residues after delivery at the pharmacy. There is a need for increased environmental awareness among the population studied.

**Descriptors:** Pharmaceuticals Disposal. Environment. Knowledge. Medication excess. Community Pharmacies.

<sup>a</sup> leticiadutrato@gmail.com

<sup>b</sup> martaluizadias@yahoo.com.br

<sup>c</sup> karlajaci@yahoo.com.br; haline@uai.com.br

<sup>d</sup> ericafurfuro@yahoo.com.br

<sup>e</sup> fernandahelena1988@gmail.com

<sup>f</sup> thamarkalil@ig.com.br

<sup>1</sup> rpereira@isave.pt

025

### EVALUATION OF PHARMACEUTICAL EXPERIENCE IN DISPENSING OF OPHTHALMIC PRODUCTS IN PORTUGAL

Orelbe Medina<sup>1,II,a</sup>, Rosa Pereira<sup>1,II</sup>, Natacha Moreno<sup>III</sup>, Daniela Borges<sup>II</sup>, Liliana Matos<sup>II</sup>, José Meleiro<sup>II</sup>, José Reguenga<sup>II</sup>, Fernando Azevedo<sup>1,II</sup>

<sup>I</sup>Centro Interdisciplinar de Ciências da Saúde. Póvoa de Lanhoso, Portugal

<sup>II</sup>Instituto Superior de Saúde do Alto Ave. Póvoa de Lanhoso, Portugal

<sup>III</sup>Clínica Visão Moreno. Braga, Portugal

**Introduction:** The Community pharmacy is patients' first choice when it comes to providing advice regarding ophthalmic products; this is due to trust, proximity and availability for counseling by these professionals on this area. The role of pharmaceutical professionals is today an unquestionable reality recognized by all health professionals, as well as, obviously, by the patients themselves.

**Objective:** To analyze if the degree of training in ophthalmic products held by professional pharmacists/technicians influences the counseling ability towards the use of these products by patients.

**Methods:** There were conducted three questionnaires, one of which was directed to the patients, another one directed at professional pharmacists, and last one directed at the ophthalmology specialist. Data obtained was statistically treated using the SPSS 20.

**Results:** Findings show that 40.4% of patients resort to community pharmacy as a first choice for ophthalmic product advice. The majority felt satisfied with the advice provided, based on the disappearance of the signs, symptoms or the disease itself. 50.8% of the professionals said they had training on this field, however, 90.3% recognize the need of a more specific training in this area of study. The involvement of ophthalmology specialist was fundamental to detect some errors in the pharmacological counseling by part of pharmaceutical professional in some eye diseases diagnosed correctly after a visit to the specialist.

**Conclusions:** It was found that counseling conducted by pharmacy professionals was generally correct; however it highlights the need for specific training of these professionals in this area of study.

**Descriptors:** Pharmaceutical experience. Ophthalmic products. Counselling. Specific training. Eye disease.

026

### AN EVIDENCED-BASED SYSTEMATIC REVIEW ABOUT THE DUAL-TASK INTERVENTION IN DECREASING FALLS ON THE ELDERLY

Renato Andrade<sup>1,a</sup>, Juliana Pais<sup>1</sup>, Sara Viana<sup>1,II,b</sup>, Rui Viana<sup>1,II,c</sup>

<sup>1</sup>Faculdade de Ciências da Saúde. Universidade Fernando Pessoa. Porto, Portugal

<sup>II</sup>Hospital de São João. Porto, Portugal

**Introduction:** The loss of balance and the recurrent falls has an important impact among the elderly, affecting their security and quality of life. The dual-task is the execution of a motor task simultaneously with a cognitive task. The practice of this dual-task increases the risk of fall, thus can be used as intervention to prevent the falls and to increase the balance in the elderly.

**Objective:** Explore how an intervention based on dual-task exercises can contribute to decrease the number of falls in the elderly.

**Methods:** Research on computerized databases PubMed/Medline and B-On to identify studies that assessed dual-task interventions in the elderly, published between 2000 and 2013. The methodological quality was assessed by Physiotherapy Evidence Database (PEDro) and evidence level through Oxford Center for Evidence-Based Medicine (CEBM).

**Results:** This review included 14 studies evaluating the effect of dual-task intervention, involving 446 individuals with mean methodological classification  $5.6 \pm 1.6$  according to PEDro scale and most of them had 1b or 2b level of evidence by CEBM.

**Conclusions:** From the evidence found in this systematic review can be concluded that a intervention based on dual-tasks is significantly effective in reducing the number of falls, increase balance and, therefore, improve the security of the elderly. However, it still exists a low number of randomized controlled trials (RCT) that assesses the effects of a dual-task intervention in elderly without a neurological disease. Thus, we suggest more investigation in this matter with well-designed RCT and a longer follow-up.

**Descriptors:** Dual task. Elderly. Quality of life. Fear of fall.

<sup>a</sup> omedina@isave.pt

<sup>a</sup> 23781@ufp.edu.pt

<sup>b</sup> sviana@ufp.edu.pt

<sup>c</sup> ruiav@ufp.edu.pt

027

### AN EVIDENCE-BASED SYSTEMATIC REVIEW ON THE EFFECTIVENESS OF BALANCE TRAINING IN DECREASING THE NUMBER OF FALLS IN HEALTHY ELDERLY

Ana Silva<sup>1,a</sup>, Renato Andrade<sup>1,b</sup>, Rui Viana<sup>1,II,c</sup><sup>1</sup>*Faculdade de Ciências da Saúde. Universidade Fernando Pessoa. Porto, Portugal*<sup>II</sup>*Hospital de São João. Porto, Portugal*

**Introduction:** Falls caused by decreased body balance are serious issues in the elderly, affecting 1:2 individuals worldwide. Physiotherapy plays an important role in reducing this issue applying techniques that aim the prevention of these falls and intervention in the injuries they caused, since the final goal is to allow them to restore balance and return to their daily life.

**Objective:** Assess the effect of balance training in decreasing the number of falls in healthy elderly.

**Methods:** Research on computerized database B-On with the keywords: Balance Training, Elderly, Functional Performance, Healthy, Non-institutionalized and logic operators (AND/OR) to identify randomized controlled trials published between 2003 and 2012. The inclusion criteria were: elderly population who have fear of fall or experienced fall in the last year and the exclusion criteria on the other hand were studies where lack of balance was associated to any kind of pathology capable of interfering with functional balance. After selection, studies were analyzed based on intervention methods, results and methodological quality through PEDro scale.

**Results:** This review included 6 studies engaging a total of 700 elderly people with methodological classification ranging between 5 and 8 according to PEDro scale. From these studies 3 evaluated risk of fall, 1 take into account stability, 1 evaluated strength and reaction time and all referred balance assessment.

**Conclusions:** According to the scientific-evidence found in this systematic review balance training plays a fundamental role in reducing the number of falls and fall risk; decreasing sway and increasing gait control.

**Descriptors:** Balance. Elderly. Number of falls. Quality of life.

028

### THE IMPORTANCE OF THE PHYSIOTHERAPY ON THE TREATMENT OF SUBACROMIAL IMPINGEMENT SYNDROME: AN EVIDENCED BASE SYSTEMATIC REVIEW

Renato Andrade<sup>1,a</sup>, Mário Cruz<sup>1,b</sup>, Ana Mariz<sup>1,c</sup>, Rui Viana<sup>1,II,d</sup>, Andrea Ribeiro<sup>1,e</sup><sup>1</sup>*Fernando Pessoa University. Fernando Pessoa, Portugal*<sup>II</sup>*Hospital São João. Local, país*

**Introduction:** The subacromial impingement syndrome (SIS) is one of the most common causes of pathology on the shoulder. The SIS is a concept used to describe a variety of conditions that can act, independently or in combination, and manifest as pain in the upper shoulder portion of the anterior and anterolateral parts. This pain is associated with the loss of function on the shoulder, especially during overhead activities.

**Objective:** Assess the efficacy of physiotherapy intervention in its different modalities on the subacromial impingement syndrome.

**Methods:** Systematic review in the databases PubMed/Medline and B-On to identify randomized controlled studies (RCT) that assessed the efficacy of physiotherapy and its different techniques for the treatment of SIS, published between 2003 and 2013. The methodological quality was assessed by Physiotherapy Evidence Database (PEDro) and evidence level through Oxford Center for Evidence-Based Medicine (CEBM).

**Results:** Ten RCTs were included, involving 1,210 patients (50.9 years), with a mean PEDro score of 6.7 and level of evidence 1b according the Oxford Center for Evidence-Based Medicine.

**Conclusions:** The evidence found in this review suggests that physiotherapy and its techniques are efficient in the treatment of SIS, with equal efficacy as subacromial arthroscopic decompression and subacromial corticosteroids injections. It is encouraged to further investigation, with high level of evidence studies and with good methodological quality (RCTs) that assess which are the most efficient physiotherapy interventions to the SIS.

**Descriptors:** Subacromial impingement syndrome. Physiotherapy. Randomized controlled trials.

<sup>a</sup> sofiia\_silva@hotmail.com<sup>b</sup> 23781@ufp.edu.pt<sup>c</sup> ruiav@ufp.edu.pt<sup>a</sup> 23781@ufp.edu.pt<sup>b</sup> 21800@ufp.edu.pt<sup>c</sup> arita@ufp.edu.pt<sup>d</sup> ruiav@ufp.edu.pt<sup>e</sup> andrear@ufp.edu.pt

029

### ASTHENOPIC SYMPTOMS AND BINOCULAR VISION OF PROFESSIONAL USERS OF OPTICAL MICROSCOPE

Ilda Poças<sup>a</sup>, Nahdia Simões<sup>b</sup>, Vânia Correia<sup>c</sup>, Filipe Nunes<sup>d</sup>, Paula Mendonça<sup>e</sup>

*Escola Superior de Tecnologia da Saúde. Instituto Politécnico de Lisboa. Lisboa, Portugal*

**Introduction:** The use of the optical microscope is an important component of Pathological Anatomy professional's work, and it is associated with the presence of visual symptoms, that can be related to their binocular vision's condition.

**Objective:** Evaluate these professional's binocular vision condition, relate it to the most frequent symptoms, observe the influence of the work with the microscope on binocular vision after a week of exercise.

**Methods:** Quantitative, descriptive and correlational study, with 45 participants, where it was applied a survey to identify the most frequent symptoms. It was also performed an orthoptic evaluation at the beginning and by the end of a working week.

**Results:** Mean subjects' age was 37,73±10,68 years, which are active for an average of 11,8±9,00 years and spent an average of 19,96±9,68 hours per week under the microscope. Of these, only 13,3% had a normal binocular vision. The most common symptoms were difficulty on seeing clearly (95,6%), tired and heavy eyes (91,1%). The itching (51,1%) was the most reported dry eye symptom. The results suggest an increase of asthenopic complaints with the beginning of the use of the optical microscope. However, no significant changes were found, on binocular vision's evaluation, between the beginning and the end of the week.

**Conclusions:** The work with the optical microscope is related to the increase of the frequency of asthenopic symptoms, which can be reduced with right optical correction, longer breaks between microscope work, and with the use of lacrimal adjuvant.

**Descriptors:** Binocular vision. Asthenopic symptoms. Optical microscope. Pathological anatomy. Visual complaints.

<sup>a</sup> ilda.pocas@estesl.ipl.pt

<sup>b</sup> nahdiasimoes@hotmail.com,

<sup>c</sup> vaniaipcorreia@gmail.com

<sup>d</sup> filipe\_mpn@hotmail.com

<sup>e</sup> paula.medonca@estesl.ipl.pt

030

### ANALYSIS OF BINOCULAR VISION ON HOSPITAL ADMINISTRATIVE EMPLOYEES COMPUTER USERS

Ilda Maria Poças<sup>1,a</sup>, Ana Rita Martins<sup>1,b</sup>, Magda Guedes<sup>1,c</sup>, Lara Santos<sup>11,d</sup>

*<sup>1</sup>Escola Superior de Tecnologia da Saúde. Instituto Politécnico de Lisboa. Lisboa, Portugal*

*<sup>11</sup>Hospital de Santiago. Espírito Santo Saúde, Setúbal, Portugal*

**Introduction:** Performing near activities for prolonged periods of time on computers can lead to transient changes in refractive error, the accommodation and vergence system may be reduced, possibly compromising the accuracy in the performing task.

**Objective:** Characterize the binocular vision of the administrative technicians (AT) involves the use of computers after a day of near work in a hospital.

**Methods:** Study descriptive, correlational and cross-sectional typology. The sample was non-probabilistic of the convenience type, formed by all Hospital's AT (n=137). Only 28 AT respected the inclusion and exclusion criteria defined. Data were collected at the Department of Ophthalmology, conducted through a questionnaire, and through evaluation of binocular vision in the beginning and the end of work day.

**Results:** Involved 28 AT, 25 (89,28%) female and three (10,71%) male, with mean age of 33,32±4,91 years. In the end of the work activity the spherical component of refractive error was changed in 78,57% eyes. In myopic eyes was registered a mean alteration of 0,68D. Far and near Visual Acuity were changed in 16,7% and 7,14%, respectively. In NPC and NPA was observed a change in 21,43% and 46,43% of the sample, respectively. Near convergence was reduced in 53,57%.

**Conclusions:** There is influence of activities closely with extended computer use, during a day's work, in binocular vision of the TA from the Hospital under study. The prolonged activity to close with computer usage over the course of a work day change factors and mechanisms inherent in binocular vision, with inherent symptoms

**Descriptors:** Binocular vision. Accommodation. Convergence. Near work activities. Computers.

<sup>a</sup> ilda.pocas@estesl.ipl.pt

<sup>b</sup> anarita.m91@gmail.com

<sup>c</sup> martaguedz@gmail.com

<sup>d</sup> lpsantos@hospitaldesantiago.pt



031

**NURSING INTERVENTION PROGRAM FOR FAMILY CAREGIVERS**Ricardo Melo<sup>I,a</sup>, Marília Rua<sup>II,b</sup>, Célia Santos<sup>III,c</sup>*<sup>I</sup>Instituto Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto, Portugal**<sup>II</sup>Escola Superior de Saúde. Universidade de Aveiro. Aveiro, Portugal**<sup>III</sup>Escola Superior de Enfermagem do Porto. Porto, Portugal*

**Introduction:** Population aging leads to an increase of dependence, not only due to the loss of autonomy, but also associated with the increase of diseases. In this sense, family caregivers play a crucial role in the care of their love ones, to ensure the satisfaction of their basic needs and maintain essential quality of life.

**Objective:** The aim of this study is to compile a set of nursing interventions in a structured program, providing emotional and instrumental support necessary to facilitate the transition to the role of family caregivers.

**Methods:** After the analysis of the scientific literature in the field of nursing interventions for caregivers in transition and their needs, we selected the most evidenced ones, which we submit to scrutiny of an expert group with eleven elements through a Delphi technique, performed in 5 rounds, until obtained consensus around an intervention program.

**Results:** This work culminated in a 93 nursing interventions program in the field of emotional support (Promoting the Role of Caregiver, Promoting Social Support, Stress Prevention) and instrumental needs (all Self-Care), where all these interventions included in this structured intervention program achieved high reliability values (greater than 4.5).

**Conclusions:** This work presents a consensual and structured nursing intervention program, in the emotional and instrumental areas, which aims to be a facilitating factor in the transition to the role of family caregivers, in order to meet their main needs and correspond to better care to their dependents. Its application to different environments and contexts can lead to optimal results throughout the transition process.

**Descriptors:** Nursing Intervention; Emotional Support; Instrumental Support; Delphi Technique.

032

**HEALTH EDUCATION GROUPS: THE NEED FOR CHANGE**Priscila Rocha<sup>a</sup>, Denise Friedrich<sup>b</sup>*Universidade Federal de Juiz de Fora. Juiz de Fora, Brasil*

**Introduction:** The groups of health education play a key role in bringing to population information relating to the health- disease process, expressed dynamically learning that reflect the target audience of your actions. Therefore, so important for individual and collective empowerment. However, this requires for the nurse who is a professional able to perform this practical work, the use of methodologies that promote this process.

**Objective:** Investigate the methodologies of conducting health education group by nurses of the Primary Health Care.

**Methods:** It is a research with qualitative approach whose subjects were with 15 nurses working in the Primary Health Care of the municipality of Minas Gerais, Brazil, during the months of March and April 2013. Data analysis was oriented by the dialectic hermeneutic.

**Results:** This work presented part of the preliminary results of a master's dissertation. Nurses reported depletion of practices leading groups of the traditional model of education to transmit knowledge about the pathology and changes in habits. Changes occur with the use of techniques and strategies that enhance user participation such as the problematizing. Therefore, a more dialogical methodology which exchange between nurse and patients user autonomy and responsibility of the individual about their health occurs.

**Conclusions:** It is concluded that despite these changes in methodology of group activities that are still incipient can enhance and strengthen health promotion. This research becomes important in that it leads to a reflection to improve this practice.

**Descriptors:** Health Education. Nursing. Group Structure. Primary Health Care. Methods.

<sup>a</sup> rcmelo@hotmail.com<sup>b</sup> mrua@ua.pt<sup>c</sup> celiasantos@esenf.pt<sup>a</sup> priscilaaraujorocha@yahoo.com.br<sup>b</sup> denisefriedrichenf@gmail.com

033

### HEALTH AND PHYSICAL ACTIVITY IN COMMUNITY-DWELLING OLDER ADULTS

Emília Martins<sup>a</sup>, Francisco Mendes<sup>b</sup>, Rosina Fernandes<sup>c</sup>, Maria João Amante<sup>d</sup>, Susana Fonseca<sup>e</sup>, Cátia Magalhães<sup>f</sup>, Lia Araújo<sup>g</sup>

*Escola Superior de Educação. Instituto Politécnico de Viseu. Viseu, Portugal*

**Introduction:** Changes resulting from the aging process have an impact on functional capacity, which tends to decline with advancing age, leading to dependency and health problems (Paulo, 2010). It is known that an active life style contributes to a healthy aging. In this sense, physical activity plays an important role.

**Objective:** This study explores health status (objective and subjective) and variation of physical activity dimensions (household, sports and leisure time activities) in a community-dwelling older adults sample.

**Methods:** Participated in this study 73 community-dwelling older adults (71.2% women; 28.8% men) aged 73.8±6.6. For data collection we used a sociodemographic questionnaire with health status questions and the Modified Baecke Questionnaire which evaluates three physical activity domains (household, sports and leisure time activities). Descriptive and inferential analyses were conducted, with a p value ≤.05 considered as statistically significant.

**Results:** Participants who reported illness revealed higher results (.22±.89) than others who don't reported illness (.15±2.96) on sports dimension of physical activity. Subjective health status was correlated positively with physical activity dimension of sports (r=.29; p=.04). This perception of health was also correlated positively with household activities (r=.34; p=.003).

**Conclusions:** The implementation of strategies to promote physical activity especially in older adults seems very important according to these results. In general, it's clear that the promotion of physical activity, either through daily household activities or through sports initiatives, has significant benefits in objective and subjective health, particularly in the process of aging.

**Descriptors:** Health. Physical activity. Older adults. Household activities. Sports.

<sup>a</sup> emiliamartins@esev.ipv.pt

<sup>b</sup> fmendes@esev.ipv.pt

<sup>c</sup> rosina@esev.ipv.pt

<sup>d</sup> majoa@esev.ipv.pt

<sup>e</sup> susanafonseca@esev.ipv.pt

<sup>f</sup> cmagalhaes@esev.ipv.pt

<sup>g</sup> liajaraújo@esev.ipv.pt

034

### AGING, PHYSICAL ACTIVITY AND SELF PERCEPTION OF PHYSICAL DISCOMFORT MANIFESTATIONS

Francisco Mendes<sup>a</sup>, Emília Martins<sup>b</sup>, Maria João Amante<sup>c</sup>, Rosina Fernandes<sup>d</sup>, Susana Fonseca<sup>e</sup>, Paula Xavier<sup>f</sup>, Lia Araújo<sup>g</sup>

*Escola Superior de Educação. Instituto Politécnico de Viseu. Viseu, Portugal*

**Introduction:** According to WHO (2004), physical inactivity is one of the main risk factors to the emergence of non-communicable diseases. Global Recommendations on Physical Activity for Health were developed under this assumption. Other studies (Evans & Sleaf, 2012) highlight the benefits of water activities to the elderly.

**Objective:** Identify and quantify the Physical Discomfort Manifestations among middle-age and older adults practitioners and non-practitioners of hydro gymnastics.

**Methods:** A sample of Portuguese (N=77) practitioners (N=42) and non-practitioners was evaluated with the Physical Discomfort Manifestations Questionnaire (*Questionário de Manifestações Físicas de Mal-Estar*; Ribeiro, 2003) comprehends a total score (ST) and 4 sub scales: Nervous System (NS), Respiratory (RS), Muscular (MS) and Digestive (DS).

**Results:** The manifestations of MS are the highest (4,33±3,88), followed by NS (2,68±3,22), SD (1,82±2,56) and RS (1,40±1,89). In every analysis there is a significant difference (Mann-Whitney p<.05) between practitioners and non-practitioners, favourable to the first ones, despite the highest age average of the practitioners (61,7±8,16 vs 56,23±5,34). Moreover, the ST is not significant when groups of age are compared. The correlations (Pearson) between age and Physical Discomfort Manifestations are negative (p<.05) except in DS. The practice/non-practice of hydro gymnastics correlates (Spearman) positively (p<.05) with manifestations of physical discomfort, with lower scores on the practitioners.

**Conclusions:** The practice of hydro gymnastics, regardless of age, seems to reduce the perception of physical discomfort manifestations, and due the relation between that perception and objective health, this practice may help to prevent the development of new and severe discomfort (Ribeiro, 2003).

**Descriptors:** Elder. Physical activity. Health. Water aerobics. Physical discomfort.

<sup>a</sup> fmendes@esev.ipv.pt

<sup>b</sup> emiliamartins@esev.ipv.pt

<sup>c</sup> majoa@esev.ipv.pt

<sup>d</sup> rosina@esev.ipv.pt

<sup>e</sup> susanafonseca@esev.ipv.pt

<sup>f</sup> paulaxavier@esev.ipv.pt

<sup>g</sup> liajaraújo@esev.ipv.pt

035

### THE IMPORTANCE OF NUTRITIONAL COUNSELING IN RENAL PATIENTS

Flavia Auler<sup>a</sup>, M<sup>a</sup> Isabel Gomes<sup>b</sup>, Kelly Soares<sup>c</sup>, Alika Nakashima<sup>d</sup>

*Pontifícia Universidade Católica do Paraná. Curitiba, Brasil*

**Introduction:** Adequate nutritional counseling for renal patients can prevent long term complications (glycemic, lipid and blood pressure alterations). But in many specialized health services in Brazil there is not the presence of nutritionist, which could contribute to a better prognosis.

**Objective:** Develop a program of nutritional counseling based on renal patients profile at a public ambulatory.

**Methods:** Cross-sectional descriptive study in a public ambulatory that serves about 30 patients per month. Data collection occurred in March and April 2013 and was used to describe socioeconomic, clinical and anthropometric profile and served as a tool for nutritional counseling.

**Results:** The sample (n=46) had 65.2% women, 71.7% illiterate, 58.7% middle and lower classes, 41.3% elderly. Overweight was present in 65.2%, 67.3% hypertensive and 26.1% diabetics. From these results, the decision to make a program of nutritional counseling based on reducing high in sodium, sugar and fat foods was taken. In addition to individual counseling, educational materials were made (with colorful drawings, large letters and popular foods) to meet the characteristics of the sample. Most patients (68%) had never received nutritional counseling and among those who had received, the material had been considered “complicated” (68%). The actual delivered material and shape individualized counseling were evaluated as “satisfactory” by 95% of the sample.

**Conclusions:** We conclude that the program of nutritional counseling was considered appropriate by patients and the inclusion of nutritionist in ambulatory could improve treatment adherence preventing the aggravation of complications of diseases.

**Descriptors:** Renal patient. Hypertension. Nutritional counseling. Treatment.

<sup>a</sup> flavia.auler@pucpr.br

<sup>b</sup> isa-egeo@hotmail.com

<sup>c</sup> kellymenotti@hotmail.com

<sup>d</sup> alika.n@pucpr.br

036

### HEALTH PROMOTION (HP) – ESSS/UMIS COMMUNITY INTERVENTION

Maria Carmo Figueiredo<sup>1,a</sup>, Celeste Godinho<sup>1,c</sup>, Anabela Cândido<sup>1,b</sup>, José Amendoeira<sup>1,II,d</sup>

*<sup>1</sup>Escola Superior de Saúde e Unidade de Investigação. Instituto Politécnico de Santarém. Santarém, Portugal*

*<sup>II</sup>Centro de Investigação Interdisciplinar em Saúde. Universidade Católica Portuguesa. Portugal*

**Introduction:** This paper is part of the ESSS project – “Promoting Healthy Lifestyles” – healthy eating. The Higher Education Institutions involved with projects of HP value their image in the political and social community. Childhood obesity is a public health problem in the European space, and World establishing itself as the epidemic of the XXI century. One of the determining factors of this epidemiological and nutritional situation is the change in the dietary patterns of the population.

**Objective:** To discuss the data of the intervention with students of the 2<sup>nd</sup> and 3<sup>rd</sup> cycles of the municipality of Santarém, 2008-2012.

**Methods:** Diagnosis of the situation at school, on the dietary habits of young people, through a questionnaire, key informant interviews, observation of feeding practices in schools; observation spaces (dining rooms and bars). 22 sessions of health education were conducted.

**Results:** 852 students and 40 parents participated. The topics covered were: healthy eating habits, healthy and unhealthy eating behaviors; Importance of healthy eating for physical and intellectual development of young children. Strategies and addressed diverse topics were used.

**Conclusions:** We appreciate the participation of parents to act as promoters of healthy choices and enabling environments of the same. We intend to continue to invest in strategies that promote student participation in meaningful learning for making informed decisions. Improving evaluation focused on the skills and abilities of the students is a goal to achieve.

**Descriptors:** Health Promotion. Higher Education Institutions. Healthy Eating. Nursing.

<sup>a</sup> mcarmofigueiredo55@gmail.com

<sup>b</sup> anabela.candido@essaude.ipsantarem.pt

<sup>c</sup> celeste.godinho@essaude.ipsantarem.pt

<sup>d</sup> umis.projetos@essaude.ipsantarem.pt

037

### DIABETES TYPE 2 AND RISK OF FALL: FUNCTIONALITY ASSESSMENT AND RISK GROUP IN DIABETIC FOOT

Mariana Marçal<sup>1,a</sup>, Nádia Augusto<sup>1,b</sup>, Sara Janela<sup>1,c</sup>, Emanuel Vital<sup>1,d</sup>, Paula Parreira<sup>1,e</sup>, Rui Fonseca-Pinto<sup>1,f</sup>

<sup>1</sup>Escola Superior de Saúde. Instituto Politécnico de Leiria. Portugal

<sup>II</sup>Agrupamentos de Centros de Saúde Pinhal Litoral. Portugal

<sup>III</sup>Instituto de Telecomunicações. Leiria, Portugal

**Introduction:** Diabetes *Mellitus* includes a group of metabolic disorders related to the metabolism of insulin. Associated to this condition, alterations in structure and function of the foot occur, which consequently affect the functionality of the individual.

**Objective:** The main objective of this work is to evaluate the risk of fall between two groups of a diabetic people sample, one with medium risk, and the other with high risk of diabetic foot score. Moreover we intend identify quantitative markers in order to improve the classification of risk.

**Methods:** This is a quantitative, transversal and correlational descriptive study that evaluates 22 subjects, 9 with medium risk (40.9%) and 13 with high risk (59.1%) registered in a Health Center in the central region of Portugal. Physiological, functional and demographic parameters were obtained by a structured interview, clinical evaluation and by the application of the Tinetti Scale (*Performance Oriented Mobility Assessment - POMA*).

**Results and Conclusions:** Global analysis allows us to conclude that this is an obese population in which 59.1% were classified as having a medium and high risk of fall. The biggest difference in POMA's score was found at the balance component, the group of high risk of diabetic foot scoring worse. This trend is absent in the "walking" component of the scale. More studies are needed to confirm these findings, but the data available suggests that people who has high risk of diabetic foot should received adequate health care to prevent functional decline.

**Descriptors:** Diabetes Mellitus. Gait. Diabetic Foot. Risk of fall. Tinetti test.

<sup>a</sup> mariana.n.marcal@gmail.com

<sup>b</sup> naa.fisio.augusto@gmail.com

<sup>c</sup> sara.janela91@gmail.com

<sup>d</sup> evital.ipl@gmail.com

<sup>e</sup> enf.paulaparreira@gmail.com

<sup>f</sup> rui.pinto@ipleiria.pt

038

### RISK AND VULNERABILITY MARKERS OF BREAST CANCER IN WOMEN WITH HIV/AIDS

Carla Viana<sup>1,a</sup>, M<sup>a</sup> Lúcia Pereira<sup>1,b</sup>, Carla Rego<sup>1,c</sup>, Ysabely Pamplona<sup>1,d</sup>, Natália Vesco<sup>1,e</sup>, Karla Cruz<sup>1,f</sup>, Bruna Leite<sup>1,g</sup>

<sup>1</sup>Faculdade de ensino e cultura do Ceará. Fortaleza, Brasil

<sup>II</sup>Universidade Estadual do Ceará. Fortaleza, Brasil

<sup>III</sup>Universidade Católica de Santos. Santos, Brasil

**Introduction:** A woman with HIV/AIDS is exposed to several factors that increase the risk for acquiring chronic degenerative diseases. Among these diseases, stands out breast cancer, due to its various risk factors.

**Objective:** This research aimed to analyze the markers of vulnerability of women with HIV/AIDS that contribute to the development of breast cancer.

**Methods:** The sample consisted of 150 women with HIV/AIDS and the ethics committee approved research protocol. The research was conducted in Fortaleza, in the specialized ward of the St. Joseph Hospital, which is a reference to diagnosis, treatment, education and research on infectious diseases in the State of Ceará.

**Results:** Individual, social and programmatic markers of vulnerability related to the three dimensions were identified. Such markers have highlighted mainly the low educational level of women, the lack of correct information about breast cancer, lack of monitoring and lack of professional, ideological and cultural orientation of the disease.

**Conclusions:** It is concluded that it is necessary to encourage early detection of breast cancer for the promotion of health and the need for training of health professionals who provide care to the female population of HIV/AIDS patients. For the prevention of breast cancer to be implemented, it is suggested the implementation of guidelines and monitoring in the nursing consultation, and additional studies to better understand the relationship between HIV/AIDS and breast cancer.

**Descriptors:** Breast Cancer. HIV. Women. Risk Factor. Vulnerability.

<sup>a</sup> profdanieleviana@gmail.com

<sup>b</sup> mlduarte@gmail.com

<sup>c</sup> ccristielemr@hotmail.com

<sup>d</sup> ysabelypontes@hotmail.com

<sup>e</sup> natyiv@hotmail.com

<sup>f</sup> karlathamysa@hotmail.com

<sup>g</sup> brunaufc@hotmail.com

039

### INFLUENCE OF SELF-EFFICACY IN AN EDUCATIONAL AND EXERCISE PROGRAM FOR CHRONIC LOW BACK PAIN

Cláudia Marques<sup>1,a</sup>, Anabela Martins<sup>1,b</sup><sup>1</sup>*Centro Hospitalar Tondela-Viseu. Portugal*<sup>2</sup>*Escola Superior de Tecnologia da Saúde de Coimbra. Coimbra, Portugal*

**Introduction:** Chronic low back pain is a health problem with high prevalence in contemporary countries and has a strong relationship with psychosocial variables, functional disability, and self-efficacy. The intervention should complement education and exercise and promote home adherence. Adherence is influenced by self-efficacy and health literacy.

**Objective:** Study the effects of an educational and exercise program on functional disability, pain intensity, fear-avoidance beliefs and self-efficacy physical activity and the relationship between self-efficacy and health literacy with functional disability, the global perception of change and frequency adherence to the home program.

**Methods:** 16 individuals completed an educational and exercise program at Viseu's hospital with a duration of 6 weeks, 12 sessions, 90 min/session. Participants were evaluated at three different times. The outcomes studied were functional disability, pain intensity, self-efficacy for exercise, fear-avoidance beliefs, health literacy, global perception of change and home exercise adherence and frequency. Were prepared audio, digital and paper support for participants perpetuate the home exercise practice.

**Results:** Significant differences were found after this program, a reduction in functional disability ( $46.13 \pm 17.20$  to  $36.81 \pm 18.35$ ) ( $p=0.001$ ), pain intensity ( $6, 56 \pm 1.67$  to  $4.88 \pm 2.19$ ) ( $p=0.006$ ) and fear-avoidance beliefs ( $22.69 \pm 10.69$  to  $16.19 \pm 10.19$ ) ( $p=0.001$ ) and improvements in self-efficacy for exercise ( $12.13 \pm 3.40$  to  $13.81 \pm 3.64$ ) ( $p=0.041$ ) and a significant association between self-efficacy and global perception of change.

**Conclusions:** An educational and exercise program showed improvements in patients with chronic non-specific low back pain.

**Descriptors:** Low Back Pain. Intervention. Education. Exercise. Adherence.

040

### EFFECTS OF EXERCISE TRAINING ON FALL PREVENTION IN ELDERLY. A RANDOMIZED CONTROLLED TRIAL

Nelson Sousa<sup>1,a</sup>, Romeu Mendes<sup>1</sup>, Catarina Abrantes<sup>1</sup>, José Oliveira<sup>1</sup><sup>1</sup>*Centro de Investigação de Desporto, Saúde e Desenvolvimento Humano. Universidade de Trás-os-Montes e Alto Douro. Vila Real, Portugal*<sup>2</sup>*Centro de Investigação em Actividade Física, Saúde e Lazer. Universidade do Porto. Porto, Portugal*

**Introduction:** The risk of falling and sustaining an injury as the result of a fall increases with age. Falls are associated with morbidity and mortality in the older population, and also linked to poorer overall functioning and early admission to long-term care facilities. Therefore, reducing fall risk in older adults is an important public health issue.

**Objective:** The purpose of this study was to compare the effects of two long-term exercise-training programs on the risk of falls among older men.

**Methods:** Forty-eight healthy older men ages 65-75 years were randomly assigned to an aerobic training group ( $n=15$ ), a combined (aerobic and resistance) training group ( $n=16$ ), or a control group ( $n=17$ ). Both programs were moderate-to-vigorous intensity, three days/week for 32-weeks. Primary outcomes were measured by the Timed Up & Go Test (TUG) and the Functional Reach Test (FRT), on five different occasions. The data were analyzed using a mixed-model ANOVA.

**Results:** ANOVA indicated a significant main effect of group ( $p=0.001$ ) for the TUG, with significant differences between the combined training group and the aerobic training group and also between the control. ANOVA also identified a significant main effect of time for the TUG ( $p<0.001$ ) in the combined training group. No significant differences were found in the performance of the FRT.

**Conclusions:** Only the combined exercise training program was effective in preventing falls among healthy older men. Trial Registration: clinicaltrials.gov Identifier: NCT01874132.

**Descriptors:** Combined Training, Prolonged Exercise, falls prevention; Timed Up & Go Test; Randomized Controlled Trial.

<sup>a</sup> fisio.sofiamarques@gmail.com<sup>b</sup> anabelacorreiamartins@estescoimbra.pt<sup>a</sup> nelsons@utad.pt

041

### ISOMETRIC ENDURANCE OF THE SPINE EXTENSOR MUSCLES AFTER APPLYING GLOBAL POSTURAL REEDUCATION

Cintia de Freitas<sup>1,II,a</sup>, Júlia Greve<sup>II,b</sup><sup>I</sup>Universidade de São Paulo. São Paulo, Brasil<sup>II</sup>Universidade Paulista. São Paulo, Brasil

**Introduction:** Global Postural Reeduction method (GPR) has been shown an effective treatment for musculoskeletal diseases, in particular for low back pain, however there aren't studies about the effects of GPR on endurance or strength of the spine extensor muscles. The GPR exercises activate the spine extensor muscles to generate a good postural alignment.

**Objective:** Evaluate the effects of this method on endurance of the spine extensor muscles.

**Methods:** 50 volunteers, without spine pain, who did not play sports, divided into two groups: Control and GPR, both were evaluated by Biering Sorenson Test. Control Group did not receive any intervention. GPR performed four posture exercises, once a week, during three months. This study was conducted at *Universidade Paulista* and *Universidade de São Paulo*. Data were evaluated by ANOVA and T Student tests. Significance was set up at  $p \leq 0,05$  and all analyses were performed using SPSS version V17.

**Results:** Control Group: 21 individuals (19 women, 2 men,  $23 \pm 6,12$  years old) and GPR: 23 individuals (16 women, 7 men,  $24,13 \pm 5,65$  years old). The GPR increased the maintenance time in Biering Sorenson Test ( $p < 0,001$ , initial mean:  $77,39 \pm 31,56$  seconds and final mean:  $119,49 \pm 45,31$  seconds). The Control Group showed no significant variation ( $p = 0,949$ , initial mean  $69,43 \pm 24,37$  seconds and final mean  $69,67 \pm 24,40$  seconds). Comparison groups had a significant difference in the final evaluation and regarding the time increased maintenance ( $p < 0,001$ ).

**Conclusions:** GPR method has been increased the isometric muscular endurance of the spine extensor muscles.

**Descriptors:** Posture. Isometric contraction. Spine. Trunk strength. Endurance.

042

### CRITICAL PERIOD IN PRESCHOOL CHILDREN FOR THE DEVELOPMENT OF OVERWEIGHT

Cátia Braga-Pontes<sup>I,a</sup>, Maria P. Guarino<sup>I,b</sup>, Sara Simões-Dias<sup>I,II,c</sup><sup>I</sup>Unidade de Investigação em Saúde. Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal<sup>II</sup>Faculdade de Ciências Médicas. Universidade Nova de Lisboa. Lisboa, Portugal

**Introduction:** Obesity in children can cause premature and long-term chronic health problems. Critical periods in childhood are already well defined, namely the preschool age, being of great importance to act preventively during this period. However, the critical period may vary among different populations, depending on geographical location and also on socioeconomic factors.

**Objetive:** To determine the critical period for the onset of excess weight among children aged 2 to 10 years of a private educational institution in the region of Leiria.

**Methods:** This study was performed in a sample of 294 children attending a private educational institution in Leiria, between 2009 and 2013 based on anthropometric measurements routinely performed in the institution. Measurement of weight and height was performed at two different times in each school year to all children aged between 2 and 10 years old.

**Results:** This study demonstrated that from 2 to 10 years the prevalence of overweight varies between 3.6% and 25.4% in males and 4.2% to 43.3% in females. In preschool children a prevalence of overweight of 9.3% was identified. The age of five years was determined as the most critical period for the development of overweight. It was also observed that there is a higher prevalence of overweight in females than in males, except at 5 and 6 years old.

**Conclusions:** Children aged 5 years should be targeted for preventive measures against overweight. In our study, the prevalence of overweight among preschool children is lower than the values obtained in similar Portuguese studies.

**Descriptors:** Child. Preschool. Overweight. Prevalence. Prevention.

<sup>a</sup> cintiafreitas24@gmail.com<sup>b</sup> jgreve@usp.br<sup>a</sup> catia.pontes@ipleiria.pt<sup>b</sup> maria.guarino@ipleiria.pt<sup>c</sup> sara.dias@ipleiria.pt

043

**EDUCATION OF NURSING STUDENTS IN WORK WITH VULNERABLE GROUPS: FEMALE PRISONER**Marlene Teixeira<sup>1,a</sup>, João Silva<sup>1,iii,b</sup>, M<sup>a</sup> Cristina Borges<sup>1,c</sup>, Elizangela Bento<sup>1,d</sup>, M<sup>a</sup> Rosa Schetinger<sup>1,e</sup>, Ana M<sup>a</sup> Borges<sup>1,ii,f</sup><sup>1</sup>Universidade Federal do Rio Grande do Sul. Porto Alegre, Brasil<sup>ii</sup>Universidade de Roma "La Sapienza". Roma, Itália<sup>iii</sup>Faculdade Leão Sampaio. Juazeiro, Ceará, Brasil**Introduction:** Female Prisoner: A proposal for intervention and health defines a project that aimed attend a health education for female prisoner, with prison visit in order to furthering the adherence to prevention and health promotion as a mean of developing quality of life.**Objective:** The aim of this study was to develop assessment strategies, identification and intervention in health education for nursing students by using female prisoner.**Methods:** It is a qualitative descriptive study that used a semi-structured interviews in a female prison in Cariri, state of Ceará in Brazil during the year of 2013. Data were analyzed using thematic categorization and discussed by content analysis. The selected speeches were according to the categorized themes so that debate happen. The dealt themes were the knowledge of the females inmates about cervical and breast cancer, the preventive exams frequency and learning for sex life.**Results:** The female prisoners has shown vulnerability to sexually transmitted infections considering that they exhibit a risk behavior. The study observed that there is an inefficiency and/or a lack of these services in the regional penitentiary system and the women do not participate in the production of care of themselves.**Conclusions:** The conclusion is that it is extremely important that there is screening for cervical and breast cancer combined with health education as well as the commitment of the professionals with the care activities.**Descriptors:** Female prisoner. Health intervention. Health education. Vulnerable groups. Quality of life.

044

**BODY PRACTICES AND THE AMPLIFIED CLINIC: LEARNING ABOUT HEALTH EDUCATION IN THE BRAZILIAN HEALTH SYSTEM (SUS)**

Valéria Monteiro Mendes, Yara Maria de Carvalho

Universidade de São Paulo. São Paulo, Brasil

**Introduction:** Lately the Brazilian Ministries of Health and Education implemented policies aimed at qualifying students and professionals to work in the SUS. However, the gap between training and intervention in the sub-areas of health persists. The urgency to improve professional education, seeking to transform health care, demands the incorporation of references such as the *Amplified Clinic*, a technology of health care focused on producing methodological arrangements aimed at meeting the necessities of health care, recognizing the singularities of individuals and institutions.**Objective:** To problematize the fragmented and disciplinary based logic of the sub-areas of health, guided by the *Amplified Clinic* and the *Method of the Wheels*, theories about the recomposition of work in health.**Methods:** Qualitative study, research-intervention type, developed from a experience with body practices in a CSE/Sao Paulo/Brazil. 51 subjects took part in the study. Observation, narratives, diverse body practices and conversation circles were the care techniques used.**Results:** The process composition between the notions of interprofessionality, bonding, autonomy, shared management and body practices, the knowledge of workers and users led to a differentiated training process, considering the resistances, limitations and disputes in the work process, the construction of networks for dialogue and care in the CSE.**Conclusions:** The theory qualified the body practices in primary health care, thereby making evident the central role of conceptual and methodological reorientation of professional education in the constitution of innovative and dialogical health care models, privileging the role of workers and users, aiming at an effectively universal and humanized SUS.**Descriptors:** health education; body practices; Amplified Clinic; SUS; health intervention.<sup>a</sup> marlamteixeira@yahoo.com.br<sup>b</sup> jp-master17@hotmail.com<sup>c</sup> crys\_inna@yahoo.com.br<sup>d</sup> elizangelaeliz@yahoo.com.br<sup>e</sup> mariachitolina@gmail.com<sup>f</sup> anaborges@leaosampaio.edu.br<sup>a</sup> vm\_mendes@yahoo.com.br<sup>b</sup> yaramc@usp.br

045

### IMPACT OF A FAMILY-BASED PULMONARY REHABILITATION PROGRAM: AN EXPLORATORY STUDY

Alda Marques<sup>1,II,a</sup>, Cristina Jácome<sup>1,b</sup>, Joana Cruz<sup>1,III,c</sup>, Raquel Gabriel<sup>1,II,d</sup>, Daniela Figueiredo<sup>1,II,e</sup>

<sup>1</sup>Escola Superior de Saúde. Universidade de Aveiro. Aveiro, Portugal

<sup>II</sup>Unidade de Investigação e Formação sobre Adultos e Idosos. Porto, Portugal

<sup>III</sup>Secção Autónoma de Ciências da Saúde. Universidade de Aveiro. Aveiro, Portugal

**Introduction:** The World Health Organization has recommended family integration in rehabilitation interventions. Nevertheless, Pulmonary Rehabilitation (PR) programs for chronic obstructive pulmonary disease (COPD) remain focus on patients' needs, neglecting the role of the family.

**Objective:** This exploratory study assessed the impact of a family-based PR program in patients with COPD and respective family members.

**Methods:** Nine dyads of patients with COPD (70±8yrs; forced expiratory volume in one second 69±25% predicted) and family members (64±11yrs) enrolled in a 12-week family-based PR program with exercise training for patients and psychoeducation for patients and family members. Patients' quadriceps muscle strength was measured with the 10 repetition maximum and exercise tolerance with the 6-minute walking test. Patients and family members had their family coping assessed with the Family Crisis Oriented Personal Scales (higher scores indicate more positive coping) and adjustment to illness with the Psychosocial Adjustment to Illness Scale (higher scores indicate poorer adjustment).

**Results:** Significant improvements were observed in patients' quadriceps muscle strength (3.4±1.9 vs. 6.5±2.4Kg, p=0.002) and 6-minute walking distance (393.7±46.3 vs. 420.5±42.9m, p=0.023). Both patients and family members used more positive coping behaviors after the intervention (patients 91.3±15.1 vs. 105.4±14.2, p=0.026; family members 96.4±15.1 vs. 106.7±12.1, p=0.011). However, psychosocial adjustment did not change significantly (patients 31.9±19.5 vs. 27±12.4, p=0.178; family members 29.9±13.9 vs. 25.8±12.1, p=0.242).

**Conclusions:** PR programs inclusive of family members enhance the skills of the whole family to manage COPD, without interfering with the widely recognized patients' benefits in conventional programs. Further research with more robust designs is needed.

**Descriptors:** Chronic Obstructive Pulmonary Disease; family; pulmonary rehabilitation; community interventions; family coping.

<sup>a</sup> amarques@ua.pt

<sup>b</sup> cristinajacome@ua.pt

<sup>c</sup> joana.cruz@ua.pt

<sup>d</sup> raquelgabriel@ua.pt

<sup>e</sup> daniela.figueiredo@ua.pt

046

### EFFECTS OF A RESPIRATORY PHYSIOTHERAPY SESSION IN PATIENTS WITH LOWER RESPIRATORY TRACT INFECTIONS

Alda Marques<sup>1,II,a</sup>, Ana Oliveira<sup>1,b</sup>, Cátia Pinho<sup>1,c</sup>

<sup>1</sup>Escola Superior de Saúde. Universidade de Aveiro. Aveiro, Portugal

<sup>II</sup>Unidade de Investigação e Formação sobre Adultos e Idosos. Porto, Portugal

**Introduction:** Patients with lower respiratory tract infections (LRTI – acute exacerbations of obstructive/restrictive diseases) experience severe dyspnea and increased sputum production (Woodhead, 2011). Respiratory physiotherapy (RP) has shown to improve these symptoms in chronic respiratory conditions (Garrod, 2007). However, studies exploring its effectiveness in patients with LRTI are lacking.

**Objective:** This study assessed the effectiveness of one session of RP in acute obstructive (AO) and acute restrictive (AR) respiratory patients.

**Methods:** RP included breathing retraining and airway clearance techniques. Data were collected pre/post session and included: peripheral oxygen saturation (SpO<sub>2</sub>), patients' perceived dyspnea (modified Borg scale – MBS) and sputum (Breathlessness, Cough, and Sputum Scale-BCSS). Paired sample t-tests/Wilcoxon signed-rank tests were used to compare pre/post data. Results are presented as: mean±SD or median(interquartile-range).

**Results:** Thirty outpatients (14 male, 55.2±17.8yrs) diagnosed with AO (exacerbation of COPD, acute bronchitis and asthma; n=18) and AR (pneumonia; n=12) diseases were recruited. After the RP session, patients with AO diseases reported significantly more dyspnea (pre 0(2) vs. post 1.5(2.3); p=0.046) and less sputum (pre 3(1) vs. post 2(2); p=0.019). These parameters did not varied in AR (MBS: pre 1(2) vs. 1(2); p=0.684; BCSS: pre 2.5(1) vs. 2(1); p=0.317) patients. No significant changes were found for SpO<sub>2</sub> in both groups (AO: pre 96.1±2.1 vs. post 96.4±1.9; p=0.318; AR: pre 96.67±2.3 vs. post 96±3.8; p=0.382).

**Conclusions:** Patients with AO and AR diseases respond differently to RP. This may suggest the need to develop specific RP interventions for each group. Further research involving larger samples and robust measures are needed to confirm these findings.

**Descriptors:** respiratory physiotherapy; lower respiratory tract infections; monitoring; airway management.

<sup>a</sup> amarques@ua.pt

<sup>b</sup> alao@ua.pt

<sup>c</sup> catiap@ua.pt



047

**AUDIOLOGIC CHANGES IN PILOTS AVIATORS**Filipa Góis<sup>a</sup>, Carla Matos Silva<sup>b</sup>*Escola Superior de Tecnologia da Saúde de Coimbra. Instituto Politécnico de Coimbra. Coimbra, Portugal*

**Introduction:** The officers of the permanent staff of Pilot Aviators should perform activities related to the operation of aircraft in military missions, operating as a pilot, instructor pilot and flight commander pilot. This study aims to sensitize drivers to the risks they face in terms of audiological result of this activity and thus to minimize and prevent accidents of this nature, so as not to affect hearing.

**Objective:** The aim of this study was to investigate whether there are any changes in audiological Pilots Aviators, taking into account their age and flight hours performed per week. To this end, we studied a sample of 16 pilots from Air Base No. 5, located in Monte Real, all male, aged between 20 and 40.

**Methods:** All data collected were then subjected to statistical treatments, being assured their full confidentiality. For the collection of information was given to each pilot a questionnaire and conducted exams such as otoscopy, tympanogram, tonal simple audiogram and percentage breakdown of 40dB in each ear.

**Results:** The pilots did not have statistically significant changes in their auditory thresholds compared to their age and pilot years, as well as the relationship between the maximum peak compliance and Pilot Time.

**Conclusions:** We concluded that as much in the right ear and left ear the Pilots with more Pilot years had the lowest percentages of discrimination at 40dB.

**Descriptos:** Pilot aviators; Hearing; Noise; Barotrauma; Pressure Differences.

<sup>a</sup> filipagois1991@gmail.com<sup>b</sup> carla@estescoimbra.pt

048

**A CLINICAL EDUCATION PROJECT FOR PEOPLE WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE**Carolina Caldeira<sup>1,a</sup>, Joana Lourenço<sup>1,b</sup>, Vítor Pinheira<sup>1,II,c</sup>, Abel Rodrigues<sup>1,d</sup>, Gonçalo Salvado<sup>III,e</sup><sup>1</sup>*Escola Superior de Saúde Dr. Lopes Dias. Instituto Politécnico de Castelo Branco. Castelo Branco, Portugal*<sup>II</sup>*Instituto de Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto, Portugal*<sup>III</sup>*Unidade Local de Saúde de Castelo Branco. Hospital Amato Lusitano*

**Introduction:** The WHO estimates that COPD reaches 210 million people worldwide. Patients with COPD must have access to adequate information about their health condition, making the active participation in the management and treatment of their illness as possible. One project was developed in clinical education of the physiotherapy undergraduate course, to assess the impact of a home program.

**Objective:** To evaluate the results of the intervention at home (educational approach). To enable the patient to deal with his health condition and make it autonomous in the control of COPD.

**Methods:** A home program with 10 COPD patients was performed. The program was divided into 8 separate weekly sessions. The evaluation occurred before - and after the intervention (T0-T1). A form was applied to collect demographic and clinical data, the Modified British Medical Research Council Questionnaire, COPD Assessment Test and the London Chest ADL's. Gas analyses were also carried out. The statistical analysis was performed using SPSS, using the comparison of means and the non-parametric Wilcoxon test.

**Results:** The mean scores of the MMRC, CAT and LCADL decreased from. However, only significant differences in relation to MMRC (p=0.021) and LCADL (p=0.014). Regarding the data obtained by gas analysis the average SaO<sub>2</sub>, pO<sub>2</sub> and FO<sub>2</sub>Hb increased from T0 to T1, but none was significant.

**Conclusions:** After domiciliary intervention patients with COPD felt especially improvements in functional terms and symptomatology. The results from blood gas analysis, are not sufficient to conclude that the intervention have a metabolic level results.

**Descriptos:** Chronic Obstructive Pulmonary Disease; Educational approach; Home program; Clinical education; Physiotherapy.

<sup>a</sup> carolinacaldeira7@gmail.com<sup>b</sup> joanasslourenco@hotmail.com<sup>c</sup> vpinheira@ipcb.pt<sup>d</sup> rodrigues.a@ipcb.pt<sup>e</sup> goncalosalvado@iol.pt

049

### THE PERCEIVED HEALTH OF CEREBRAL PALSY PEOPLE WHO ARE AGEING

María Yolanda González-Alonso<sup>1,a</sup>, María Isabel García Alonso<sup>1,b</sup>, Antonio León Aguado-Diez<sup>1,c</sup>

<sup>1</sup>Universidad de Burgos. Burgos, Spain

<sup>11</sup>Universidad de Oviedo. Oviedo, Spain

**Introduction:** Life expectancy has increased for the general population as well as for those with cerebral palsy (CP), thanks to social, technological and medical progress. The process of active aging is optimal for opportunities within health, social participation and security in order to improve the quality of life of aging people. Health as a fundamental human right is the basis for developing 'active aging'.

**Objective:** To analyze the perceived personal health needs and solutions that people with cerebral palsy have, to prevent aging and care for their wellbeing.

**Methods:** We conducted a descriptive study collecting and interpreting health needs and the solutions proposed. 260 participants with CP, age between 45 to 72 (107 female and 153 males) have completed a semi-structured interview. If the participants demonstrated severe functional limitations, families or professionals who knew them well answered in their place.

**Results:** The main needs, shared by most older CP is on physical health. Care of their health (21.5%), personal functional limitations (19.7%), dependence (17.7%), daily personal care (15.2%). Solutions: aid for daily personal care (43.7%), support for non-professional carers (19.7%).

**Conclusions:** We know what their perceived needs and solutions. Health is the main priority in the design of programs and services. The good health of these people creates greater opportunities, lowers costs for them, for their families and the society.

**Descriptors:** Personal health, Independence, quality of life, daily personal care, support carers.

050

### DOES 6-MINUTES WALK TEST PREDICT FUNCTIONAL CAPACITY IN ELDERLY PEOPLE? A PILOT-STUDY

Andreia Garcia<sup>a</sup>, Ana Marta Santos<sup>b</sup>, Maria Teresa Tomás<sup>c</sup>

Escola Superior de Tecnologias da Saúde de Lisboa. Lisboa, Portugal

**Introduction:** Functional ability consists in an individual's capacity to conduct daily activities in an independent way. It can be estimated with the 6-minutes walk test (6MWT) and other validated test.

**Objective:** Verify associations between functional capacity measured with two different instruments (6MWT and Composite Physical Function (CPF) scale) and between those results and characterization variables.

**Methods:** The sample consisted of 30 apparently healthy elderly women from Loures region. Essentially they must be independent and community-dwelling. Characterization data were collected, containing physical activity characterization and anthropometric data. Functional capacity was assessed with CPF scale and distance walked by the 6MWT. Results were analyzed using a SPSS v21.0 through correlation tests.

**Results:** The walked distance in 6MWT was positively associated with height ( $r=0.406$ ;  $p=0.026$ ), physical activity level ( $r=0.594$ ;  $p=0.001$ ) and functional capacity ( $r=0.682$ ;  $p=0.000$ ). The walked distance variation is explained in 64.3% by functional capacity, height and physical activity level. The BMI, weight, age and waist perimeter didn't show statistically significant correlation with walked distance, in this sample.

**Conclusions:** In this sample, functional capacity influences more the walked distance, then height or physical activity level. The walked distance in 6MWT has a high correlation with results in CPF scale, so this test can be used to predict functional capacity. More attention should be taken to promote walking and functional capacity in older adults.

**Descriptors:** 6-minutes walk test; Composite Physical Function scale; elderly people; functional capacity; walked distance.

<sup>a</sup> mygonzalez@ubu.es

<sup>b</sup> igarcia@ubu.es

<sup>c</sup> alaguado@cop.es

<sup>a</sup> andreia.jacome.garcia@gmail.com

<sup>b</sup> ana.marta\_santos@gmail.com

<sup>c</sup> teresa.tomas@estesl.ipl.pt

051

### THE PROGRAM “MORE DOCTORS”: THE IMPACT ON HEALTH ACCESS IN RIO GRANDE DO SUL ANALYSIS

Franciele Moletta Almeida<sup>a</sup>, Luciana Barcellos Teixeira<sup>b</sup>, Alcindo Antônio Ferla<sup>c</sup>

*Universidade Federal do Rio Grande do Sul. Rio Grande do Sul, Brasil*

**Introduction:** The “More Doctors” is a Brazilian public policy to improve health access to the public health system (SUS). It is suppose to bring health care to vulnerable communities, including Indigenous Sanitary Districts.

**Objective:** Identify the municipalities that received the More Doctors program’s professionals, describe the population and the number of existing health teams for the creation of an index.

**Methods:** Descriptive quantitative study demonstrating the impact of the program on SUS access in the municipalities of RS. Population data and number of professionals will be evaluated. According to the Department of Primary Health Care, municipalities must have at least 1 Family Health Team (FHT) for every 3.000 habitants. The data on the number of teams and number of inhabitants were extracted from DATASUS and IBGE. Subsequently, the rate of FHT for each 3.000 habitants was calculated.

**Results:** Thirty municipalities were included. Among them, fourteen did not have FHT until the arrival of the doctor. There was a variation between 5.000 residents up to more then 1 million on the population. The index calculated for municipalities ranged from 0.1 to 0.3. The number of health teams was inadequate in all municipalities. Observing almost half of the municipalities, they have an extreme unassisted population. Moreover, the index was low in 100% municipalities.

**Conclusion:** The data show situations of absence or shortage in primary care of health care in these thirty counties, which reinforces the program’s relevance to access to health care in the municipalities.

**Descriptors:** analysis on health access; social vulnerability; family health team.

<sup>a</sup> fmoletta@gmail.com

<sup>b</sup> luciana.bteixeira@gmail.com

<sup>c</sup> alcindoferla@uol.com.br

052

### PALLIATIVE CARE AT HOME: A RIGHT FOR ALL, AN INTEGRATIVE REVIEW

Patrícia Coelho<sup>1,a</sup>, Sandra Alves<sup>11,b</sup>, Manuel Luís Capelas<sup>111,c</sup>, Tania Costa<sup>1,d</sup>, Luis Sá<sup>1,e</sup>

*<sup>1</sup>Instituto de Ciências da Saúde. Universidade Católica Portuguesa. Porto, Portugal*

*<sup>11</sup>Mid Essex Hospital Services NHS Trust. Essex, United Kingdom*

*<sup>111</sup>Instituto de Ciências da Saúde. Universidade Católica Portuguesa. Lisboa, Portugal*

**Introduction:** To approach the holistic needs, including the cultural issues, of the patients and their families, Home Palliative Care are essential in a National Palliative Care Program. Only, trough this way the care provided can promote the well-being and quality of life of terminal ill and his family by prevention and relief of suffering. It may be provided in different settings, including at home.

**Objective:** demonstrate the relevance of home palliative care.

**Methods:** literature review on CINAL, MedLine, ISI database. Keywords “home care”, “palliative care” die at home” and “patients needs”. Were defined as inclusion criteria: English-language articles, published after 2003, in full text, available and analyzed by experts.

**Results:** from a total of 32 papers, we found that 51% of patients prefer to die at home but sometimes this is impossible because factors such as uncontrolled symptoms, urgent situations, exhaustion, feelings of helplessness and inability of caregivers. However, the possibility of a comprehensive care allows patients to die in their homes, with their families and their symptoms under control.

**Conclusions:** with the increasing number of terminal ill patients associated with the necessity of equity, fairness and accessibility to health care in terminal phase of the illness, and also to respect the minimum requirements issued by the EAPC (1 team/100,000 inhabitants), it is imperative to ensure palliative care at home by empowering teams to deliver quality care that provide a dignity death according to the choices of patients

**Descriptors:** home care; palliative care; die at home; patients; needs.

<sup>a</sup> sfcoelho@porto.ucp.pt

<sup>b</sup> sandracachopa@gmail.com

<sup>c</sup> luis.capelas@ics.lisboa.ucp.pt

<sup>d</sup> tcosta@porto.ucp.pt

<sup>e</sup> lsa@porto.ucp.pt

053

### INTERVENTION IN ADULTS ON A MENTAL HEALTH CARE CENTER – A CLINICAL EDUCATION PROJECT

Tânia Bartolomeu<sup>1,a</sup>, Joana Francisco<sup>1,b</sup>, Vítor Pinheira<sup>1,c</sup>

<sup>1</sup>*Escola Superior de Saúde Dr. Lopes Dias. Instituto Politécnico de Castelo Branco. Castelo Branco, Portugal*

<sup>11</sup>*Associação de Pais e Amigos do Cidadão Deficiente Mental - Castelo Branco. Castelo Branco, Portugal*

**Introduction:** The peculiarities of each individual with mental disorders concerns a challenge to their intervention in group, however this might be the answer to a development of adaptive and social behavior.

**Objective:** Assess cognitive development, improvement of physical performance and group interaction, and progress of behavioral development and communication, in individuals with mental disorders who underwent the group intervention.

**Methods:** Prior to the beginning of the sessions there was an initial evaluation of 6 institutionalized adults with Intellectual Disabilities, using three assessment instruments, including the Mini Mental State (MMS), Modified Physical Performance Test (MPPT) and Behavioral Observation Protocol (BOP). This data, allowed an awareness of the key needs to meet in the 20 intervention sessions performed. Subsequently, there was a similar final evaluation.

**Results:** The results showed further progress in the behavioral field, with an average upgrading of the score in BOP of 26.33, followed by an average score increase 3.83 in MPPT and 2.83 in MMS.

**Conclusions:** The cognitive level developments centered on orientation, memory, and naming. The data given by MPPT relate to an increase of the speed the tasks are carried, and not the reach of new physical abilities. However, the most significant improvements were represented mainly in the ability of communication and understanding, which are reflected in the interaction of individuals in different situations, with different objects and people.

**Descriptors:** Mental disorders; Cognitive development; Physical performance; Behavioral field; Clinical education.

<sup>a</sup> vpinheira@ipcb.pt

<sup>b</sup> joanafrancisco87@hotmail.com

<sup>c</sup> tania.m.bartolomeu@gmail.com

054

### COM(VIVER) MAIS – PROJECT FOR COMMUNITY INTERVENTION IN THE ELDERLY POPULATION IN AZORES

Manuela Dias<sup>1,a</sup>, Ricardo Dias<sup>1,b</sup>, Helena Oliveira<sup>111,c</sup>, Carla Silva<sup>1,d</sup>

<sup>1</sup>*Centro de Saúde de Angra do Heroísmo. Unidade de Saúde da Ilha Terceira. Angra do Heroísmo, Portugal*

<sup>11</sup>*Hospital de Santo Espírito da Ilha Terceira. Angra do Heroísmo, Portugal*

<sup>111</sup>*Escola Superior de Enfermagem de Ponta Delgada. Universidade dos Açores. Ponta Delgada, Portugal*

**Introduction:** The new challenges that the phenomenon of demographic aging imposes on society in general, and health services in particular, that can impact active and healthy aging. The project Com(viver) Mais was implemented for two years (2012/2013) and aimed to combat loneliness in the elderly, which constitutes an obstacle to a healthy and active aging.

**Objective:** Decrease the sense of loneliness of individuals from 65 to 84 years of age.

**Methods:** The project was made using the health planning methodology, starting with a descriptive study (health diagnosis of the independent elderly population) followed by the development, implementation and evaluation of a community intervention project, which included house calls to the elderly, assessment of the level of loneliness in 3 different times (UCLA scale) and various intergenerational activities of social life (dancing, walking, conducting courses in computers, games...) using a cross-section of partnerships and community involvement.

**Results:** There was a decrease from 62.8% to 43.0% in the feeling of loneliness of independent individuals between the ages of 65 and 84 years of age. There was an increase from 50.0% to 61.6% of seniors who now have dreams/life projects. The results of 2013 are still being analyzed.

**Conclusions:** The reduction of social and emotional isolation that resulted in the promotion of social networks, which encouraged social interaction but also considering the elderly who live alone. The health gains arising from it are evidenced in contributing more proactively and the improvement of the quality of life in the elderly community.

**Descriptors:** Elderly, community, loneliness, active aging.

<sup>a</sup> mmmgdias@gmail.com

<sup>b</sup> ricdia@gmail.com

<sup>c</sup> helenamaroliveira@hotmail.com

<sup>d</sup> carla\_n\_natal@hotmail.com

055

### THE INFLUENCE OF THE INGESTION OF ALCOHOL ON SLEEP QUALITY

Ana Pires<sup>a</sup>, Lucinda Sofia Carvalho, Alexandre Pereira  
*Escola Superior de Saúde Dr. Lopes Dias. Instituto Politécnico de Castelo Branco. Castelo Branco, Portugal*

**Introduction:** The consumption of alcohol begins earlier and earlier in larger quantities, making relevant to approach the influence it has on sleep quality, essential to human life.

**Objective:** To characterize the habits of alcohol consumption in the Polytechnic Institute of Castelo Branco population, and to correlate them with the quality of sleep.

**Methods:** The sample was collected between October 2012 and March 2013, using sociodemographic questionnaires, habits of alcohol consumption and Quality Index Pittsburgh Sleep. Satisfying the criteria for inclusion and exclusion, made part of the 452 individuals of both gender, randomly selected, aged between 18 and 30 years, who consumed alcohol and who studied at the Polytechnic Institute of Castelo Branco. For statistical analysis were used Kolmogorov-Smirnov try-out, Mann Whitney, Kendall Tau-b and Chi-square test of independence.

**Results:** It was found that of the 452 individuals included in the sample only 83 had no alcohol habits. Relating alcohol consumption data to the assessment of sleep quality, 42.20 % individuals claim not to have a restful sleep. It was also observed that who claims that his school performance is not affected by alcohol, consumes a smaller amount per week (176.65 vs. 208.13). Finally, comparing the amount of alcohol consumed by gender, it was found that males consumes more than females.

**Conclusions:** Was concluded that exist a high percentage of alcohol consumption among students in higher education and this consumption leads to a change in sleep quality.

**Descriptors:** Quality of Sleep; Consumption Alcohol; Students.

056

### ARE SKIN LESIONS CORRECTLY CLASSIFIED?

Francisco-José Hernández-Martínez<sup>1,a</sup>, Bienvenida Rodríguez-De-Vera<sup>1,b</sup>, Alexandre Rodrigues<sup>11,c</sup>, Juan-Fernando Jiménez-Díaz<sup>1,d</sup>, Teresa Espirito Santo<sup>111,e</sup>, Rodrigo Chacón-Ferrera<sup>1f</sup>, M<sup>a</sup> Del Pino Quintana-Montesdeoca<sup>1g</sup>

<sup>1</sup>*Universidad de Las Palmas de Gran Canaria. Las Palmas de Gran Canaria, Spain*

<sup>11</sup>*Escola de Enfermagem Cruz Vermelha. Oliveira de Azeméis, Portugal*

<sup>111</sup>*Hospital General de Funchal. Funchal, Portugal*

**Introduction:** It is important to distinguish between pressure ulcers and humidity ulcers, because their prevention and healing will be different.

**Objective:** To assess whether skin lesions, localized in the sacrum and/or buttocks in patients of a primary healthcare centre, are properly classified as pressure ulcers and/or humidity ulcers by nursing professionals.

**Methods:** Quantitative study, correlational-descriptive and transversal study between 18 nurses from a primary healthcare centre. The nurses provide homecare to 22 users with skin lesions. To analyse the data they use the following statistics program SPSS 19.0. According to Spanish legislation, the fundamental rights of patients are preserved.

**Results:** By sex, 67.5% are women; the largest group is between 45 and 55 years old. According to the classification of the European Research Ulcer Advisory Panel (EPUAP-PUCLAS 2), 87% of professionals do not classify ulcer humidity and pressure ulcer properly. 80% of professionals (14 nurses) classified the injury as pressure ulcer category II when it corresponded with ulcer humidity, and no nurse found any “injury” as “combined”, when 13.63% (3 patients) of the study presented this type of injury. The measures that were used to prevent ulcer humidity do not correspond to those recommended by expert panels.

**Conclusions:** Most professionals do not know the classification system PUCLAS 2, so they will require specific training in this type of injury. The distinction between the two types of injury is essential in order to establish proper “cost-effective” prevention.

**Descriptors:** Skin; lesions; classification; pressure ulcers.

<sup>a</sup> fjhernandez@denf.ulpgc.es

<sup>b</sup> brodriguez@denf.ulpgc.es

<sup>c</sup> rodriguesalexandr@gmail.com

<sup>d</sup> jjimenez@denf.ulpgc.es

<sup>e</sup> tmses@hotmail.com

<sup>f</sup> rchacon@denf.ulpgc.es

<sup>g</sup> mpino@dma.ulpgc.es

<sup>a</sup> rita\_p4@hotmail.com

057

**NURSING HOME VISIT IMPACT IN PUERPERIUM: SYSTEMATIC REVIEW**Ana Castro<sup>a</sup>, Taciana Ribeiro<sup>b</sup>, Tomé Rocha<sup>c</sup>, Tânia Alves<sup>d</sup>, Simão Vilaça<sup>a</sup>*Universidade do Minho. Braga, Portugal***Introduction:** Home visit can be an intervention tool in family's health and in the continuity of postpartum cares.**Objective:** Examine the impact of nursing home visit in puerperium and in neonates of occidental countries.**Methods:** The language used was English and the publication period refers to the last 10 years. Expression used in Web of Knowledge ISI database: ((postpartum periodORpuerper\*)AND((Home visit\*).**Results:** From 137 articles, 6 articles were eligible, after the implementation of the protocol of systematic reviews of literature. Three dimensions related to home visit were identified: personal contact; relation cost-benefit/efficacy; importance of home visit to the mothers. According to Salonen et al (2011), online resources with information about puerperium is not effective. Paul et al (2004), Koc et al (2008) and Ammerman et al (2013) demonstrate that home visit reduces parental stress and neonates' trauma, decreasing rates of hospital readmission. Rodrigues et al (2006) and Aksu et al (2011) show the lower cost of home visit compared to the cost of neonates' readmission. Mothers who receive home visit choose exclusive breastfeeding, for a longer period, recognizing the importance of home visit.**Conclusions:** Home visit reduces parental stress, contributes to knowledge acquisition, and reduces neonates' readmission and morbidity. The interpersonal relationship shows more effectiveness in prevention of postpartum problems unlike online information. Furthermore, relation cost-benefit is positive, because home visit costs are lower than costs of neonates' readmission. However, further research is needed to understand the importance of home visit in puerperium.**Descriptors:** Nursing; Systematic Review; Home visit; Neonate; Puerperium.<sup>a</sup> a65888@alunos.uminho.pt<sup>b</sup> a65919@alunos.uminho.pt<sup>c</sup> a65934@alunos.uminho.pt<sup>d</sup> a65930@alunos.uminho.pt<sup>e</sup> svilaca@ese.uminho.pt

058

**QUALITATIVE ASSESSMENT OF CARDIOVASCULAR RISK IN A COMMUNITY PHARMACY IN THE ALGARVE**Joana Reis<sup>1,a</sup>, Margarida Santo<sup>1,b</sup>, Tânia Nascimento<sup>1,c</sup><sup>1</sup>*Escola Superior de Saúde. Universidade do Algarve. Faro, Portugal*<sup>11</sup>*Centro de Estudos e Desenvolvimento em Saúde. Escola Superior de Saúde. Universidade do Algarve. Faro, Portugal***Introduction:** Cardiovascular diseases are the leading cause of death worldwide and several risk factors can be identified in the etiology.**Objective:** The objective of this study was to evaluate the cardiovascular risk (CVR) of patients in a community pharmacy.**Methods:** A descriptive cross-sectional study (34 patients) was conducted through a questionnaire.**Results:** The patients sample had a mean age of 50.7±17.9 years, about 68% were female, married (58.8%), with high or university education (47%). The mean weight and height were respectively 74.3±14.9 kg and 163±13 cm, and 61.8% of the patients were overweight. About 35% did physical exercise at least 30 minutes and about 27% were smokers. Most patients (71%) reported having family history of cardiovascular event (CVE), however only one reported have already a CVE. About 41% of patients had diagnosis of hypertension, 47% diagnosis of hypercholesterolaemia and 17.6% diabetes mellitus. Systolic blood pressure (BP) mean was 132.5±12.9 mm/Hg and diastolic BP mean 78.5±8.1 mm/Hg. Only 35.7% of patients medicated with antihypertensive drugs had controlled BP values. All patients had at least 1 CVR factor, and 29.4% had 3 CVR factors. About 32% of patients had moderately increased CVR and 47.1% had high increased CVR, with men having a higher risk than women (p<0,05).**Conclusions:** We concluded that patients had a relatively high cardiovascular risk, mostly with 3 or more CVR factors, which may identify a group of patients who require a more restricted monitoring in community pharmacy.**Descriptors:** Community Pharmacy; Hypertension; Cardiovascular risk.<sup>a</sup> joanafsreis@gmail.com<sup>b</sup> mfesanto@ualg.pt<sup>c</sup> tinascimento@ualg.pt

059

### REHABILITATION AND SUBJECTIVITY: CARTOGRAPHY OF A MUTILATED BODY BY LEPROSY

Ana Maria Dourado Lavinsky Fontes<sup>1</sup>, Silvana Martins Mishima<sup>II</sup>

<sup>1</sup>Universidade Estadual de Santa Cruz. Bahia, Brazil

<sup>II</sup>Universidade São Paulo. São Paulo, Brazil

**Introduction:** The path of leprosy patients with physical deformities shows that these patients are victims of a cruelly neglected care. In this investigation a case of a leprosy carrier that evolved with irreversible functional condition of the limbs was studied. We tried to understand the potentiality of this carrier living in social adversity with his physical limitations. The approach goes far beyond physical rehabilitation based on Gilles Deleuze's philosophy.

**Objective:** Mapping the micropolitics of an emblematic leprosy mutilated body beyond health care and to analyze the movements of this body in other scenarios not on technical knowledge field which the relation processes are vulnerable to the technical power.

**Methods:** This study was conducted in Ilhéus, Bahia, Brazil. The Cartographic Method was used. Besides direct observation, semi-structured interviews were conducted with the subject, intentionally selected. The data was gathered using the analysis of content based on the nucleus of sense of the interviews.

**Results:** This research focused on "existential territories", based on Rolnik's perspective (2006). F.D (61), developed serious state of reactional leprosy evolving to physical deformities. The meetings with F.D, showed there is a non-visible body, capable to produce a subjectivity to help him to overcome adversities.

**Conclusions:** In conclusion, the subjective field, in this case, makes an important element to be prioritized and explored in the rehabilitation and autonomy process with a person with irreversible physical condition. It is relevant that the rehabilitation practice is not centered only in recovery of physical damage.

**Descriptors:** Leprosy, Cartography, Subjectivity.

060

### BEHAVIOURS AND SEXUAL ATTITUDES IN HIGHER EDUCATION STUDENTS

Ana Maria Baptista Oliveira Dias Malva Vaz<sup>I</sup>, Maria Teresa Calvário Antunes<sup>II,b</sup>, Wilson Jorge Correia Pinto de Abreu<sup>III,c</sup>

<sup>I</sup>Escola Superior de Saúde Dr. Lopes Dias. Instituto Politécnico de Castelo Branco. Castelo Branco, Portugal

<sup>II</sup>Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal

<sup>III</sup>Escola Superior de Enfermagem do Porto. Porto, Portugal

**Introduction:** The issue of sexual attitudes and behaviours is of particular importance in young people entering higher education, who initiate new experiences, namely in the area of sexuality.

**Objective:** Analyse the influence of gender, age, having a boyfriend, having sexual relations, in the behaviour and attitudes of young people.

**Methods:** We made a study with a sample of 639 young people who entered the Polytechnic Institute of Castelo Branco. The sample consisted of 57.6% female students and 42.4% male, with an average age of 19.9 years and standard deviation of 1.76. This is a cross-sectional, descriptive and analytical study. It was applied a Questionnaire of Behaviours and Attitudes towards Sexuality, with four dimensions: Behavioural intention, Attitudes, Subjective standard; Perceived control.

**Results:** The results show that 74.8% of the students already had sex, 52.9% had boyfriend/girlfriend, 96.4% used a contraceptive method, being condoms the most used method 32.6%. The information on sexuality is "good" in 56.9% of the students. Significant Statistical differences were found in all dimensions, according to gender and age ( $p < 0.05$ ), and for the variables of having boyfriend/girlfriend and already had sex, in the dimensions Behavioural intention and Attitudes ( $p < 0.001$ ).

**Conclusions:** sexual behaviours and attitudes are determined by gender and by age. In order to promote healthy sexual attitudes and behaviours, it is essential to implement a sexual education that aims to develop attitudes and skills in young people, allowing them to feel informed and secure in their choices, and to practice "safe sex".

**Descriptors:** Sexuality; contraception; sexual behaviours; sexual attitudes.

<sup>a</sup> anamariavaz@gmail.com

<sup>b</sup> mtcantunes@gmail.com

<sup>c</sup> wjabreu@esenf.pt

061

### PHYSICAL HEALTH AND ACTIVITIES OF DAILY LIVING IN OLDEST OLD COMMUNITY-DWELLING ASSESSMENT

Rogério Manuel Clemente Rodrigues<sup>1,a</sup>, Luis Manuel de Jesus Loureiro<sup>1,b</sup>, Zaida de Aguiar de Sá Azeredo<sup>1,c</sup>, Sílvia Manuela Dias Tavares da Silva<sup>1,d</sup>, Cristiana Filipa Ribeiro da Silva<sup>1,e</sup>, Sandrina Sofia da Silva Crespo<sup>1,f</sup>

<sup>1</sup>Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal

<sup>11</sup>Instituto de Ciências Biomédicas Abel Salazar. Porto, Portugal

**Introduction:** The progressive aging of the population in contemporary societies leads to the necessary adjustment to the health care services responses. “The Oldest Old: Coimbra aging study” (PTDC/CS-SOC/114895/2009) assesses the use and need of health services and social support by elderly people according to their functional status in five areas: social resources, economic resources, mental health, physical health and activities of daily living (ADL).

**Objective:** Assessment of the functional status in two areas: physical health and ADL.

**Methods:** The randomly and stratified (age and gender) sample consisted of 1153 individuals (422 men; 731 women) representative of Coimbra’s elder residents, divided into two age groups: a group of 75-84 years (814 individuals) and the second group aged  $\geq 85$  (339 individuals). The questionnaire OARS/QAFMI included four dimensions of physical health (medication use, illness/chronic, functional limitation and self-evaluation of health) and the ADL scale, included seven physical ADL and seven instrumental ADL items.

**Results:** According to the OARS/QAFMI scoring model for the physical health there are significant differences between gender ( $p=0,001$ ), with men presenting better scores than women. It also revealed significant differences between age groups ( $p<0,001$ ), with the age group of  $\geq 85$  presenting the worst results. In the ADL area there were also observed significant differences between age groups ( $p<0,001$ ), with the elder individuals presenting the worst results.

**Conclusions:** The OARS/QAFMI is considered very useful to define functional status in oldest old community-dwelling, in specific areas of evaluation like physical health and ADL. Greater attention should be given to the oldest ( $\geq 85$  years) and to women.

**Descriptors:** Elderly; Functional status; Physical health; Activities of daily living; OARS/QAFMI.

<sup>a</sup> rogerio@esenfc.pt

<sup>b</sup> luisloureiro@esenfc.pt

<sup>c</sup> zaida.azeredo@gmail.com

<sup>d</sup> sylviatavares@hotmail.com

<sup>e</sup> cfribeiro@esenfc.pt

<sup>f</sup> sandrina@esenfc.pt

062

### SCALES TO ASSESS MEDICATION ADHERENCE IN PEOPLE WITH CHRONIC DISEASE: A SYSTEMATIC REVIEW

Cláudia Oliveira<sup>a</sup>, Helena José<sup>b</sup>

Instituto de Ciências da Saúde. Universidade Católica Portuguesa. Portugal

**Introduction:** Medication adherence is defined by the patient’s conformance with the provider’s recommendation with respect to timing, dosage and frequency of medication-taking during the perscribed length of time (WHO, 2003). Ho et al (2009) said that medication prescriptions never filled 20% to 30% and the rates of medication adherence drop after first six months. So it’s important to know which scale to use to assess the adherence and than implement a program to improve the medication adherence and solve this public health problem.

**Objective:** Framing the current state of knowledge, regarding medication adherence scales based on diseases.

**Methods:** Systematic review. Electronic research in scientific databases. Descriptors: “medication adherence” AND “chronic disease” AND “scale”. Inclusion criteria: one of the descriptors in the title; articles relevant to the subject under study; original studies; without time limit. Exclusion criteria: academic references arising from first cycle studies.

**Results:** In the references consulted, we found different scales to assess the medication adherence according to the disease. It was possible to agroup the scales into two therapeutic area: metabolic disorders and mental health. For the first area we can use: Medication Adherence Questionnaire, also know as the Morisky-4; Self-Efficacy for Appropriate Medication Use Scale; Brief Medication Questionnaire and Hill-Bone Compliance Scale. In the mental health area it’s also possible to apply the Medication Adherence Rating Scale and the Brief Medication Questionnaire.

**Conclusions:** According to the results, it’s important to have a general guide for choosing medication adherence scales based on disease of interest.

**Descriptors:** Medication Adherence; Scales; Chronic Disease.

<sup>a</sup> claudiajs.oliveira@gmail.com

<sup>b</sup> leninha.humor@gmail.com



063

### SEX EDUCATION IN SCHOOLS: AN INTERVENTIONAL PROJECT

Hélia Dias<sup>1,a</sup>, Olímpia Cruz<sup>1,b</sup>, Maria Conceição Santiago<sup>1,c</sup>, Teresa Carreira<sup>1,d</sup>, José Amendoeira<sup>1,II,e</sup>

<sup>1</sup>*Escola Superior de Saúde. Instituto Politécnico de Santarém. Santarém, Portugal*

<sup>II</sup>*Centro de Investigação Interdisciplinar em Saúde. Universidade Católica Portuguesa. Porto, Portugal*

**Introduction:** The school defines itself as a privileged space for sexuality approach. Part of the project School Health Promotion - Promoting Healthy Lifestyles from Indicators Monitoring Unit at the School of Health of Santarém, the intervention at sexuality level has involved students from primary to secondary school, parents and teachers, within a logic of complementarity of training for different target groups.

**Objective:** To present the activities developed in schools between 2008-2012 in the context of sexuality.

**Methods:** The operationalization of the project has occurred mostly in class, using an interactive method, films and discussion spaces. Theoretical sessions and monitorization of the practical component has been developed with teachers and to be performed in a school context.

**Results:** From the 2,463 participants that were involved, 1,944 were students, 170 parents and 299 teachers and there was a mixed group of 50 parents and students, all distributed for 85 sessions. In the students group the different topics covered a logic of complementarity between the growth and development of children and young people and what are their needs for intervention at the level of sexual education. Among parents the parent-child communication about sexuality has been recurrent. With teachers the intervention has focused on the debate of sexual education in schools.

**Conclusions:** The project has proved to be highly positive. The involvement of students, parents and teachers confirms effectively that the school has a privileged role in the development of a critical reflection regarding sexuality.

**Descriptors:** sex education; school; health promotion; adolescence.

064

### ASSOCIATION BETWEEN GRIP STRENGTH, ANTHROPOMETRIC DATA AND FUNCTIONAL CAPACITY

Angélica Soares do Nascimento<sup>a</sup>, Inês Rosendo Pinto<sup>b</sup>, Mónica Martinho Abreu<sup>c</sup>, Sofia Pereira de Almeida<sup>d</sup>, Maria Beatriz Fernandes<sup>e</sup>, Maria Teresa Tomás<sup>f</sup>

*Escola Superior de Tecnologia da Saúde de Lisboa. Instituto Politécnico de Lisboa. Lisboa, Portugal*

**Introduction:** Grip strength has been described as an important predictor of functional capacity, however, there are several factors that may influence it, such as gender, age, anthropometric characteristics, among others.

**Objective:** To investigate the associations between grip strength, functional capacity and Body Mass Index (BMI) in individuals aged 65 years or over.

**Methods:** Descriptive-correlational study with a sample of 30 elderly and independent volunteers (15M; 15F; 73.2±8.2 years). Height was measured with a stadiometer (SECA, Hamburg, Germany), and body weight was measured using a standard scale (SECA). Body mass index (BMI) (kg/m<sup>2</sup>) was calculated for height and weight. Grip strength was assessed with JAMAR<sup>®</sup> hydraulic analogical dynamometer, and functional capacity through the Composite Physical Function (CPF) scale. Pearson correlation tests were used to determine the associations between variables.

**Results:** There were moderate associations between grip strength and weight (right handgrip:  $r=0.493$ ;  $p=0.006$ ; left handgrip:  $r=0.515$ ;  $p=0.004$ ), high association between height and grip strength (right:  $r=0.758$ ;  $p=0.000$ ; left:  $r=0.8$ ;  $p=0.000$ ). No correlation was found between grip strength and BMI (right:  $r=-0.050$ ;  $p=0.793$ ; left:  $r=-0.055$ ;  $p=0.771$ ). Moderate correlation was found between grip strength and CPF score (right:  $r=0.674$ ;  $p=0.000$ ; left:  $r=0.642$ ;  $p=0.000$ ).

**Conclusions:** There are significant associations between grip strength and anthropometric characteristics. Also, there is a significant association between grip strength and functional capacity, highlighting that grip strength can be a predictor of an elderly person's functional capacity, allowing for the implementation of strategies to prevent further disabilities through a simple and inexpensive assessment such as handgrip strength.

**Descriptors:** grip strength, elderly, functional capacity, CPF scale (Composite Physical Function).

<sup>a</sup> helia.dias@essaude.ipsantarem.pt

<sup>b</sup> olimpia.fonseca@essaude.ipsantarem.pt

<sup>c</sup> mcsantiago@essaude.ipsantarem.pt

<sup>d</sup> teresa.carreira@essaude.ipsantarem.pt

<sup>e</sup> jose.amendoeira@essaude.ipsantarem.pt

<sup>a</sup> nascimentoangelicas@gmail.com

<sup>b</sup> inesrosendo@gmail.com

<sup>c</sup> monica\_abreu91@hotmail.com

<sup>d</sup> sofia.almeida.1991@gmail.com

<sup>e</sup> beatriz.fernandes@estesl.ipl.pt

<sup>f</sup> teresa.tomas@estesl.ipl.pt

065

### A COMMUNITY-BASED EXERCISE PROGRAM TO CONTROL CARDIOVASCULAR RISK IN TYPE 2 DIABETICS\*

Romeu Mendes<sup>1,a</sup>, Nelson Sousa<sup>1</sup>, Victor Machado Reis<sup>1</sup>, José Luís Themudo-Barata<sup>1,11</sup>

<sup>1</sup>Research Center in Sport Sciences. Health Sciences and Human Development. Universidade de Trás-os-Montes e Alto Douro. Vila Real, Portugal

<sup>11</sup>Universidade da Beira Interior. Covilhã, Portugal

<sup>111</sup>Centro Hospitalar Cova da Beira. Covilhã, Portugal

**Introduction:** Heart disease is the leading cause of death among patients with type 2 diabetes.

**Objective:** To analyze the effects of *Diabetes em Movimento*<sup>®</sup> a community-based supervised exercise program on cardiovascular risk in patients with type 2 diabetes.

**Methods:** Thirty-nine individuals with type 2 diabetes (19 men and 20 women; age 62.05 ± 6.14 years old) underwent a 9-month community-based exercise program, combining aerobic, resistance, agility and flexibility exercise. Group exercise sessions were held three times per week on non-consecutive days, lasting 70 minutes and were supervised by exercise professionals. Cardiovascular risk (10-year risk estimate of non-fatal and fatal coronary heart disease) was assessed before and after the exercise program application through *UKPDS Risk Engine v2.0*, a type 2 diabetes specific risk calculator. This risk is based on duration of type 2 diabetes, current age, sex, ethnicity, smoking status, presence or absence of atrial fibrillation and levels of HbA1c, systolic blood pressure, total cholesterol and HDL cholesterol. Data were compared with a control group (N=85) of patients with type 2 diabetes.

**Results:** Split-plot ANOVA for repeated measures identified a significant effect of group\*time interaction on cardiovascular risk ( $p < 0.001$ ).

**Conclusions:** Community-based physical activity interventions like *Diabetes em Movimento*<sup>®</sup> are effective strategies to control cardiovascular risk in patients with type 2 diabetes.

**Descriptors:** Community-Based Intervention; Physical Activity; Exercise; Cardiovascular Risk; Type 2 Diabetes.

\*Funding and registration: *Diabetes em Movimento*<sup>®</sup> Trial was funded by Portuguese Foundation for Science and Technology (reference SFRH/BD/47733/2008) and is registered in *Current Controlled Trials* (reference ISRCTN09240628).

<sup>a</sup>rmendes@utad.pt

066

### HOST FAMILIES TARGETED FOR NURSING INTERVENTION

Joana Filipa Oliveira e Costa<sup>1,a</sup>, Maria da Conceição Alves Rainho Soares Pereira<sup>11</sup>, Maria João Filomena Santos Pinto Monteiro<sup>11,c</sup>, Isabel Maria Antunes Rodrigues da Costa Barroso<sup>11,d</sup>

<sup>1</sup>Centro Hospitalar de Trás-os-Montes e Alto Douro. Vila Real, Portugal

<sup>11</sup>Escola Superior de Enfermagem de Vila Real. Universidade de Trás-os-Montes e Alto Douro. Vila Real, Portugal

**Introduction:** promoting quality of life is essential in nursing care. In this sense, fostering arises from the absence or inadequacy of the family setting as the most personalized solution.

**Objective:** Characterize the individuals responsible for foster families and people received in a county of northern Portugal.

**Methods:** A cross-sectional descriptive study, whose target population was composed of six individuals responsible for host families in the county, was developed and a questionnaire was designed to characterize these families and those admitted.

**Results:** all individuals responsible for host families were female and had an average age of 52. Of the six families participating in the study, three welcomed three people and the others welcomed respectively one, two and four people, totaling 16 persons accepted. Of these, 8 (50%) were male and 8 (50%) female, most of them single 9 (56.3%), 5 were divorced or separated (31.2%) and 2 (12.5%) were widowed. The ages ranged from 40 to 87 years, with an average of 62. The reasons for needing fostering were lack of a caregiver, psychiatric disorders and physical dependence related to a stroke. It was found that 6 (37.5%) remained in HF between one and three years.

**Conclusions:** The characterization carried out allowed for the knowledge of both the HF and the people received; it provided nurses with information for planning training interventions, thereby helping to overcome difficulties that arise in this context.

**Descriptors:** Host families, Nursing intervention, Quality Life.

<sup>a</sup>jfilipacosta@hotmail.com

<sup>b</sup>crainho@utad.pt

<sup>c</sup>mjmonteiro@utad.pt

<sup>d</sup>imbarroso@utad.pt

067

### EVALUATION OF A PROTOCOL EXERCISES FOR MUSICIANS WITH MUSCULOSKELETAL PROBLEMS

Madalena Santana<sup>a</sup>, Abel Rodrigues<sup>b</sup>, Vitor Pinheira<sup>c</sup>

*Escola Superior de Saúde Dr.º Lopes Dias. Instituto Politécnico de Castelo Branco. Castelo Branco, Portugal*

**Introduction:** Work-Related Musculoskeletal Disorders (MSDs), associated with execution of musical performance, are usually referred to the upper limb, neck and lumbar spine.

**Objective:** The general objective of this study is to evaluate the effectiveness of an exercises protocol of muscle relaxation in the decrease of pain, discomfort and activity levels of the neck and shoulder muscles in different types of musicians with musculoskeletal disorders.

**Methods:** The sample was composed by 12 students of the music course of Escola Superior de Artes Aplicadas de Castelo Branco, who were divided in two groups: strings (7 participants) and wind (5 participants). The sample was composed by 7 male and 5 female musicians with an average age of 20,75 years. Data collection was performed in two stages: T0 before the realization of protocol and T1 after the application of the intervention. In the two moments, the instruments and scales used were the Surface Electromyography (sEMG), Visual Analogue Scale (VAS) of pain and discomfort in the neck-shoulder and Neck and Upper Limb Index (NULI-20). About EMG, the data collection was realized while participants performed a 15 minutes repertoire wherein the muscles evaluated were the trapezius (upper, middle and lower) and the deltoids (anterior, middle and posterior). Intervention protocol consisted in relaxation and stretching exercises of the muscles in study realized in class and autonomous execution in the beginning, break and final of the instrumental daily practice of each one of the participants with duration of 4 weeks.

**Results:** There is a significative decrease in the VAS of pain ( $p=0,008$ ) and discomfort ( $p=0,012$ ) but not significative in the values of NULI-20 and RMS ( $p>0,05$ ).

**Conclusions:** Intervention protocol applied in this study was effective in the decreased intensity of pain and discomfort and contributed to the decrease of the values of NULI-20 and myoelectric activity levels of trapezius and deltoids, although without significance. These results confirm the idea that prevention programs should be early implemented in music schools in order to avoid the appearance of PRMD in this population.

**Descriptors:** Work-Related Musculoskeletal Disorders (MSDs); Musicians; Relaxation/stretching; Neck; Shoulder.

<sup>a</sup> madalena\_santana@hotmail.com

<sup>b</sup> rodrigues.a@ipcb.pt

<sup>c</sup> vpinheira@ipcb.pt

068

### INFLUENCE OF STRETCHING PROGRAM IN FACTORY WORKERS, PREVALENCE OF MUSCULOSKELETAL SYMPTOMS

Ana Mendes<sup>l,a</sup>, Abel Rodrigues<sup>l,b</sup>, Rui Gonçalves<sup>ll,c</sup>

*Escola Superior de Saúde Dr. Lopes Dias. Instituto Politécnico de Castelo Branco. Castelo Branco, Portugal*

*Escola Superior de Tecnologia da Saúde de Coimbra. Instituto Politécnico de Coimbra. Coimbra, Portugal*

**Introduction:** Musculoskeletal injuries have become a major health problem in the industrialized world.

**Objective:** Evaluate the prevalence of musculoskeletal symptoms in factory workers and compare the ability to work comparatively to subjects with and without symptoms prevalence. Evaluate the influence of a self-static stretches program in the prevalence of symptoms in the last 7 days, pain intensity and ability to work.

**Methods:** The sample consisted of factory workers at two factories in the Castelo Branco district. At T0 the Nordic Musculoskeletal Questionnaire (NMQ) for the survey of musculoskeletal symptoms was applied, and to assess the ability to work and physical activity level were applied the Work Ability Index (WAI) and the International Physical Activity Questionnaire (IPAQ), respectively. Subsequently, the workers of factory A were divided into a control group (CG) and experimental group (EG), the latter being subjected to a program of self-static stretches. At T1 were again applied the NMQ and WAI, in both groups.

**Results:** In factory A ( $n=131$ ) there was a high prevalence of symptoms at the upper limbs, and in B ( $n=50$ ) at the level of the lower limbs and lower back. Individuals with occurrence of symptoms present greater hour load, service time and Body Mass Index (BMI), and more/less time sitting. Workers with prevalence of symptoms have a lower WAI, and there was a negative association between pain intensity and WAI. In EG there was found, between T0 and T1, a significant decrease in the intensity of lower back pain ( $p=0.011$ ).

**Conclusions:** The results show the need for urgent intervention in industry, mainly directed to the most prevailing body regions. Some mentioned factors should be reduced, but the results do not indicate causality. The results of the program of self-static stretches were not in favor of the hypotheses, therefore more research is needed to confirm these results.

**Descriptors:** Musculoskeletal symptoms. Work ability. Stretching program. Factory workers.

<sup>a</sup> ana\_mendes\_2004@hotmail.com

<sup>b</sup> rodrigues.a@ipcb.pt

<sup>c</sup> ruisolesgoncalves@gmail.com

069

**PREVALENCE AND DETERMINANTS OF GINGIVAL RECESSIONS IN PORTUGUESE ADULTS**João Lapa<sup>1,a</sup>, Cláudia Ribeiro<sup>1,11,b</sup>, Nélio Veiga<sup>1,c</sup><sup>1</sup>Universidade Católica Portuguesa. Porto, Portugal<sup>11</sup>Unidade de Imunologia. Hospital Geral Santo António. Centro Hospitalar do Porto. Porto, Portugal

**Introduction:** Apical migration of the free gingival margin can be a result of gingival recession, defined as an unwanted clinical condition of attachment loss. The importance that should be given to a recession varies by its etiology, distribution in the oral cavity and complications that may arise.

**Objective:** Assess the prevalence of gingival recessions and its determinants in a sample of adults at the Dental Clinic of the Portuguese Catholic University in Viseu, Portugal.

**Methods:** We conducted a cross-sectional study in which we assessed a sample of 101 patients with a mean age of 23.1±2.2 years (53.5% female). A self-administered questionnaire was applied regarding issues related to etiological factors associated with recessions and an intra-oral clinical examination. Prevalences were expressed in proportions and compared by the Chi-square test.

**Results:** The prevalence of gingival recession was 85.1%. In this study, we found association between the development of recessions and the use of a specific tooth brushing technique mostly based on horizontal movements and brushes with harder bristles ( $p<0.05$ ). Of the patients who had orthodontic treatment, 83.8% had recessions. It has been found that the higher presence of dental plaque is associated with a higher risk of gingival recessions and its severity ( $<50\%$  dental plaque=6.21 vs  $\geq 50\%$  dental plaque=14.0%,  $p=0.04$ ).

**Conclusions:** Gingival recessions have a multifactorial etiology. Although further studies and a greater sample is needed, we concluded that the majority of the analyzed sample has already suitable oral health behaviours, however, some need to be modified to prevent the development of recessions.

**Descriptors:** Gingival recession. Prevalence, oral health.

070

**INTERVENTION PROJECT INTO ACADEMIC COMMUNITY: A REALITY**Ana Frias<sup>1,a</sup>, Margarida Sim-Sim<sup>1,b</sup>, Antónia Chora<sup>1,c</sup>, Edgar Palminhas<sup>11,d</sup>, Vitória Casas-Novas<sup>1,e</sup>, Ermelinda Caldeira<sup>1,f</sup><sup>1</sup>Universidade de Évora. Évora, Portugal<sup>11</sup>Administração Regional de Saúde do Alentejo. Évora, Portugal

**Introduction:** Portugal, in the context of Western Europe, is the 3rd country with the highest incidence rate for HIV/AIDS infection [i.e., 13.5/100,000 inhab.] (ECDC, 2012). Positive effects are achieved through young-adults partnerships, giving voice to the youngest, empowering them on prevention (UNFPA, 2014). In developing countries these programs aimed at youth are strategic for the health of society in the short term (Dick, Ferguson, & Ross, 2006). Some universities abroad take the prevention of HIV/AIDS as an institutional policy organizing programs and projects (Hoban, Ottenritter, Gascoigne, & Kerr, 2003), but in Portugal is scarce.

**Objective:** To present the project “know and prevent HIV-Aids” and interventions carried out in the year 2013 into Academic Community of Évora.

**Methods:** Peers educators training (volunteers); interventions at the University of Évora poles; application of the teaching and non-teaching staff Questionnaire; debates and games; distribution of condoms and discussion of the correct use of it; rapid HIV test, free of charge and confidential.

**Results:** 22 educators peers were trained. Of the interventions carried out resulted 6 debates, distribution of 5,321 male condoms and 500 female condoms, 117 individual counseling activities and carrying out of 117 HIV rapid tests.

**Conclusions:** Within the framework of the policies of the Ministry of Health and the National Health Plan, the prevention of the HIV-AIDS is considered a priority. We intend to continue this pilot project being already scheduled new interventions, in academia, for the Year 2014.

**Descriptors:** HIV-AIDS. Academic community. Intervention project.

<sup>a</sup> joalapa23@gmail.com<sup>b</sup> claudiaribeiro.usc@gmail.com<sup>c</sup> nelioveiga@gmail.com<sup>a</sup> anafrias@uevora.pt<sup>b</sup> msimsim@uevora.pt<sup>c</sup> mafcc@uevora.pt<sup>d</sup> edgar.palminhas@arsalentejo.min-saude.pt<sup>e</sup> mvcn@uevora.pt<sup>f</sup> ecaldeira@uevora.pt

071

### ORAL HEALTH AND THE USE OF DENTAL PROSTHESIS AMONG THE INSTITUTIONALIZED ELDERLY

Joana Cunha<sup>1,a</sup>, Nélio Veiga<sup>1,b</sup>, Cláudia Ribeiro<sup>1,II,c</sup><sup>1</sup>Universidade Católica Portuguesa. Porto, Portugal<sup>II</sup>Unidade de Imunologia. Hospital Geral Santo António. Centro Hospitalar do Porto. Porto, Portugal

**Introduction:** The tooth mortality and its consequences remain a reality among the geriatric population. Geriatric population characteristics often limit the treatment options for oral rehabilitation with removable dentures.

**Objective:** Assess the prosthetic rehabilitation and the average score of decayed, missing and filled teeth (DMFT index) among a sample of institutionalized elderly individuals.

**Methods:** An epidemiological observational cross-sectional study was designed in which a sample of 445 elderly individuals was assessed. Data collection was accomplished through intra-oral clinical observation and the application of a questionnaire. Prevalences were expressed in proportions and compared by the Chi-square test.

**Results:** The DMFT index of the sample was  $26.31 \pm 3.79$ , with predominance on the number of missing teeth ( $21.70 \pm 7.87$ ). There were statistical significant differences between the number of missing teeth and the female gender ( $p=0.002$ ), between frequency of prosthesis cleaning and the presence of dental plaque ( $p=0.022$ ) and between nocturnal removal of the prosthesis and the presence of lesions in the soft tissue ( $p<0.01$ ). The most frequent injury was denture stomatitis (80%). A higher prevalence of partial edentulous patients without dentures was observed, both in the maxilla (38.7%) and the mandible (42.0%).

**Conclusions:** A high prevalence of tooth loss was found in the sample studied. A lack of information on oral health care and prosthesis hygiene was found among the institutionalized elderly.

**Descriptors:** Geriatric. Oral Health. Oral rehabilitation.

072

### THE CHALLENGES OF FEEDING

João Canossa Dias<sup>1,a</sup>, Tânia Fonseca<sup>1,b</sup>, Isabel Monteiro<sup>II,c</sup><sup>1</sup>Associação para a Recuperação de Cidadãos Inadaptados da Lousã. Lousã, Portugal<sup>II</sup>Universidade de Aveiro. Aveiro, Portugal

**Introduction:** Feeding difficulties are frequently present in individuals with neurological and developmental disorders. Due to specific biological conditions, these individuals are generally dependent on others in the feeding process. Often, caregivers do not access specialized training in this domain and may not use the best techniques to act when food rejection or choking risk are present, which may cause discomfort and anxiety. Thus, it was considered of major importance to train caregivers, whether formal or informal, to enable them to respond safely and appropriately to the needs of clients and/or family members.

**Objective:** With this research it is aimed to explain and implement the various stages of a health education project, targeted to caregivers of individuals with feeding and eating disorders, as well as to evaluate the impact in the mentioned sample.

**Methods:** Three major instruments were used to plan and monitor actions, in particular: The Five-Step Approach to Monitoring and Evaluation, from Charities Evaluation Services; Caffarella's Interactive Model for Program Planning; and the Kirkpatrick's Multilevel Evaluation Model.

**Results and Conclusions:** Outcomes showed that 90% of respondents had no access, to date of the questionnaire, to training opportunities related to feeding and eating problems. It was also observed that the greatest difficulties experienced by caregivers were related to incorrect positioning of the caregiver and the person cared for. Respondents also reported difficulties when choking, anterior escape and inadequate dosage of food occurred during feeding. Still to evaluate was the impact or SROI, in the long term, of such initiatives.

**Descriptors:** Feeding disorders. Health education project. specialized training.

<sup>a</sup> joanapmcunha@gmail.com<sup>b</sup> nelioveiga@gmail.com<sup>c</sup> claudiaribeiro.usc@gmail.com<sup>a</sup> cri.arci@gmail.com<sup>b</sup> taniacsfonseca@gmail.com<sup>c</sup> imonteiro@ua.pt

073

### VOLUNTARY COUNSELLING AND TESTING FOR HIV: AN INTERVENTION AT THE UNIVERSITY CAMPUS OF ÉVORA

Ana Frias<sup>1,a</sup>, Maria Chora<sup>1,b</sup>, Margarida Sim-Sim<sup>1,c</sup>, Edgar Palminhas<sup>1,d</sup>, Vitória Casas-Novas<sup>1,e</sup>, Ermelinda Caldeira<sup>1,f</sup>

<sup>1</sup>Universidade de Évora. Évora, Portugal

<sup>II</sup>Administração Regional de Saúde do Alentejo. Évora, Portugal

**Introduction:** Portugal continues to present rates of new diagnoses of HIV infection above the European average (UNAIDS, 2012) with a cumulative total of 42,580 cases at December 31, of which 29.3% diagnosed at ages between 20-29 (INSA, 2012). Voluntary Counselling and Testing (VCT) is a priority strategy in the different levels of prevention (Fonner, Denison, Kennedy, O'Reilly, & Sweat, 2012) and is common in foreign universities (Hoban, Ottenritter, Gascoigne, & Kerr, 2003; Matlala, Mokono, & Tsoetsi, 2013; Peltzer, Nzewi, & Mohan, 2004).

**Objective:** To describe the results of ATV for HIV activities at the University of Évora in the context of a specific project.

**Methods:** Cross-sectional, quantitative and descriptive study. Convenience sample of 114 individuals aged between 18-56 (M=28.29; SD=12:39) were asked about condom use with different partners and in different types of sexual practices. In sub-sample of 74 (60%) individuals was searched attitudes towards HIV testing in 8 dimensions.

**Results:** In group of individuals who reported sexual practices with regular partner the condom is always used by 43.2% in vaginal sex, by 17.6% in anal sex and by 7.7% in oral sex. In group of individuals who reported sexual practices with occasional partners, the condom is always used by 70% in vaginal sex, by 90% in anal sex and by 47.1% in oral sex. All cases were seronegative. In the sub-sample searching attitudes towards HIV testing are valued.

**Conclusions:** Although not identified HIV positive cases, the individuals have risk practices. It is useful to develop ATV activities on universities.

**Descriptors:** Voluntary counselling and testing. VIH. Youth. Condom. Attitude.

<sup>a</sup> anafrias@uevora.pt

<sup>b</sup> mafcc@uevora.pt

<sup>c</sup> msimsim@uevora.pt

<sup>d</sup> edgar.palminhas@arsalentejo.min-saude.pt

<sup>e</sup> mvcn@uevora.pt

<sup>f</sup> ecaldeira@uevora.pt

074

### ASSESSMENT OF MEDICATION ADHERENCE AND REGIMEN COMPLEXITY IN HYPERTENSIVE PATIENTS

Margarida Santo<sup>1,a</sup>, Telma Dias<sup>1,b</sup>, Tânia Nascimento<sup>1,c</sup>

<sup>1</sup>Centro de Estudos e Desenvolvimento em Saúde. Escola Superior de Saúde. Universidade do Algarve. Faro, Portugal

<sup>II</sup>Escola Superior de Saúde. Universidade do Algarve. Faro, Portugal

**Introduction:** The high prevalence of hypertension (HT) in Portugal shows a target for reducing morbidity and mortality from cardiovascular diseases. Non-adherence to medication is probably an important cause of treatment failure.

**Objective:** This study aimed to evaluate adherence to antihypertensive medication (aHT) in a sample of hypertensive patients in a pharmacy in the Algarve countryside, medicated for at least 6 months.

**Methods:** A descriptive cross-sectional study, with application of a standardized questionnaire (medication adherence - Delgado & Lima, 2001; pharmacotherapeutic complexity index - Melchioris, 2008) was conducted to assess adherence and regimen complexity medication.

**Results:** The sample (n=58) had a mean age 70.17±11.42 years, of whom 56.9% were women. The majority had low education (63.8%), were retired (77.6%), using on average 2.93±1.59 medications, and most (81%) using one aHT drug. Most patients (65.5%) had controlled blood pressure and high levels of adherence (41.4% "good adherence", 51.7% "completely adherence"). Factors shown to influence adherence to medication were age, professional status and monthly income (p<0,05). The regimen complexity medication showed no influence on adherence rates or control of HT.

**Conclusions:** In this study patients had a high adherence to medication, which may be associated with age, professional status and monthly income, and that can be a contribution to the control of HT, but was not possible to conclude that adherence to medications affected the control of HT. It is essential to improve these patients education regarding non pharmacological approaches that contribute to the control of HT.

**Descriptors:** Hypertension control. Medication adherence. Regimen complexity.

<sup>a</sup> mfesanto@ualg.pt

<sup>b</sup> kikolinas2@hotmail.com

<sup>c</sup> tinascimento@ualg.pt

075

### EFFECTS OF THE ASSOCIATION OF COGNITIVE STIMULATION WITH MOTOR TRAINING IN COGNITIVE IMPAIRMENT ELDERLY

Inês Guerra<sup>a</sup>, Carla Rodrigues<sup>b</sup>, Carolina Silva<sup>c</sup>, Filipa Jesus<sup>d</sup>, Inês Marques<sup>e</sup>, Luísa Pedro<sup>f</sup>

*Escola Superior de Tecnologia da Saúde de Lisboa. Lisboa, Portugal*

**Introduction:** Cognitive decline stems from normal physiological aging or a stage of transition to dementia. Dementia is related to brain structure neural damages, which results in cognitive and functional changes in the elderly.

**Objective:** To evaluate the effect of cognitive and motor stimulation training in elderly patients with cognitive deficits.

**Methods:** The sample was selected from Parede's Psychogeriatric Center. Five female subjects with mental illness and cognitive deficit, with scores between 18-29 in Mini Mental State Evaluation Scale (MMS), with a mean age of 85.6 and preserved capacity for independent ambulation and understanding of the proposed exercises were studied. MMS and Observação Psicomotora em Idosos (O.P.I.) were applied before and after the intervention. O.P.I. is an instrument created by Marco Ferreira (2011) from Faculdade de Motricidade Humana, adapted from Vitor Fonseca's Psychomotor Battery (1975). It allows to assign a qualitative/descriptive and quantitative classification of various parameters of observation, such as balance, body concept, spatial and temporal organization, praxis and motor memory. The study was conducted for 5 weeks, 40 minutes once a week and consisted in balance, walking, spatial sense, body concept and motion sequence exercises.

**Results:** There was a maintenance or improvement in 5 out of 9 parameters evaluated in OPI - body concept, rhythmic and spatial structuring, coordination and motor memory. The MMS's scores suffered a small increase, since the gap changed from 18-29 to 19-30.

**Conclusions:** Data suggests a positive influence of motor training combined with cognitive stimulation in elderly patients with mental illness.

**Descriptors:** Elderly. Cognitive impairment. Cognitive training. Motor training. Physical therapy.

<sup>a</sup> ines.sg3@gmail.com

<sup>b</sup> carla.rodriqs@gmail.com

<sup>c</sup> carolinaandradesilva@gmail.com

<sup>d</sup> filipamj@gmail.com

<sup>e</sup> frm.ines@gmail.com

<sup>f</sup> luísa.pedro@estesl.ipl.pt

076

### PERFIL SOCIODEMOGRÁFICO, HEMATOLÓGICO E BIOQUÍMICO DE UMA POPULAÇÃO ALCOÓLICA

Céu Leitão<sup>a</sup>, Ana Almeida<sup>b</sup>, Fernando Bellém<sup>c</sup>, Hélia Ferreira<sup>d</sup>, João Mafra<sup>e</sup>, Renato Abreu<sup>f</sup>

*Escola Superior de Tecnologia da Saúde de Lisboa. Lisboa, Portugal*

**Introduction:** With 140 million alcoholics throughout the world, alcohol dependence is a worldwide public health issue.

**Objective:** Our original aim was to establish a demographic, hematological and a biochemical profile to this population establish the occurrence of significant associations and compare it to the available data.

**Methods:** We collected and analyzed data from the medical records of 52 diagnosed inpatients that were being treated for alcoholism at Lisbon's Alcoholism Treatment Unit. 69,2% of the subjects were male with a mean alcohol consumption of 276,97 g/day. Most of the subjects reported use of illegal drugs and tobacco.

**Results and Conclusions:** Mean cell volume, mean cell hemoglobin, mean cell hemoglobin concentration, gamma-glutamyl transpeptidase, aspartate aminotransferase, alanine aminotransferase and total cholesterol were elevated. There were no significant associations between the mean alcohol consumption and hemoglobin, mean cell volume, platelets, mean platelet volume, gamma-glutamyl transpeptidase, aspartate aminotransferase and alanine aminotransferase ( $p > 0,05$ ). Most of the test values were comparable with available data, except for hemoglobin, red cell distribution width, erythrocyte, leukocyte and platelet count, glucose, triglycerides and total bilirubin.

**Descriptors:** Alcohol. Alcoholism. Sociodemographic profile. Hematological findings. Biochemical findings.

<sup>a</sup> mcleitao@estesl.ipl.pt

<sup>b</sup> ana.almeida@estesl.ipl.pt

<sup>c</sup> fernando.bellem@estesl.ipl.pt

<sup>d</sup> heliaferreira@gmail.com

<sup>e</sup> joaomgmafra@gmail.com

<sup>f</sup> renato.abreu@estesl.ipl.pt

077

**ALARYNGEAL VOICES UNDER A MAGNIFYING GLASS OF THE COMMUNITY**Paula Correia<sup>a</sup>, Ana Rita Santos<sup>b</sup>, Aldora Quintal<sup>c</sup>*Escola Superior Saúde Egas Moniz. Almada, Portugal*

**Introduction:** The person with total laryngectomy still remains in XXI century, victim of a subtle layer of exclusion and social isolation. Communication difficulties and physical changes after total laryngectomy transpose the person to a cruel and hermetic reality, opposite a different body and sound communication.

**Objective:** Identify the level of pleasantness, in different communication alternatives in persons with total laryngectomy, in rural and urban areas.

**Methods:** A stratified sample of 282 healthy individuals (228 from urban areas and 54 in rural areas), aged [35-65] years, were asked to hear four speech samples: murmured speech, electronic larynx, esophageal speech, and tracheoesophageal voice, and classify in a linear scale from zero to ten, the level of pleasantness of the auditory stimulus.

**Results:** The results reflect a low pleasantness for all voices, with tracheoesophageal voice in both areas with a higher level of acceptance (6.1 and 6.2 for rural and urban respectively, with no statistically significant differences). This low pleasantness is explained with statistical significance ( $p \leq 0.05$ ) for the urban population by the variables age and education, where older and low education significantly reveal a lower pleasantness.

**Conclusions:** We conclude that there are urgent needs for action and strategies for health education in relation to alternative communication of laryngeal voice.

**Descriptors:** Total laryngectomy. Pleasantness. Rural and urban areas.

<sup>a</sup> aldoraquintal64@gmail.com<sup>b</sup> aritavilar@hotmail.com<sup>c</sup> paulacgcorreia@sapo.pt

078

**MENTAL HEALTH INTERVENTION IN SCHOOL**António Nabais<sup>i,ii,a</sup>, Maria de Lurdes Simeão<sup>ib</sup>, Daniel Virella<sup>ic</sup>, Marta Alves<sup>id</sup>, Lucília Nunes<sup>iii,e</sup>, Ana Nunes de Almeida<sup>iv,f</sup><sup>i</sup>Centro Hospitalar Lisboa Central. Hospital D. Estefânia. Lisboa, Portugal<sup>ii</sup>Escola Superior Enfermagem Lisboa. Lisboa, Portugal<sup>iii</sup>Departamento de Enfermagem. Escola Superior de Saúde. Instituto Politécnico de Setúbal. Setúbal, Portugal<sup>iv</sup>Instituto de Ciências Sociais. Universidade de Lisboa. Lisboa, Portugal

**Introduction:** The intervention of Community Mental Health began after a tornado (level 3 on the Fujita Scale improved) who destroyed an Pre-primary and primary school on the inside were 136 children. Six months after the children have made a series of behaviours, signs and symptoms that parents and teachers associated with the traumatic event, considering it a risk factor for children to develop mental disorders. In the context of selective prevention the World Health Organization recommends health interventions in a community context. (WHO, 2004a: 17)

**Objective:** Evaluate the mental health status of children in Pre-primary and primary school affected by the tornado.

**Methods:** Transversal study with nested case control study. The Instruments deployed with parents and teachers were groups - focal and SDQ "a brief behavioural screening questionnaire that asks about children's and teenagers' symptoms and attribute positive" (Goodman, 1999, p 791.). With kids were mobilized drawings.

**Results:** About 103 children in the sample of 136 who lived through the tornado, 43 children (41.7%) present possible changes in mental health status (in a total of children at risk).

**Conclusions:** The data reveals that no child had psychiatric illness diagnosed or were monitored in mental health consultation at the time of the tornado, but we noticed that after an evaluation using the SDQ he identified 43 children (41.7%) who present possible mental disorder, most of them previous to tornado, especially the behavioural disorders. This identification has allowed in the school implement therapeutic strategies as soon as possible.

**Descriptors:** Children. School. SDQ (Strengths and Difficulties Questionnaire). Mental Health. Tornado.

<sup>a</sup> antonio.nabais@chlc.min-saude.pt<sup>b</sup> maria\_simeao@hotmail.com<sup>c</sup> danielvirella@oninetspeed.pt<sup>d</sup> marta.alves@chlc.min-saude.pt<sup>e</sup> lucilia.nunes@ess.ips.pt<sup>f</sup> ana.nunes.almeida@ics.ul.pt



079

### EFFECT OF THE ERGOMETER CYCLING ON THE REHABILITATION OF THE ELDERLY WITH HIP ARTHROPLASTY

Mariana Kátia Rampazo Lacativa<sup>a</sup>, Maria José D'Elboux<sup>b</sup>

*Faculty of Nursing. State University of Campinas. Campinas, SP, Brasil*

**Introduction:** The total hip arthroplasty (THA) is an increasingly common treatment for elderly patients with hip osteoarthritis. In postoperative of THA the effects of various rehabilitation strategies must be better understood when used in the elderly.

**Objective:** To evaluate the effect of the ergometer cycling associated conventional exercises on the functional results and health-related quality of life of the elderly with THA.

**Methods:** A pilot randomized controlled trial. Patients (n=15) with 60 years and older undergoing primary THA for hip osteoarthritis were randomized in two groups. The Group 1 (n=8) received of ergometer cycling associated conventional exercises and the Group 2 (n=7) received the conventional exercises only. The sessions were performed twice a week for eight weeks. Primary outcomes (before and after intervention) were: hip function evaluated by Harris Hip Score (HHS); balance, gait speed and strength lower limbs by the instrument Short Physical Performance Battery (SPPB). Secondary outcomes included: The Medical Outcomes Study 36-Item Short-Form Health Survey (SF-36) and Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC).

**Results:** Both groups improved after the interventions. However, Group 1 had significantly better scores than Group 2 for HHS: function item; SPPB: balance and gait speed; and WOMAC: physical activity (P<0.05). There were no significant differences between the groups for pain, strength lower limbs and stiffness and in the SF-36.

**Conclusions:** This pilot study showed that the ergometer cycling associated conventional exercises program may be effective in recovery of the function, balance and gait speed of the elderly after THA (Trial Registration: NCT01622465).

**Descriptors:** Hip replacement. Arthroplasty. Aged. Exercise therapy. Rehabilitation.

080

### DENVER-II: PORTUGUESE NORMATIVE PROFILE

Ana Paula Martins<sup>a</sup>, Olinda Roldão<sup>b</sup>, Paula Correia<sup>c</sup>

*Escola Superior de Saúde Egas Moniz. Almada, Portugal*

**Introduction:** The lack of standardized tests and validate tools hampers qualified health professionals to perform early diagnosis and monitoring of child development. One of the oldest and best known developmental screening tests was recently restandardized and revised as the Denver-II however it hasn't been validated for the Portuguese child.

**Objective:** Translate and culturally adapt to Portuguese European the original version of the questionnaire screening of child development prescreening Denver-II and identify the profile of child development (language, personal-social, fine and gross motor skills) in order to validate the normative values in the questionnaire for the Portuguese population. Intended to also check if there are significant differences between genders in each area.

**Methods:** The study used a sample of 867 Portuguese children, without any type of pathology diagnosed, aged 2 weeks to 6 years. Logistic regression analysis established the 25th, 50th, 75th, and 90th percentile passing age for achieving the test tasks. The study protocol was based on Denver II (latest version). Modifications were introduced to improve on the sensitivity of the test and to make the test more suited to Portuguese culture.

**Results:** According to the results obtained, we describe the development profile and age in months and noted that there were relatively smaller differences among the sub-groups studied (male and females).

**Conclusions:** The results from the Denver II questionnaire adapted for the Portuguese population were substantially different than those of the original questionnaire in the U.S. population, so its adaptation and validation is justified, and necessary.

**Descriptors:** Denver-II. Culturally adapt. Validation. Portuguese children.

<sup>a</sup> marianarampazo@yahoo.com.br

<sup>b</sup> mariadio@uol.com.br

<sup>a</sup> anapmartins@sapo.pt

<sup>b</sup> olinda\_roldao@hotmail.com

<sup>c</sup> paulacgcorreia@sapo.pt

081

**ANALYSIS OF NORMAL AND PATHOLOGICAL VOICES FOR WOMEN DYSPHONIC**Aldora Quintal<sup>I,II,a</sup>, Paula Correia<sup>I,II,III,b</sup>, Catarina Figueiredo<sup>I,c</sup>, Ana Paula Martins<sup>IV,c</sup><sup>I</sup>*Escola Superior de Saúde Egas Moniz. Almada, Portugal*<sup>II</sup>*Serviço de Otorrinolaringologia. Hospital Garcia de Orta. Almada, Portugal*<sup>III</sup>*Grupo de Investigação em Voz. Instituto Superior de Ciências da Saúde. Universidade Católica Portuguesa. Lisboa, Portugal*<sup>IV</sup>*Serviço de Medicina Física e de Reabilitação. Hospital Garcia de Orta, Almada, Portugal*

**Introduction:** The perception of voice arises from cognitive ability to create and represent images from what we hear, and units of meaning conferred. A deviation of voice quality in this area is of particular importance in the communicative skills which compromises the quality of life. We consider the

**Objective:** to compare the degree of pleasantness of women with and without dysphonia for the different types of normal and pathological voices and degrees of severity.

**Methods:** Comparative study of crossover design, with 162 women with and without dysphonia, over the age of 18 years without neurological, hearing and visual disturbances severe. Used a sociodemographic questionnaire and a visual analogue scale (VAS) to measure the perception of pleasantness of voice quality, the different voice types and degrees of severity from a corpus analysis of twenty samples of female and male voices, two normal and eighteen pathological validated in focus groups. We use a descriptive and inferential statistical analysis (SPSS. 19) with a significance level of 0.05.

**Results:** the female and male voices rough aspirate were considered the nicest and female and male voices sucked blown less pleasant and the greater the degree of severity, the lower the degree of pleasantness. The perception of the pleasantness in women with and without dysphonia shows lack of statistical significance.

**Conclusions:** The less voice pleasant is, greater social impact has, and this is relevant to our clinical practice.

**Descriptors:** Voice. Pleasantness. Women with. Without dysphonia.

<sup>a</sup>aldoraquintal64@gmail.com<sup>b</sup>paulacgcorreia@sapo.pt<sup>c</sup>anacatarinafigueiredo@hotmail.com<sup>d</sup>anapmartins@sapo.pt

082

**EATING HABITS OF CHILDREN IN SCHOOL AGE**Sofia Caires<sup>I,a</sup>, Cláudia Lucas<sup>I,b</sup>, Patrícia Quintal<sup>I,c</sup>, Fanne Rodrigues<sup>I,d</sup>, Joana Vieira<sup>I,e</sup>, Eva Sousa<sup>I,II,f</sup>, Rita Abreu-Figueiredo<sup>I,III,g</sup><sup>I</sup>*Escola Superior de Enfermagem S. José de Cluny. Funchal, Portugal*<sup>II</sup>*Instituto de Ciências Biomédicas Abel Salazar. Porto, Portugal*<sup>III</sup>*Instituto de Ciências da Saúde. Universidade Católica Portuguesa. Lisboa, Portugal*

**Introduction:** Eating habits are acquired in the first years of life, and the family assumes a primordial role in it. The children's awareness about healthy eating habits is important for a healthy development.

**Objective:** To understand the eating habits of a group of children in school age.

**Methods:** This is a transversal, quantitative, exploratory and descriptive study. A non-probabilistic and accidental sample was used, formed by 45 children in school age. The data gathering was done in December 2013, using a questionnaire built by the researchers, which included characterization questions and 10 questions related with eating habits. To each question, the expected minimum score varied between 0 (worst eating habit) and 2 (best eating habit).

**Results:** All the children are male, with ages ranging between 4 and 12 years old, and with an average age of 8 years old. The most scored item was the consumption of dairy products (median of 2), and the least scored items were the consumption of greens, fruit and vegetables, all with a median of 1. We observed that 51,1% of the children do, usually, five daily meals and 22,2% do six daily meals.

**Conclusions:** This group of children needs to increase the consumption of greens, vegetables and fruit, and needs a health promotion programme in this area.

**Descriptors:** Children; School age; Eating Habits.

<sup>a</sup>sofia\_caires@hotmail.com<sup>b</sup>claudiaplucas@hotmail.com<sup>c</sup>patricia\_jq\_@hotmail.com<sup>d</sup>fannerodrigues@hotmail.com<sup>e</sup>joana.vieira92@hotmail.com<sup>f</sup>sousaeva@esesjcluny.pt<sup>g</sup>ritasaf40@gmail.com

083

### INTERVENTION PROGRAM IN CHILDREN AND ADOLESCENTS TO PROMOTE PHYSICAL FITNESS, PHYSICAL ACTIVITY AND NUTRITIONAL KNOWLEDGE\*

José Ribeiro<sup>1,a</sup>, Vera Ferro-Lebres<sup>1,II,b</sup>, Luísa Aires<sup>1,III,c</sup>, Pedro Moreira<sup>1,IV,d</sup>, Nuno Guimarães<sup>1,e</sup>, Raquel Esteves<sup>1,IV,f</sup>, Gustavo Silva<sup>1,g</sup>

<sup>I</sup>Centro de Investigação em Actividade Física, Saúde e Lazer. Faculdade de Desporto. Universidade do Porto. Porto, Portugal

<sup>II</sup>Departamento de Tecnologias de Diagnóstico Terapêutica. Escola Superior de Saúde. Instituto Politécnico de Bragança. Bragança, Portugal

<sup>III</sup>Instituto Universitário da Maia. Maia, Portugal

<sup>IV</sup>Faculdade de Ciências da Nutrição e Alimentação. Universidade do Porto. Porto, Portugal

**Introduction:** In young people, reduced values of cardio-respiratory fitness (CRF) align themselves with the clustering of cardiovascular risk factors (CVRF). The relationships between volumes, physical activity (PA) intensities and CRF levels on the prevalence and clustering of CVRF have not yet been completely clarified. Assuming that inadequate levels of PA and suitable diets would influence the CRF, the body fat and, therefore, the metabolic profile, it seems prudent to intervene on sedentary behaviors and unhealthy habits to improve cardiovascular health from an early age. Studies involving together the two major determinants of health in these ages: food and exercise are fundamental to the establishment of effective and reasoned health policies.

**Objective:** To assess nutritional knowledge and dietary habits, and PA in a cohort of adolescents before and after an intervention program (IP) of nutritional food education and PA.

**Methods:** PA will be measured by accelerometers and food knowledge through questionnaire (Nutritional Knowledge Questionnaire - NKQ). The IP will be an experimental study based at school and on the internet for promoting healthy behaviors related to PA and healthy nutritional choices, supported by theories of behavioral change. Duration - 9 months involving school and parents community in curricular and extracurricular activities.

**Results:** (1) validation of NKQ (2) explore the associations between CRF, PA and food knowledge; and (3) evaluating the effects of an IP based at school and on the Internet (website), involving the promotion of PA and healthy nutrition behaviors.

**Descriptors:** physical activity; nutrition knowledge; intervention program; children; health promotion.

\*PTDC/DTP-DES/1328/2012 (FCOMP-01-0124-FE- DER-028619); and Research Centre (CIAFEL) supported by: PEst-OE/SAU/UI0617/2011

<sup>a</sup> jribeiro@fade.up.pt

<sup>b</sup> vferrolebres@gmail.com

<sup>c</sup> luisa.aires@gmail.com

<sup>d</sup> pedromoreira@fcna.up.pt

<sup>e</sup> nguimaraes@fade.up.pt

<sup>f</sup> resteves@fade.up.pt

<sup>g</sup> gugonsilva@gmail.com

084

### COMMUNITY-DWELLING ELDERLY: INEFFECTIVE MANAGEMENT OF DRUG REGIMEN AND RISK OF FALL

Tânia Costa<sup>a</sup>, Catarina Pinto<sup>b</sup>, Diogo Afonso<sup>c</sup>, Armando Almeida<sup>d</sup>, Rosa Silva<sup>e</sup>, Patrícia Coelho<sup>f</sup>, Paulo Alves<sup>g</sup>

*Institute of Health Sciences Catholic University of Portugal. Porto, Portugal*

**Introduction:** Drugs intake is common in the elderly, but pharmacodynamics/pharmacokinetic changes associated with multiple pathology amplifys the drug interactions and adverted effects.

**Objective:** Evaluate the management of drug regimen for the elderly residing at home (N=37), relating it to falls.

**Methods:** Data collection was carried out by semi-structured interview (using instruments validated for the Portuguese reality) followed by descriptive/infereential analysis. Insured informed consent.

**Results:** Average of drug ingestion was 6 drugs/day (min:2 /max:6) and 7 pills/day (min:2/max:15). A total of 9 prescribers were described: family physician (N=32), the hospital physician (N=26), the pharmacist (N = 6) and the elderly (N=6). The reasons why we found that 25 elderly do not meet treatment as prescribed, was due to forgetfulness (68%) and switching medications (23%). The management of medication regimen presents statistically significant differences compared to moderate/high risk of falling ( $p=0.030$ ), dependence in activities of daily living ( $p=0.008$ ), geriatric depression ( $p=0.022$ ), number of pills/day ( $p=0.006$ ) and number of different drugs ( $p=0.009$ ). The risk of falling, in other way, is related to cognitive impairment ( $p=0.032$ ), dependence in instrumental activities of daily living ( $p=0.005$ ) and number of pills/day ( $p=0.043$ ).

**Conclusions:** Data seem indicate that there is a proportional relationship between fall risk and ineffective management of medication regimen. Considering the prevalence of falls in the elderly and it's repercussions, highlights the need to implement nursing care of proximity/partnership, but also, integrals and integrated in both diagnoses, especially in the context of primary health care.

**Descriptors:** "Community-dwelling Elderly"; "Management of Drug Regimen"; "Accidental Falls".

<sup>a</sup> tcosta@porto.ucp.pt

<sup>b</sup> catarina\_p\_pinto@sapo.pt

<sup>c</sup> diogoo\_afonso@hotmail.com

<sup>d</sup> aalmeida@porto.ucp.pt

<sup>e</sup> rcgsilva@porto.ucp.pt

<sup>f</sup> sfcoelho@porto.ucp.pt

<sup>g</sup> pjalves@porto.ucp.pt

085

**OBJECT NAMING: IS IT A MATTER OF AGE?**

Olinda Roldão<sup>a</sup>, Mónica Carrilho<sup>b</sup>, Filipa Gonçalves<sup>c</sup>,  
Catarina Ferreira<sup>d</sup>

*Escola Superior de Saúde Egas Moniz. Almada, Portugal*

**Introduction:** The ability to assign a name to an image is a process that involves complex cognitive abilities. This ability is one of the earliest achievements in language development in children and their loss is often associated with normal aging.

**Objective:** The purpose of this study is to describe the capacity of naming objects in healthy elderly adults. Verify that this significantly depends on the variables age group, educational level and sex.

**Methods:** A cross-sectional study of comparative methodology based descriptive whose sample consisted of 141 healthy individuals aged over 70 years divided into two age groups ([70-79 years] and [80-89 years]). The instrument used was the Boston naming test. For the data treatment we used a descriptive statistics of central tendency and the t-student test for comparison of independent samples

**Results:** The total amount of correct answers in the Boston test was on average  $35.27 \pm 9.535$ , however this capability was higher in more younger individuals (respectively,  $37.95 \pm 9.285$  and  $32.09 \pm 8.960$ ), though without significant evidence. The comparative results have significant differences to the variable schooling (IC95% -41.47 35.36 for the literate and the illiterate 28.00 to -33.65).

**Conclusions:** With this study we concluded that the ability of naming objects decreases with age and increases with level of schooling education. The variable sex shows no statistically significant evidence.

**Descriptors:** naming objects; elderly; Boston test; education level.

<sup>a</sup> olinda\_roldao@hotmail.com

<sup>b</sup> monica\_s\_m\_morganheira@hotmail.com

<sup>c</sup> filipangoncalves@hotmail.com

<sup>d</sup> catarinaferre@gmail.com

086

**ADOLESCENT SEXUALITY: PERSPECTIVE OF TEACHERS**

André Ramos<sup>a</sup>, David Ribeiro<sup>b</sup>, Diogo Costa Alexandre<sup>c</sup>,  
Susana Francisco<sup>d</sup>

*Escola Superior de Saúde de Leiria. Instituto Politécnico de Leiria. Leiria, Portugal*

**Introduction:** The questions related to the sexuality education in adolescence are social concerns where the teachers assume an important role regarding the effectiveness of actions in this area.

**Methods:** The present descriptive correlational study had, as main objectives know the type of training, strategies adopted in sexuality education and training needs that teachers have in ES; assess the degree of knowledge, self-efficacy, importance and comfort in ES in schools; determine the relationship between knowledge, self-efficacy and comfort and the importance depending on teachers who did not attend training or ES. This monograph encompassed the Secondary Education of Group of Schools of Porto de Mós teachers, of whom 35 participated, and filled out a questionnaire consisting of socio-demographic data, opinion regarding the issues surrounding sexual education in schools, scale of knowledge relating to legislation and ministerial guidelines of ES, comfort scale on issues of sexuality, importance scale and self-efficacy scale.

**Results:** In our study, from 35 respondent teachers, 16 already had attended training in ES. This variable proved to be quite significant when compared with untrained teachers since teacher training proved to be related with more comfort, self-efficacy and importance assigned to ES. We found that the average knowledge of the ES teachers was 10.19 for a total of 15 questions.

**Conclusions:** Teachers refer relatively little comfort to address the "Anal Sex". Finally, 81.8% of teachers surveyed consider effective actions of ES in schools, but only 11 of the 35 teachers promote strategies that promote ES school level focusing on expository methods.

**Descriptors:** Adolescence; Education; Perspectives; Sexuality; Teachers.

<sup>a</sup> andreramos1991@hotmail.com

<sup>b</sup> davidribeiro7@gmail.com

<sup>c</sup> digogufive@hotmail.com

<sup>d</sup> susanafrancisco1991@hotmail.com

087

**MEDICATION ADHERENCE IN ELDERLY PEOPLE: LITERATURE REVIEW**Ana Raquel Lobão<sup>1,II,a</sup>, Natacha Dinis<sup>1,III,b</sup>, Catarina Lobão<sup>1,c</sup>, Ricardo Baltazar<sup>1,d</sup><sup>1</sup>*Escola Superior de Saúde de Leiria. Instituto Politécnico de Leiria. Leiria, Portugal*<sup>II</sup>*Bluepharma. Coimbra, Portugal*<sup>III</sup>*Farmácia Dulce Caçador. Leiria, Portugal***Introduction:** Elderly patients are an important group of consumption patients and, for this reason, medication non-adherence is a relevant problem among them.**Objective:** The purpose of this paper was to answer the question “What influences medication adherence in elderly people?”**Methods:** This literature review was performed according to the methodology proposed by the Cochrane Centre. The PubMed database was searched for articles published in the last five years, with key-words “adherence”, “medication” and “elderly”. Format PICOD was used to establish the inclusion and exclusion criteria.**Results:** Five research articles compose the corpus of this review. The relationship between patients and health professionals is essential to help the patient understand the issues related with medication and treatment to clarify any doubts. The variables most associated with medication adherence were self-efficacy, health literacy, number of medication types and chronic diseases. Cost-related medication nonadherence emerges as an important problem, and, is associated, among other factors, with perceptions of social capital.**Conclusions:** The interventions of health professionals, with more dialoge with elderly patient about their health and respective treatment, is very important to improve the self-efficacy and medication adherence.**Descriptors:** adherence, medication, elderly, health professional.

088

**DETERMINANTS OF SELF-MEDICATION IN ELDERLY PEOPLE: SYSTEMATIC REVIEW**Natacha Dinis<sup>1,III,a</sup>, Ana Raquel Lobão<sup>1,II,b</sup>, Catarina Lobão<sup>1,c</sup>, Ricardo Baltazar<sup>1,d</sup><sup>1</sup>*Escola Superior de Saúde de Leiria, Instituto Politécnico de Leiria. Leiria, Portugal*<sup>II</sup>*Bluepharma. Coimbra, Portugal*<sup>III</sup>*Farmácia Dulce Caçador. Leiria, Portugal***Introduction:** Self-medication has grown exponentially in recent years and despite having advantages for the majority of the population, it may become problematic in the elderly.**Objective:** The purpose of this paper was to answer the question “What are the determinants of self-medication in the elderly?”**Methods:** This study was performed according to the methodology proposed by the Cochrane Centre and included pre-defined inclusion and exclusion criteria established by PICODformat. The PubMed database and search engine Google Scholar were searched for articles published in last five years, with key-words “self-medication”, and “elderly”.**Results:** Four international research articles compose the corpus of this review. Increasing age and the presence of chronic diseases seems to be inversely proportional to self-medication, with a higher incidence in female individuals. Older people who live in communities where health professionals have an active presence have a lower self-medication index. The family budget can influence self-medication both positively and negatively, as the health service that is available to the elderly is the main influence. The main reasons given by the elderly to resort to self-medication: the difficulty in having a medical consultation; the fact that those specific drugs are easily accessible; previous positive experiences with the same medicine or, finally, because they minimized the problem. The most commonly used drugs are analgesics and antipyretics.**Conclusions:** We conclude that an intervention closer to the elderly by qualified health professionals is a major determinant to decrease the risk of excessive self-medication.**Descriptors:** Self-medication, elderly, health professionals<sup>a</sup> araquelobao@gmail.com<sup>b</sup> natacha.p.dinis@gmail.com<sup>c</sup> catarina.lobao@ipleiria.pt<sup>d</sup> ricardo.monteiro@ipleiria.pt<sup>a</sup> natacha.p.dinis@gmail.com<sup>b</sup> araquelobao@gmail.com<sup>c</sup> catarina.lobao@ipleiria.pt<sup>d</sup> ricardo.monteiro@ipleiria.pt

089

**(RE)THINK HEALTHCARE TO ELDERLY FROM THEIR PERCEPTIONS**

Carminda Morais<sup>a</sup>, Elsa Leiras<sup>b</sup>, Débora Oliveira<sup>c</sup>, Raquel Ferreira<sup>d</sup>, Filipa Costa<sup>e</sup>, Ricardo Gomes<sup>f</sup>

*Escola Superior de Saúde do Instituto Politécnico de Viana do Castelo. Viana do Castelo, Portugal*

**Introduction:** Today's society is faced the need for a new approach to human aging, in which the focus change from the fatality of the process to a new perspective of gains in years of healthy life, with independence, functionality, autonomy and active participation in different areas of public and private life. Moreover, this process is marked by objective changes in health status, but also by strong subjectivities that urge to know in order to maximize health intervention from the perspective of the centrality of the citizen and of the promotion of the determinants of active aging.

**Objective:** This study aims to characterize the health profile of the elderly and assess the burden of the caregiver, in a rural community of northern Portugal.

**Methods:** This was a cross-sectional, descriptive-correlational type with the application of Easy-Care Portugal 2010 and "Zarit Burden Interview" Scale to 243 seniors.

**Results:** It was found that 25.4% of subjects had cognitive impairment and 92.3% of informal caregivers had moderate to severe burden. Regarding the elderly, there is still no statistically significant relationship between the risk of depression, health perception and sex, as well as between polypharmacy and the risk of failure of care. The same study also showed that in addition to the risk of falls being related to the dependence, it is greater in women.

**Conclusions:** The knowledge produced is fundamental to (re)consider intervention projects directed to territorial specificities, as well as for the promotion of the determinants of active aging and support to informal caregivers.

**Descriptors:** aging; informal caregivers; determinants of active aging.

<sup>a</sup> carmindamorais@ess.ipv.pt

<sup>b</sup> elsavaleleiras@gmail.com

<sup>c</sup> debieoliveira@hotmail.com

<sup>d</sup> rssferreira@sapo.pt

<sup>e</sup> lipac@sapo.pt

<sup>f</sup> jrtgomes@gmail.com

090

**PREDICTORS OF POSTOPERATIVE OUTCOMES AFTER SURGERY FOR LUNG CANCER**

José María Tena<sup>1,a</sup>, Isabel Alejandra Becerra<sup>1,b</sup>, Patricia Rodriguez<sup>11,c</sup>, María Elizabeth Agudelo<sup>1,d</sup>, Ana Beatriz Rodriguez<sup>11,e</sup>, Francisco Luis Perez<sup>11,f</sup>, Roberto Bajo<sup>1,g</sup>

<sup>1</sup>*Department of Anesthesiology. University Hospital Complex of Badajoz. Badajoz, Espana*

<sup>11</sup>*Faculty of Science. University of Extremadura. Badajoz, Espana*

<sup>111</sup>*University Hospital Complex of Badajoz. Badajoz, Espana*

**Introduction:** Complications in hospitalized patients causes a greater need for health care resources that result in increased health care cost.

**Objective:** To identify those characteristics related with the development of respiratory complications in patients undergoing elective surgery.

**Methods:** An analytical, observational, retrospective, cohort study was carried out in patients undergoing lung resection surgery. 50 participants were included in our assay. Patients were subjected to the surgical procedure being performed close monitoring of respiratory complications from surgery until hospital discharge. The following variables were considered: age, gender, creatine, diabetes, dyslipidemia, hypertension, COPD, smoking, ASA Physical Status Classification, lesion site, kind of resection, anesthesia type, crystalloid and colloid volumes, one-lung ventilation tolerance, hospitalization time, readmission in Intensive Care Unit (ICU), lung complications, hospital readmission and mortality. With respect to statistics, a lineal regression/Spearman- $\rho$  Test were performed for quantitative variables; Student-T Test/Mann-Whitney U Test were used for categorical variables.

**Results:** Lung complications were found in 28% patients. The main complications were respiratory failure (12%), atelectasias on chest X ray (10%), 2% of them required bronchoscopy; pleural effusion (6%); pneumonia (4%) and acute respiratory distress syndrome (2%). Age ( $p < 0.05$ ), hospitalization time ( $p < 0.001$ ), diabetes ( $p < 0.05$ ) and ICU readmission ( $p < 0.001$ ) were related to lung complications. 22% of these patients needed hospital readmission and 2% died.

**Conclusions:** An adequate preoperative evaluation has an essential role to identify those patients who are able to have a postoperative increased risk. Preoperative actions and a reduced hospitalization time may decrease postoperative complications and related costs for healthy services.

**Descriptors:** Lung Cancer; Predictors; Complications.

<sup>a</sup> tenaguerrero@hotmail.com

<sup>b</sup> isbecay@gmail.com

<sup>c</sup> patriciarg1985@gmail.com

<sup>d</sup> meagudelom@gmail.com

<sup>e</sup> moratino@unex.es

<sup>f</sup> franciscoluisper@gmail.com

<sup>g</sup> zoorober@hotmail.com

091

**SELF-CARE ADHERENCE IN TYPE 2 DIABETES**Tânia Nascimento<sup>1,a</sup>, Eurico Gomes<sup>1,b</sup>, María-Ángeles Arche<sup>11,c</sup>, Rocío de La Puerta Vázquez<sup>11,d</sup><sup>1</sup>*Centro de Estudos e Desenvolvimento em Saúde. Escola Superior de Saúde. Universidade do Algarve. Faro, Portugal*<sup>11</sup>*Associação para o Estudo da Diabetes Mellitus e Apoio ao Diabético do Algarve. Faro, Portugal*<sup>111</sup>*Departamento de Farmacología. Facultad de Farmacia. Universidad de Sevilla. Sevilla, España***Introduction:** Diabetes mellitus type 2 is a disease that affects a large number of people in Portugal (12.9%). The treatment requires several daily activities performed by patients (self-care).**Objective:** This study aimed to perform the assessment of adherence to self-care in type 2 diabetes patients.**Methods:** A descriptive cross-sectional study (43 patients) was performed through the application of a validated questionnaire to assess self-care adherence in diabetes. The results were expressed in days per week that patients performed self-care activities.**Results:** The mean age of patients was 62.02±12.0 years. About 58.1% of patients didn't smoke, 25.6% reported having smoked and only 16.3% were smokers, and of these the majority (71.4%) consumed between 0-10 cigarettes/day. The average level of diet adherence was 4.49±2.00 days/week for general diet and 2.60±0.73 days/week for specific diet, that represents a low adherence level, once that this assessment is related to the consumption (or not) of foods rich in carbohydrates and/or sugar, such as bread or rice, consumption of red meat or alcohol. The physical exercise adherence assessment showed an average level of 2.42±2.28 days/week. Regarding the self-monitoring blood glucose (SMBG) adherence the average level was high (6.44±1.14 days/week), as well as the level of feet care adherence (6.02±1.67 days/week).**Conclusions:** We conclude that self-care adherence in diabetes type 2 is higher for SMBG and feet care, and lower for diet and exercise, possibly because these activities/attitudes require further efforts in changing behaviors of diabetic patients.**Descriptors:** adherence; self-care; type 2 diabetes.

092

**SUPPORTING OLDER PEOPLE'S INFORMAL CAREGIVERS AT HOME THROUGH INCARE PROGRAMME: THE STUDY PROTOCOL**Odete Araújo<sup>1,a</sup>, José Cabrita<sup>11,b</sup>, Isabel Lage<sup>1,c</sup><sup>1</sup>*School of Nursing. University of Minho. Braga, Portugal*<sup>11</sup>*Faculty of Pharmacy. University of Lisbon. Lisboa, Portugal***Introduction:** More than 42% of older people (+65) have a stroke and almost all of them require help to self-care at home. Informal caregivers have reported several needs and dissatisfaction with technical and emotional support delivered by a community health team. Furthermore, empowering informal caregivers who take care of older stroke survivors is an important challenge, preventing negative outcomes in themselves, such as burden or anxiety, as well as depression, loss of physical function or hospitalization in older people. Evidence has also shown that telehealth interventions articulated with home visits may be an effective way to achieve health gains.**Objective:** This pilot study aims at describing a protocol of an intervention based on training and telephone support delivered to informal caregivers who take care of older people after a stroke at home.**Methods:** A single blinded randomized trial will include 156 eligible informal caregivers. The intervention will be delivered by a community nursing team one week, one and three months after a hospital discharge. In addition, telephone support, counseling caregivers on the 3rd, 6th, 8th and 10th week post discharge will be provided.**Results/Conclusions:** Data collection started in February and will be concluded in October 2014. InCARE will be the first pilot study ever undertaken in Portugal. It will highlight new ways to support caregivers who take care of older people post-stroke. If successful, this study will be translational and it will also allow disseminate results all over the country and be implemented as a best practice.**Descriptors:** stroke survivors; elderly; informal caregivers; empowerment; pilot study.<sup>a</sup> tinascimento@ualg.pt<sup>b</sup> gomes.eurico@gmail.com<sup>c</sup> arche@us.es<sup>d</sup> puerta@us.es<sup>a</sup> odete.araujo@ese.uminho.pt<sup>b</sup> jcabrita@ff.ul.pt<sup>c</sup> ilage@ese.uminho.pt

093

### MEDICATION ADHERENCE AND CARDIOMETABOLIC CONTROL IN TYPE 2 DIABETES

Tânia Nascimento<sup>1,a</sup>, Margarida Santo<sup>1,b</sup>, Eurico Gomes<sup>1,c</sup>, María-Ángeles Arche<sup>1,d</sup>, Rocío de La Puerta Vázquez<sup>1,e</sup>

<sup>1</sup>*Centro de Estudos e Desenvolvimento em Saúde. Escola Superior de Saúde. Universidade do Algarve. Faro, Portugal*

<sup>2</sup>*Associação para o Estudo da Diabetes Mellitus e Apoio ao Diabético do Algarve. Faro, Portugal*

<sup>3</sup>*Departamento de Farmacología. Facultad de Farmacia. Universidad de Sevilla, Sevilla, España*

**Introduction:** Diabetes mellitus type 2 is a disease that affects 12.9% of individuals in Portugal and whose control is difficult to achieve. Non-adherence to diabetes treatment is probably one of the causes of uncontrolled diabetes.

**Objective:** The aim was to assess medication adherence in type 2 diabetic patients and its relation to the cardiometabolic control.

**Methods:** A descriptive cross-sectional study with 43 patients was performed through the application of a validated questionnaire and collection of cardiometabolic and anthropometric parameters.

**Results:** The mean age of patients was 62.02±12.0 years, with 60.5% male. The mean BMI was 28.40±4.07 kg/m<sup>2</sup> (pre-obese), and the mean waist circumference for men was 101.35±12.21 cm and 92.35±17.13 cm for women. The values of systolic blood pressure in most patients (90.7%) were uncontrolled, but 63% had values of diastolic blood pressure controlled. The mean value of total cholesterol was 196.98±41.15 mg/dL, about 72.1% had not a LDL cholesterol level controlled, but 60.5% had a HDL cholesterol level controlled. The metabolic syndrome was present in 67% of these patients. The mean of preprandial blood glucose was 164.23±74.088 mg/dL, with HbA1c mean value of 7.995±1.65%. About 74.4% of the patients had uncontrolled HbA1c. These patients were taking an average of 4.19±2.26 drugs, and the mean of medication adherence was 5.63±0.58 (“good adherence”) with 67.4% of patients with “completely adherence”. Medication adherence was not associated with cardiometabolic control (p>0.1).

**Conclusions:** It was possible to conclude that despite some cardiometabolic parameters are uncontrolled there may be other factors than medication adherence involved on the glycemic control of diabetic patients.

**Descriptors:** cardiometabolic control; medication adherence; type 2 diabetes.

<sup>a</sup> tinascimento@ualg.pt

<sup>b</sup> mfesanto@ualg.pt

<sup>c</sup> gomes.eurico@gmail.com

<sup>d</sup> arche@us.es

<sup>e</sup> puerta@us.es

094

### EVALUATION OF TRIHALOMETHANES AND ALUMINUM IN DRINKING WATER IN THE NORTHWEST OF PORTUGAL

Fátima Moreira<sup>1,a</sup>, Andreia Rodrigues<sup>1,b</sup>, Fabiana Silva<sup>1,c</sup>, Bruno Pires<sup>1,d</sup>, Andrea Afonso<sup>1,e</sup>, António Nogueira<sup>1,f</sup>

<sup>1</sup>*Department of Therapeutic and Diagnostic Technologies. Polytechnic Institute of Bragança. Bragança, Portugal*

<sup>2</sup>*Public Health Laboratory of Bragança. Bragança, Portugal*

<sup>3</sup>*Department of Veterinary Sciences. University of Trás-os-Montes and Alto Douro. Vila Real, Portugal*

**Introduction:** Safe water for human consumption is defined by the World Health Organization (WHO) as water that does not cause a significant hazard to human health during its consumption.

**Objective:** The aim of this study was to evaluate the levels of trihalomethanes (THM) and aluminum in the drinking water of the District of Bragança, in order to understand the importance of periodicity these analyzes and the risks to the health of the populations that have been supplied by this water.

**Methods:** The THM and aluminum in drinking waters, 233 and 230 samples respectively, were analyzed in Public Health Laboratory of Bragança, in northeast of Portugal between January 1996 and April 2005, according to the guidelines of European Directives of 1980 and 1998. The THM concentration was determined by gas-liquid chromatography and aluminum concentration was determined by atomic absorption spectroscopy.

**Results:** The THM were determined in 233 samples, of which only two showed a concentration greater than the Maximum Acceptable Value (MAV=150 µg/L), from reservoirs of the region of Moncorvo. This value represents a minority (0,9%), compared to the total number of analyzed samples. The determination of aluminum was performed in 230 samples, of which 11.3% exceeded the MAV=200 µg/L. The region of Mogadouro exhibited the major number of samples (n=10) with concentrations above the MAV.

**Conclusions:** Individuals that consumed this water with high levels of THM and aluminum in particular the individuals of the regions of Moncorvo and Mogadouro, may be associated with several potential health risks.

**Descriptors:** trihalomethanes; aluminum; drinking-water; chemical contaminants; District of Bragança.

<sup>a</sup> fatimamoreira\_17@sapo.pt

<sup>b</sup> andreia\_oops@hotmail.com

<sup>c</sup> bianasilva\_caixa@hotmail.com

<sup>d</sup> brunopires7@gmail.com

<sup>e</sup> andrea@ipb.pt

<sup>f</sup> ajmnogueira@ipb.pt



095

**NURSING INTERVENTIONS TO PREVENT FALLS IN OLDER PEOPLE: A SYSTEMATIC REVIEW**Isabel Lage<sup>a</sup>, Odete Araújo<sup>b</sup>, Simão Vilaça<sup>c</sup>*School of Nursing. University of Minho. Braga, Portugal*

**Introduction:** Falls are common and become a serious problem among older people who have the highest risk of falling, with 30% of people older than 65 and 50% of people older than 80 falling at least once a year. Several consequences can result as fractures, loss of independence and hasten death.

**Objective:** To synthesize the effectiveness of nursing interventions to prevent falls in older people ( $\geq 75$ ).

**Methods:** Systematic review of RCT's. We searched the SCOPUS database without date restriction. Inclusion and exclusion criteria were defined, the search expression used was: older people AND falls prevention AND nurs\* AND randomized controlled trials. Full manuscripts were obtained and screened independently by two reviewers using a screening form with clearly defined criteria.

**Results:** From twelve studies met the inclusion criteria. Four were related with exercise programs; four involved devices to prevent falls (hip protectors); two included health promotional sessions (multidisciplinary team); and two studies involved a software to evaluate the risk of falling.

**Conclusions:** Twelve interventions found in this study, nine had positive effect on preventing falls. Studies showed that physical exercise promotes strength, balance and can reduce the risk of falling and increase quality of life in older people. Devices designed to prevent falls could reduce the potential risk of falling. Also, an individualized intervention, empowering older people at home could reduce/prevent falls. These findings can be used by health professionals to play an important role in decreasing older adults' fear of falling and promote their mobility and quality of life.

**Descriptors:** Nursing interventions; falls; prevention; older people; systematic review.

096

**GUIDE TO PREVENTING FALLS FOR OLDER PEOPLE LIVING IN THE COMMUNITY**Isabel Lage<sup>a</sup>, Simão Vilaça<sup>b</sup>, Odete Araújo<sup>c</sup>*School of Nursing. University of Minho. Braga, Portugal*

**Introduction:** Worldwide high costs are spent with new cases of hospitalization and institutionalization caused by fractures in older people. Although there are several programs to prevent falls, clear guidelines are missing to identify the effectiveness of nursing interventions. Yet, more research is needed to synthesize knowledge, to develop, implement and evaluate interventions to prevent falls and other negative consequences.

**Objective:** The main goal of this research is to develop a guide of good practice for preventing falls in older people at home.

**Methods:** After a systematic review, the PPFalls team will develop a focus group who will work with experts in this field, such as nurses and other health professionals from community units and academic experts whose goal is a guide of good practice creation on falls prevention throughout 2014. This guide is also intended to: (1) define the key elements which make fall prevention programs effective; (2) alert older people, informal caregivers about the major intrinsic and extrinsic factors on risk of falling. This guide will become a tool to be used by decision makers and delivered in community-dwelling, especially in the region of Cávado, in Northern Portugal.

**Results and Conclusions:** It is expected that this guide may support older people and informal caregivers to improve falls prevention by emphasizing the individual potential of each older person. Health professionals, in general, and nurses, in particular, have an important role concerning falls prevention, especially those who work in the community, counseling and screening older people who have the highest risk of falling.

**Descriptors:** falls prevention; older people; guide; community-dwelling.

<sup>a</sup> ilage@ese.uminho.pt<sup>b</sup> odete.araujo@ese.uminho.pt<sup>c</sup> svilaca@ese.uminho.pt<sup>a</sup> ilage@ese.uminho.pt<sup>b</sup> svilaca@ese.uminho.pt<sup>c</sup> odete.araujo@ese.uminho.pt

097

### CONTAMINATION LEVELS THAT COMPROMISE THE HYGIENIC CONDITION IN THE HANDLING OF FOOD

Isabel Sousa<sup>1,a</sup>, Marília Gonçalves<sup>1,v,b</sup>, Rita Portelinha<sup>1,c</sup>, Tânia Ferreira<sup>1,iv,d</sup>, Andrea Afonso<sup>1,ii,e</sup>, António Nogueira<sup>1,iii,f</sup>, Bruno Pires<sup>1,ii,g</sup>

<sup>1</sup>Department of Therapeutic and Diagnostic Technologies. Polytechnic Institute of Bragança. Bragança, Portugal

<sup>ii</sup>Public Health Laboratory of Bragança. Bragança, Portugal

<sup>iii</sup>Department of Veterinary Sciences. University of Trás-os-Montes and Alto Douro. Vila Real, Portugal

<sup>iv</sup>Department of Physics. School of Sciences. University of Minho. Braga, Portugal

<sup>v</sup>Department of Biology. School of Sciences. University of Minho. Braga, Portugal

**Introduction:** Microbiological contamination of food is a major public health problem, affecting millions of people worldwide. Most of the contamination is associated with bad practices in the handling and processing of food, due to poor hygiene of food worker's hands or utensils and surfaces used in this manipulation.

**Objective:** The aim of this study was evaluate the hygienic condition of food handling in the district of Bragança, determining microbial contamination of utensils and worker's hands.

**Methods:** This study evaluates the hygienic condition in 421 samples of utensils and 421 samples of worker's hands, during the period 2009-2010.

**Results:** With respect to the worker's hands, 39% of cases showed contamination. In 57% of these samples total coliforms were identified, in 26% of them fecal coliforms, Staphylococcus aureus in 10% and finally 7% with Escherichia coli. The utensils contamination was confirmed in 30% of samples with results "not satisfactory" and 4% had results "bad". These contaminations stand out 60% of the samples with the presence of total germs, 28% with total coliforms, fecal coliforms with 9% and even 3% with Escherichia coli. It was also found that only 37% of the samples developed positively.

**Conclusions:** It was concluded that there is a better cleaning of utensils manipulation than the worker's hands, however the trend to improve the hygienic condition is most pronounced in the hands of these workers. The implementation of a program of rules for good hygiene practices will reduce these contaminants to lower levels.

**Descriptors:** food handling; food contamination; control; prevention, microbiological.

<sup>a</sup> isagsousa@hotmail.com

<sup>b</sup> mari22lia@hotmail.com

<sup>c</sup> rita\_mota\_portelinha@hotmail.com

<sup>d</sup> tania\_ferreira\_89@hotmail.com

<sup>e</sup> andrea@ipb.pt

<sup>f</sup> ajmnoqueira@ipb.pt

<sup>g</sup> brunopires7@gmail.com

098

### RESIDUAL NEUROMUSCULAR BLOCKADE IN PATIENTS UNDERGOING SURGERY. ALTERATIONS OF MUSCLE STRENGTH AND POSTOPERATIVE RESPIRATORY MORBIDITY

Tena JM<sup>1,a</sup>, Bravo R<sup>1,b</sup>, Toro F<sup>1,c</sup>, Rodríguez P<sup>1,ii,d</sup>, Pérez FL<sup>1,ii,e</sup>, Becerra IA<sup>1,f</sup>, Bajo R<sup>1,g</sup>

<sup>1</sup>Department of Anesthesiology. University Hospital Complex of Badajoz. Badajoz, Espana

<sup>ii</sup>Faculty of Science. University of Extremadura. Badajoz, Espana

<sup>iii</sup>University Hospital Complex of Badajoz. Badajoz, Espana

**Introduction:** Muscle relaxants have several aims in Anesthesia like making intubation easier or adapting patients to mechanical ventilation. Non-complete recoveries of neuromuscular functions are associated to post-operative morbidities.

**Objectives:** To identify the incidence of residual neuromuscular block (rNMB) and postoperative alterations.

**Methods:** A prospective study was carried out, in which each patient was its own control. 47 patients undergoing surgery in "Ambulatory Major Surgery Area" at our hospital were included. The primary endpoint was the presence of rNMB after patient extubation, defined as train-of-four-ratio < 0,9 using acceleromyography. Muscle strength was measured with "Collin dynamometer"®. Following variables were considered: body weight, surgery, relaxant doses, O2 saturation before/after surgery, previous strength, block reversion, strength at Post Anesthetic Care Unit (PACU) arriving, O2 saturation 30 minutes after PACU arriving, and high-flow oxygen therapy needed. Fisher Test was performed for categorical variables and Student-t Test/Mann-Whitney U Test were used for continuous variables.

**Results:** The incidence of rNMB in our sample was 51.1%. Patients with rNMB after extubation showed an strength decrease when they arrived to PACU (4,54N vs. 20,38N; p < 0.001). These patients needed more high flow therapy to have an appropriate O2 saturation (30,23% vs. 18.60%, p > 0.05). Moreover, differences neither in muscular strength or O2 saturation 30 minutes after PACU arriving were reported (p > 0.05).

**Conclusions:** rNMB is common at our hospital. Patients with rNMB had low muscular strength; they needed an O2 supplement to have an adequate O2 saturation. Neuromuscular function monitoring is essential to identify these cases and to have an appropriate use of neuromuscular blockers.

**Descriptors:** Neuromuscular blockade; TOF ratio; Acceleromyography; Surgery.

<sup>a</sup> tenaguerrero@hotmail.com

<sup>b</sup> rbravo@unex.es

<sup>c</sup> pacotoro1980@hotmail.com

<sup>d</sup> patriciarg1985@gmail.com

<sup>e</sup> franciscolisper@gmail.com

<sup>f</sup> isbecay@gmail.com

<sup>g</sup> zoorober@hotmail.com

099

### ECPICID-AVC: AN INSTRUMENT FOR MEASURING SELF-CARE IN OLDER PEOPLE AFTER A STROKE

Odete Araújo<sup>1,a</sup>, José Cabrita<sup>1,b</sup>, Isabel Lage<sup>1,c</sup><sup>1</sup>School of Nursing. University of Minho. Braga, Portugal<sup>2</sup>Faculty of Pharmacy. University of Lisbon. Lisboa, Portugal

**Introduction:** Evidence has shown that informal caregivers complain about their lack of knowledge about causes and effects of stroke together with a lack of practical skills. Caregivers often ask for more information and techniques to improve their skills to take care of older people who suffered a stroke.

**Objective:** To develop and validate an instrument that measures the capacity of informal caregivers to promote self-care in older people who had stroke (ECPICID-AVC).

**Methods:** The development of ECPICID-AVC was carried out based on Nursing Intervention Classification (NIC) taxonomy. A focus group of eleven experts, composed of five rehabilitation nurses, four general nurses one statistician and an academic expert in gerontological nursing was created. Firstly, the focus group discussed and confirmed the structure ECPICID-AVC. After experts decision the instrument had 35 items with six different domains, such as eating/drinking, bathing, oral hygiene, transferring, positioning, (un)dressing, which were tested and retested in 186 informal caregivers who care for older dependent people after a stroke, living in community of Northern Portugal.

**Results:** Factor analysis determined the validity of the instrument; the reliability was assessed using measures of internal consistency and temporal stability (test-retest). It was considered that the ECPICID had initial content validity and high internal consistency reliability (Cronbach's  $\alpha=.77-.90$ ).

**Conclusions:** This is the first instrument existing in Portugal to assess the capacity of informal caregivers to self-care. The psychometric properties provide guarantees for its implementation/evaluation of structured nursing programs aimed at training caregivers and obtaining gains in health.

**Descriptors:** instrument; informal caregiver; empowerment; self-care; older people.

100

### BIBLIOGRAPHIC STUDY GROUPS AND WORKSHOPS ON MENTAL HEALTH PRAXIS OF PSYCHOLOGY

Maria Suely Alves Costa<sup>a</sup>, Maria Emanoelle Freire Pessoa<sup>b</sup>

Universidade Federal do Ceará. Fortaleza, CE, Brasil

**Introduction:** The interest in the topic working group is based on the interaction with the model of work as a professional in the mental health field. The study aims to instigate psychologists to discuss, reflect and (re) think about their group practices in mental health in order to make progress in the task of transforming social reality.

**Objective:** Conduct a literature study on the publications produced in the field of psychology in the context of mental health involving their practical experience with the group approaches (group and workshop), the Brazilian reality.

**Methods:** Analysis of the content of the texts was performed from the following categories of analysis proveniences authors referenced in study groups: group conceptions of the role of coordinator and weaknesses in carrying out such practices perceived from what is reported and discoursed in publications. Eighteen publications were analyzed in this study, consisting of articles and dissertations produced between the years 2001 to 2011, indexed in electronic databases LILACS, SciELO and Theses Database of Capes.

**Results:** Revealed the inadequacy of papers on the topic, the lack of familiarity and identification with the group of psychologists devices and the role of coordinator and some weaknesses in the way such practices have been developed in everyday mental health services.

**Conclusions:** Identifying the need for reflection on this practice by professionals/psychologists and the need to rethink about their academic and social commitment of psychology.

**Descriptors:** Mental Health; Workshop; Group; Psychology.

<sup>a</sup> odete.araujo@ese.uminho.pt<sup>b</sup> jcabrita@ff.ul.pt<sup>c</sup> ilage@ese.uminho.pt<sup>a</sup> suelypsic@yahoo.com.br<sup>b</sup> manuzinha.freire@yahoo.com.br

101

## LIFESTYLE OF PARENTS WITH CHILDREN IN SCHOOL AGE

Eva Sousa<sup>a</sup>, Rita Abreu-Figueiredo<sup>b</sup>, Clara Martins<sup>c</sup>, Ester Ramos<sup>d</sup>, Tânia Lourenço<sup>e</sup>, Luísa Gonçalves<sup>f</sup>

*Escola Superior de Enfermagem S. José de Cluny, Funchal, Madeira, Portugal*

**Introduction:** Adopting healthier lifestyles is essential to improve the quality of life and longevity of human beings. Therefore, this is one of the main concerns of healthcare professionals, especially in countries with a longer life span. Nowadays, the healthier lifestyle of individuals is one of the main concerns of healthcare professionals. Knowing that children in school age tend to mimic their parents behaviour, we tried to describe the lifestyle of this adult group in this study.

**Objective:** We intended to identify the most affected lifestyle's domains, in order to design and implement a project to promote the parents health.

**Methods:** Cross-sectional, descriptive and correlational study where a non-probabilistic sample was used, comprising 45 parents of children attending a football school. In the data sampling, the FANTÁSTICO lifestyle questionnaire was used.

**Results:** The majority of parents who answered the questionnaire were mothers, with ages under 40 years old, and that viewed their family incomes as enough. 55,6% of the mothers and 64,7% of the fathers had excess weight or were obese. Most of the parents had a very good (n=26) or great lifestyle (n=12). The most affected domains in their lifestyles were physical activity and nutrition, and the subjects adopted a healthier behaviour in their relation with family, friends and in safety behaviours. No statistical relevant relations were found between lifestyles and the questioned parents characteristics.

**Conclusions:** The FANTASTIC is a suitable data collection instrument for assessing parents lifestyles. Despite the interest of these children in physical activities that interest is not revealed in the parents.

**Descriptors:** Lifestyle; FANTÁSTICO questionnaire.

<sup>a</sup> sousaeva@esesjcluny.pt

<sup>b</sup> ritasaf40@gmail.com

<sup>c</sup> mmartins47@gmail.com

<sup>d</sup> egomes@esesjcluny.pt

<sup>e</sup> taniamlourenco@gmail.com

<sup>f</sup> luisagoncalves@esesjcluny.pt

102

## PROVIDING HOME COUNSELING FOR OLDER ADULTS: BENEFITS AND CHALLENGES

Margarida Pedroso de Lima<sup>a</sup>, Cátia Silva<sup>b</sup>, Mariana Maia de Carvalho<sup>c</sup>, Diana Fernandes<sup>d</sup>

*Faculdade de Psicologia e Ciências da Educação, Universidade de Coimbra, Coimbra, Portugal*

**Introduction:** The ageing of the population has created numerous challenges for modern society. The increase of motor difficulties and autonomy related problems are, among with other aspects of the ageing of the actual coorte of seniors, crucial to address in the enhancement of the quality of life of these individuals. Therefore, taking in consideration their health and social needs, professionals of different areas have been investing in home care services. Nevertheless, few studies report psychological support delivered at the elders' home.

**Objective:** The present study aims to characterize: a) Home Counseling Pro-VoluntariU Service (Lima et al, 2013), that is a component of the Alta de Coimbra Project from ATLAS ONGD; b) the population of users who benefited from psychological help during the period between 2012-2014.

**Methods:** An exploratory study with a sample of 8 older adults was enhanced. A semi-structured interview (socio-demographic characteristics, interests, subjective health and satisfaction with home counseling); Mini Mental Scale (Folstein & Folstein, 1975); Geriatric Depression Scale and Geriatric Anxiety Inventory (Yesavage et al, 1983; Pachana et al, 2007) and Faces Scale Wong-Baker (Wong et al, 2001) adapted for well-being were administered to the subjects.

**Results:** Most of the participants referred isolation, health related problems and depression/anxiety related symptoms so as moderate well-being. The results suggest the need for this type of service to promote health and wellness as well as to prevent pathology related to isolation.

**Conclusions:** Concerning all adaptations necessary to the in-home setting, the discussion addresses the major challenges and opportunities of these facilities for professionals and users.

**Descriptors:** home; ageing; psychotherapy; counseling; services.

<sup>a</sup> mplima@fpce.uc.pt

<sup>b</sup> catiasilva00@hotmail.com

<sup>c</sup> marianaportocarrero@hotmail.com

<sup>d</sup> diana.marta.f@hotmail.com

103

**LIFESTYLES OF THE SCHOOL AGE CHILD**

Eva Sousa<sup>1,a</sup>, Rita Abreu-Figueiredo<sup>1,b</sup>, Clara Martins<sup>1,c</sup>, Ester Ramos<sup>1,d</sup>, Joana Vieira<sup>1,e</sup>, Tânia Lourenço<sup>1,f</sup>, Luísa Gonçalves<sup>1,g</sup>

<sup>1</sup>*Escola Superior de Enfermagem S. José de Cluny, Funchal. Madeira, Portugal*

<sup>II</sup>*Instituto Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto, Portugal*

<sup>III</sup>*Instituto de Ciências da Saude. Universidade Católica Lisboa. Lisboa, Portugal*

**Introduction:** Healthy lifestyles intends for an active role of the population in promoting health and preventing diseases, and also the development of individual competences in health-related decisions.

**Objective:** We intended to identify the most affected lifestyle's domains, in order to design and implement a project to promote children's health.

**Methods:** The non-accidental random sample is composed by 45 children. The data collection took place during December 2013 using a questionnaire "School children's habits of life" with 10 domains. Word 2013 and Statistic XII were used in the data processing and analysis. All the children are male, with an average age of 7-8 years, in a universe that ranges between 4 and 12 years old.

**Results:** The domains with highest scores in the Children lifestyles scale were Family and friends, and Safety, with a 2,0 median and a 1,7 average. On the other hand, life habits that should be improved are the ones related with Leisure time and Food, with averages of 1,5 and 1,6 respectively. Study time was another of the low scored domains (with a 1,7 average and median), although it is still relatively close to the expected maximum score of 2,0. In the children lifestyles 5 categories were considered, according to the Lifestyles evaluation scale: Excellent, Very Good, Adequate, Improving and Dangerous. The results showed that 66,7% of the children have an Excellent lifestyle and 33,3 have a Very good lifestyle.

**Conclusions:** The lifestyle of a human being in influenced by the habits acquired since the first years of life, based on the family model.

**Descriptors:** Children; School age, lifestyle.

<sup>a</sup>sousaeva@esesjcluny.pt

<sup>b</sup>ritasaf40@gmail.com

<sup>c</sup>mmartins47@gmail.com

<sup>d</sup>egomes@esesjcluny.pt

<sup>e</sup>joana.vieira92@hotmail.com

<sup>f</sup>taniamlourenco@gmail.com

<sup>g</sup>luisagoncalves@esesjcluny.pt

104

**MEN ACCESS TO PRIMARY HEALTH CARE: DISCUSSING DIFFICULTIES AND RESISTANCE FACED BY THEM**

Anderson Reis de Sousa<sup>1,a</sup>, Ana Margarete Cordeiro da Silva Maia<sup>1,b</sup>, Michelle Teixeira Oliveira<sup>1,c</sup>, Jules Ramon Brito Teixeira<sup>1,d</sup>, Ramon Missias Moreira<sup>1,e</sup>, Jaido Gomes Rodrigues<sup>1,f</sup>, Rita Juciélma Almeida Carneiro<sup>1,g</sup>

<sup>1</sup>*Faculdade Nobre. Feira de Santana, BA Brasil*

<sup>II</sup>*Universidade Estadual do Sudoeste da Bahia. Jequié, BA, Brasil*

**Introduction:** The interest of the man by the health care is different from the socialization that they belong, seeking service when the disease is already installed.

**Objective:** To discuss the difficulties and resistance faced by men in access to primary health care.

**Methods:** This was a study of exploratory, descriptive with qualitative approach, carried out in a Basic Health Unit in the City of Feira de Santana, Bahia, using discourse analysis and structured interviews as data collection instrument.

**Results:** The study highlights the lack of demand for the services of the men, where the most frequently reported difficulties are lack of time and the issues involving their job. The data collected originated the thematic category about men: the search for the health unit and insertion difficulties. It can be noticed that interviewed subjects understand the importance of the Family Health Strategy, however they attend other forms of assistance, such as pharmacies, perform self-medication, complain of program structure, the lack of time to perform the care, as well as the working hours of the units; They say care as being predominantly female and do not know or participate in actions managed by family planning and of Integral Attention to Men's Health Policy.

**Conclusion:** Given the above it makes you realize the need to carry out the policies, creating innovative strategies to encourage men to access services and conducting professional training from a gender perspective.

**Descriptors:** Nursing, Gynecological Diseases; pregnant women.

<sup>a</sup>son.reis@hotmail.com

<sup>b</sup>anamargarete@yahoo.com.br

<sup>c</sup>michelle@gruponobre.net

<sup>d</sup>julesramon@gmail.com

<sup>e</sup>ramonefísica@hotmail.com

<sup>f</sup>dealmeida\_rodrigues@hotmail.com

<sup>g</sup>ritajucy@hotmail.com

105

### SOCIOECONOMIC INFLUENCE ON INTESTINAL ENDOPARASITIC DISEASES IN PREGNANT WOMEN IN DIAMANTINA, BRAZIL

Juarez Henrique Teixeira Gonçalves<sup>1a</sup>, Delba Fonseca<sup>1b</sup>, Raiana Soares de Sousa Silva<sup>1c</sup>, João Henrique Araújo de Andrade<sup>1d</sup>

<sup>1</sup>Universidade Federal dos Vales do Jequitinhonha e Mucuri. Teófilo Otoni, MG, Brasil

<sup>11</sup>Universidade Federal do Piauí. Teresina, PI, Brasil

<sup>111</sup>Universidade do Estado da Bahia. Salvador. BA, Brasil

**Introduction:** The intestinal parasites, although high prevalence are found most often in developing countries, little is known about the course of intestinal parasitological infection in pregnant women, or about the possible impact of these infections on fetal development. The highest frequency of intestinal parasites were observed in populations of peripheral regions of the city and covering populations of lower socioeconomic status. According to the IBGE (2010), Diamantina, has 52.2% of women aged up to 39 years, 15% of women aged from 10 to 39 years old illiterate, 49% of women have children, 72.6% of households with inadequate sanitation and per capita income of half the minimum wage, 11.3% with no potable water supply, 2.8% without sewage system and 26.6% of households with more than 5 residents. There is a prevalence of endoparasitose in pregnant women, given that the socioeconomic profile of pregnant women are similar, 37.6% and 45.1%, respectively.

**Objective:** Analysis of use of anthelmintic by pregnant women in Diamantina.

**Methods:** For the research, were applied questionnaires to 108 patients enrolled in Basic Health Units, using samples by extract.

**Result:** 2.7% of pregnant women used anthelmintics during pregnancy.

**Discussion:** The low rate of use of anthelmintics suggests the need for coprological tests during prenatal care, since most of the women can be asymptomatic and natural reservoir.

**Conclusions:** The data indicate the need to diagnose, inform and effectively treat pregnant women; teach health education to mothers to prevent reinfection and study their drugs and the most suitable regimens of treatment for this group affected by intestinal parasites.

**Descriptors:** Endoparasitic; SUS; Pregnant; Anthelmintic; Public health.

<sup>a</sup> juarezhenrique8@gmail.com

<sup>b</sup> delbafonseca@yahoo.com.br

<sup>c</sup> raiana\_sousa@hotmail.com

<sup>d</sup> henrick\_andrade@hotmail.com

106

### IMPLEMENTATION OF SINGLE HEALTH SYSTEM (SUS): ANALYSIS OF SCIENTIFIC PRODUCTION IN BRAZIL

Raiana Soares de Sousa Silva<sup>1a</sup>, Ana Cristina Soares Silva<sup>1b</sup>, Ana Hortência Cavalcante Cardoso Pereira<sup>1c</sup>, Debora de Sousa Pereira<sup>1d</sup>, João Henrique Araújo de Andrade<sup>11e</sup>, Juarez Henrique Teixeira Gonçalves<sup>11f</sup>, Raissa Soares de Sousa Silva<sup>11g</sup>

<sup>1</sup>Universidade Federal do Piauí. Teresina, Piauí, Brasil

<sup>11</sup>Faculdade Santo Agostinho. Montes Claros, Brasil

<sup>111</sup>Universidade do Estado da Bahia. Salvador, BA, Brasil

<sup>1111</sup>Universidade Federal dos Vales do Jequitinhonha e Mucuri. Teófilo Otoni, MG, Brasil

<sup>11111</sup>Faculdade de Tecnologia de Teresina. Teresina, PI, Brasil

**Introduction:** Until the early twentieth century, inequalities in access to health services in Brazil were alarming, it was necessary to radicalize the health system, as the country was growing socially and economically and the system could not face with decision, in addition of the excessive centralization and lack of definition of the powers of the organs and political-administrative bodies. The movement of Health Reform in the late 70 emerged to address these issues, proposing that health is a right of the citizen, duty of the State and that the access to goods and services that promote and recover it is universal. The passage of the 1988 Federal Constitution institutionalized the SUS guided by the principles of universality, equity, comprehensiveness, as well as decentralization, regionalization, hierarchy and social participation.

**Objective:** To analyze the scientific production in Brazil regarding the implementation of the SUS.

**Methods:** A review of national literature characterized by identification and analysis of articles found on the Virtual Health Library, selected according to the theme. Of the 20 articles found, 06 were evaluated in full, dated from 1995 to 2012.

**Results:** In addition to organizing the political-administrative system management, SUS brought a broader conception of health, and started to consider factors that were associated when thinking about health and quality of life as biological, socioeconomic and cultural aspects.

**Conclusions:** The national scientific literature on this subject is small, but of great value to the knowledge about the implementation of SUS which undoubtedly came to improve the quality of health care in Brazil.

**Descriptors:** Public Health; SUS; Citizenship; Equity; Universality.

<sup>a</sup> raiana\_sousa@hotmail.com

<sup>b</sup> aninha\_silva268@hotmail.com

<sup>c</sup> ana-hortencia@hotmail.com

<sup>d</sup> deboraskyline@hotmail.com

<sup>e</sup> henrick\_andrade@hotmail.com

<sup>f</sup> juarezhenrique8@gmail.com

<sup>g</sup> issinhasoares@hotmail.com

107

### CHARACTERISTICS OF VULVOVAGINITIS IN PREGNANT WOMEN IN A USF (HEALTH UNIT) IN THE MUNICIPALITY OF THE INTERIOR OF BAHIA

Anderson Reis de Sousa<sup>1,a</sup>, Isaac Suzart Gomes Filho<sup>11,b</sup>, Ana Margarete Cordeiro da Silva Maia<sup>1c</sup>, Leydiane Farias de Araújo<sup>1d</sup>, Manuella Araújo de Freitas<sup>1e</sup>, Michelle Teixeira Oliveira<sup>1f</sup>

<sup>1</sup>Faculdade Nobre. Feira de Santana, Bahia, Brasil

<sup>11</sup>Universidade Estadual de Feira de Santana. Feira de Santana, Bahia, Brasil

**Introduction:** Vulvovaginitis, one of the most common gynecological problems is responsible for affecting the health of women representing many complaints in gynecological appointments, featuring a frequent reason for carrying the cytological examination, especially during pregnancy.

**Objective:** To describe the profile of vulvovaginitis in pregnant women in a Family Health Unit in the city in the interior of Bahia.

**Methods:** This is a field study, a descriptive and documentary, with a quantitative approach, conducted with pregnant women who sought medical treatment between January and October of 2012. Data was collected from medical records, the prenatal booklet and the Book of Gynecological disorders, given the ethical principles of the research.

**Results:** The results have provided to describe the socio-demographic characteristics, pregnancy history, aspects of prenatal, the realization of the cytopathologic examination, as well as the identification of vulvovaginitis. It was found that among 27 pregnant women studied, 55.6% had a pap smear examination, and of these, 26.7% had satisfactory results and others had altered vaginal discharge, representing 73.3%. Among the altered vaginal flora, 36.4% had *Gardnerella vaginalis*, *Candida albicans* 36.4%, 18.1% other types of inflammatory processes and 9.1% did not report the result. The data reinforce the importance of prenatal care in women through cytopathological exams so that the infections can be detected and treated avoiding harm to the mother and the fetus or neonate.

**Conclusions:** Therefore this study is relevant for pointing out the need to create new strategies that motivate the female population perform prevention, in an attempt to eliminate these diseases.

**Descriptors:** Nursing, Gynecological Diseases; pregnant women.

<sup>a</sup>son.reis@hotmail.com

<sup>b</sup>isuzart@gmail.com

<sup>c</sup>anamargarete@yahoo.com.br

<sup>d</sup>leydi\_farias@hotmail.com

<sup>e</sup>manuella-araujodefritas@hotmail.com

<sup>f</sup>michelle@gruponobre.net

108

### APPLICATION STOPP CRITERIA AND BEERS CRITERIA IN THE EVALUATION OF THE DRUG PHARMACOTHERAPY USED IN ELDERLY: A COMPARATIVE STUDY IN THE LONDRINA CITY, BRAZIL

Pedro Domingues Cardoso<sup>1,a</sup>, Tânia Nascimento<sup>11,b</sup>, Emanuelle de Almeida-Santos<sup>1c</sup>, Glagys Marques-Santana<sup>1d</sup>

<sup>1</sup>Universidade Norte do Paraná. Londrina, Brasil

<sup>11</sup>Centro de Estudos e Desenvolvimento em Saúde. Escola Superior de Saúde. Universidade do Algarve. Faro, Portugal

**Introduction:** Elderly suffer from multiple co-morbidities and makes this patient group particularly vulnerable to potentially inappropriate medicines (PIM). PIM has been reported to be a substantial cause of morbidity and mortality and has been identified as factor related adverse drug events. Two systems-defined medicine review tool have gained international recognition, Beers' criteria and "Screening Tool of Older Peoples Prescriptions (STOPP)".

**Objective:** The aim was to determine the percentage of PIM in the drug pharmacotherapy, the prevalence of PIM/elderly, and compared the performance of STOPP and Beers' criteria in detecting potentially inappropriate medicines.

**Methods:** A total of 161 older patients were randomly selected from ELLO project (n=519). We included patients with  $\geq 60$  years and taking  $\geq 3$  medication. Both criteria were applied to the 161 patients.

**Results:** Of the older patients reviewed, 116 (72%) were female and the median age was  $72,6 \pm 7,0$  years old. The total number of medicines prescribed was 748 medicines, with  $4,65 \pm 1,6$  for patients. Beers' criteria identified, in 460 medicines, 139 PIMs, with 94 patients (58,4%) had at least one PIM identified. STOPP criteria identified, in 374 medicines, 105 PIMs, affecting 76 patients (35%) with at least 1 PIM. More than half of elderly patient for both the criteria used  $\geq 5$  medications (BEERS-54%; STOPP-55,2%) with an mean of PIM identified of the 1,5 and 1,4 PIM/patient.

**Conclusions:** This study demonstrated that there are a high percentage of PIM prescribed in the pharmacotherapy of elderly. In this study BEERS criteria demonstrated superior capability over the STOPP criteria in the identification of instances of PIM.

**Descriptors:** BEERS; Elderly; Potentially inappropriate medicines; STOPP.

<sup>a</sup>pedro.giovanni@gmail.com

<sup>b</sup>tinascimento@ualg.pt

<sup>c</sup>almeida\_emanuelle@hotmail.com

<sup>d</sup>gladysmarques@hotmail.com.br

109

### KNOWLEDGE AND PRACTICE ABOUT THE CONTRACEPTIVE METHODS AMONG NURSING STUDENTS OF A COLLEGE OF BAHIA, BRAZIL

Ana Margarete Cordeiro da Silva Maia<sup>1,a</sup>, Anderson Reis de Sousa<sup>1,b</sup>, Gervanilson Oliveira<sup>1,c</sup>, Luciana Lopes Rios<sup>1,d</sup>, Michelle Teixeira Oliveira<sup>1,e</sup>, Tamires Limeira Magalhães Oliveira<sup>1,f</sup>

<sup>1</sup>Faculdade Nobre. Feira de Santana. Bahia, Brasil

<sup>2</sup>Universidade Federal da Bahia. Salvador, Bahia, Brasil

**Introduction:** Sexuality is a fundamental component of human life. It is estimated that schooling has a differential impact on numerous aspects of the health and illness of individuals and social groups.

**Objective:** To assess the knowledge and practice of nursing students about the use of contraceptive methods.

**Methods:** This was a descriptive study with a quantitative approach. The sample consisted of 66 students of a Nursing College of Bahia, enrolled among the first and fifth semester. Data collection occurred during October-November 2013, from a questionnaire.

**Results:** It was observed that the majority of respondents, 55.1% considered themselves to have a good knowledge about contraception, 55.8% reported having used a condom at first sexual intercourse. While for the majority of respondents, 77.3% reported that the College did not influence the choice of method, since the beginning of sexual activity, for most started before entry. The study showed that students in the health field, especially nursing students, entering college with a prior knowledge about contraceptive methods, especially regarding the most used as condoms and oral contraceptives.

**Conclusions:** Thus, this study has helped understand the practical use of contraceptive methods, in order to identify gaps, seeking to generate innovative proposals for intervention and acceptance to this public.

**Descriptors:** Nursing, Sexuality and contraceptive methods.

110

### HEALTH PROMOTING SCHOOL. HEALTHY LIFESTYLES: MENTAL HEALTH PROMOTION

Maria Clara André<sup>1,a</sup>, Anabela Escabelado Cândido<sup>1,b</sup>, Conceição Santiago<sup>1,c</sup>, Olimpia Cruz<sup>1,d</sup>, Teresa Margarida Carreira<sup>1,e</sup>, José Amendoeira<sup>1,f</sup>

<sup>1</sup>Escola Superior de Saúde do Instituto Politécnico de Santarém., Membros da Unidade de Investigação do Instituto Politécnico de Santarém

<sup>2</sup>Escola Superior de Saúde do Instituto Politécnico de Santarém. Unidade de Investigação do Instituto Politécnico de Santarém. Investigador integrado no CIIS/UCP

**Introduction:** Promoting mental health in schools is a challenge and an imperative for us as health promoting school. Being school a privileged environment for the development of healthy lifestyles, it presents itself as a singular context for the appearance of risk behavior. This intervention is part of the Health Promotion Project - Promoting Healthy Lifestyles from Monitoring Unit of Indicators on Health in Santarem Health School and has as primary objective to empower students/school community to adopt healthy lifestyles promoting mental health. In this context we analyze the interventions carried out between 2008-2012.

**Objective:** Present the intervention developed in the area of mental health promotion in schools.

**Methods:** The focus is the interactive method/active methods with use of oral exposure and debate in the class context. Were, as well, developed conferences with opportunities for discussion and sharing whenever limitations of time existed.

**Results:** The intervention involved 1878 participants in 36 sessions. The thematic developed had focus on aspects of the current health of children and adolescents, but also their future health. The thematic were: Eating disorders, Interpersonal relationship, Harmful consumption, Discrimination vs. Non-Discrimination in HIV/AIDS.

**Conclusions:** The activities related to the mental health promotion program met the needs identified by the partner organizations. The feedback received from the educational community throughout the process was very positive, emerging new proposals, allowing to reach a larger number of participants and thematic.

**Descriptors:** Mental health promotion; Healthy lifestyles; Nursing.

<sup>a</sup> anamargarete@yahoo.com.br

<sup>b</sup> son.reis@hotmail.com

<sup>c</sup> chelleuefs@gmail.com

<sup>d</sup> lucianarios@hotmail.com

<sup>e</sup> michelle@gruponobre.net

<sup>f</sup> tamireslimeira@hotmail.com

<sup>a</sup> clara.andre@essaude.ipsantarem.pt

<sup>b</sup> anabela.candido@essaude.ipsantarem.pt

<sup>c</sup> mconceicao.santiago@essaude.ipsantarem.pt

<sup>d</sup> olimpia-fonseca@essaude.ipsantarem.pt

<sup>e</sup> teresa.carreira@essaude.ipsantarem.pt

<sup>f</sup> umis.projetos@essaude.ipsantarem.pt



111

### THE ANTISOCIAL PHENOMENON AMONG PORTUGUESE STUDENTS: TOWARDS HEALTHIER SOCIAL BEHAVIOURS

Alice Murteira Morgado<sup>a</sup>, Maria da Luz Vale Dias<sup>b</sup>

*Faculdade de Psicologia e ciências da educação. Universidade de Coimbra. Coimbra, Portugal*

**Introduction:** The complexity of antisocial behaviour in adolescence is widely acknowledged by developmental psychology. Antisocial behaviours are particularly prevalent during this stage, making it crucial to identify variables that potentially influence deviancy in this specific developmental moment.

**Objective:** The aim of our research was to study and understand what types of behaviours are displayed by adolescents and their relation with several dimensions of personality, social skills, self-concept, family environment, socioeconomic status, age and gender.

**Methods:** A sample of 490 Portuguese students from the Coimbra region (Portugal) between the 5th and 12th grades filled, in classroom, a sociodemographic questionnaire and the Portuguese versions of Youth Self-Report; Social Skills Questionnaire – Student Form; Family Environment Scale; Piers-Harris Children’s Self-Concept Scale-2; and Eysenck Personality Questionnaire-J. Parents were asked to fill the Child Behaviour Checklist and a socio-demographic questionnaire.

**Results:** Our results show significant differences between individuals who reported and did not report antisocial conducts in several dimensions of personality, self-concept, social skills, and family environment. Furthermore, some of those dimensions were found to predict the scores obtained in YSR’s and CBCL’s factors related to antisocial behaviour.

**Conclusions:** Our research presents great value for understanding this challenging phenomenon, providing significant results and explaining important amounts of variance while addressing multiple sets of variables. Therefore, due to its broad scope and approach this study provides an important contribute for designing and implementing intervention programs that can promote healthier social behaviours in adolescence.

**Descriptors:** development, adolescence, antisocial, behaviour.

<sup>a</sup> alicemorgado@gmail.com

<sup>b</sup> valedias@fpce.uc.pt

112

### THE INCIDENCE OF FALLS IN INSTITUTIONALIZED ELDERLY

Bruno Ferreira<sup>1,a</sup>, Rosa Silva<sup>1,b</sup>, Tânia Costa<sup>1,c</sup>, Patrícia Coelho<sup>1,d</sup>, Armando Almeida<sup>1,e</sup>

*<sup>1</sup>Agrupamento de centros de saúde Povoia de Varzim/Vila do Conde. Portugal*

*<sup>11</sup>Instituto das Ciências da Saúde. Universidade Católica Portuguesa. Porto, Portugal*

**Introduction:** The characteristics of the institutionalized elderly, as age and physical disability, increase significantly the probability of falling, as well as their severity when they occur. For this reason, it is crucial to understand and study the occurrence of this phenomenon in elderly.

**Objective:** To determine the incidence of the phenomenon falls in institutionalized elderly and the prevalence of the risk of falling, by applying an assessment instrument. This study was developed in two nursing homes in Oporto, being organized in two stages: first, we identified the incidence of the phenomenon of falls, by a retrospective analysis to institutional records for the period of one year, in one of those nursing homes. Second, we applied the instrument of risk assessment of falls - Hendrich II Fall Risk Model (HIIFRM).

**Results:** it was reported that 46% of the elderly have fallen in the last year (from September 2011 to 2012); an average there was more than two falls in the elderly ( $X=2.2; \pm 1.8$ ), and the fall was at least one and a maximum of 9. By applying the HIIFRM to 111 elderly, 47% are at high risk of falling. We analyzed the most significant risk factor is the administration of benzodiazepines, that is present in 41%.

**Conclusions:** According to this, it appears that the incidence of this phenomenon, in the sample, is competing with international data. However, these figures are nonetheless worrisome, given the impact that falls represent the quality of life of elderly.

**Descriptors:** Falls; Elderly; Nursing Homes; Quality of Life; Risk Factor.

<sup>a</sup> brunoferreira.enf@gmail.com

<sup>b</sup> rcgsilva@porto.ucp.pt

<sup>c</sup> tcosta@porto.ucp.pt

<sup>d</sup> sfcoelho@porto.ucp.pt

<sup>e</sup> aalmeida@porto.ucp.pt

113

### ASSISTANCE FOR VIOLENCE VICTIMS IN STATIONARY PRE-HOSPITAL UNITS

Anderson Reis de Sousa<sup>a</sup>, Ana Margarete Cordeiro da Silva Maia<sup>b</sup>, Isaac Suzart Gomes Filho<sup>1,c</sup>, Karla Lucila Cintra<sup>d</sup>, Pablo Carneiro de Oliveira Costa<sup>e</sup>, Maíza Sandra Ribeiro Macedo Silva<sup>f</sup>, Michelle Teixeira Oliveira<sup>g</sup>

*Faculdade Nobre. Feira de Santana, Bahia, Brasil*

**Introduction:** Violence can be considered an important public health problem, it is constituted by an ancient phenomena that goes through temporality, it is present in the lives of humans, affecting all genders and social classes. So welcome individuals victims of violence is part of health rights. So welcome individuals victims of violence is part of health rights.

**Objective:** Characterize the attendances for violence in Prehospital Service Units fixed in a municipality of the interior of Bahia.

**Methods:** A quantitative study evaluating data from six Pre-Hospital units located in the city of Feira de Santana, Bahia, and the Police Station of Specialized in assistance to women, in 2012, using the variables: total number of attendances; visits due to violence, sex, age, zone of the city.

**Results:** Among the findings, stood out the violence by firing a firearm, aggression by means of impact of motor vehicle, physical assault, resulting from domestic and marital violence, for being a problem difficult to detect, in most cases it remains hidden and under-reported, pointing the women as targets of such violence, and the appearance of self-harming. It was also observed the difficulty of teams to identify, meet and report cases due to lack of training, and weaknesses in the training process that has not dealt with this issue effectively.

**Conclusions:** Thus, this study has brought great reflections to the community, managers and health professionals that the issue needs to be worked and that this is necessary to identify hidden and vulnerable demand in order to reduce rates and forms of violence that exist in the locus analyzed.

**Descriptors:** Nursing; Violence; Urgent Care.

<sup>a</sup> son.reis@hotmail.com

<sup>b</sup> anamargarete@yahoo.com.br

<sup>c</sup> isuzart@gmail.com

<sup>d</sup> lucilacintra@hotmail.com

<sup>e</sup> pablooliveira.enf@gmail.com

<sup>f</sup> macedomaiza@yahoo.com.br

<sup>g</sup> michelle@gruponobre.net

114

### EXCLUSIVE BREASTFEEDING: PREVALENCE AND IDENTIFICATION OF PROBLEMS UNTIL FOUR MONTHS

Dolores Sardo<sup>1,a</sup>, Arminda Pinheiro<sup>11,b</sup>

*<sup>1</sup>Escola Superior de Enfermagem do Porto. Porto, Portugal*

*<sup>11</sup>Escola Superior de Enfermagem da Universidade do Minho. Braga, Portugal*

**Introduction:** WHO/UNICEF promote, protect and support the practice of exclusive breastfeeding (EBF) up to 6 months and supplemented up to 2 years age, with the aim to reduce malnutrition, infant mortality and chronic diseases. Several studies indicate that previous experience of breastfeeding (BF) influences the breastfeed behavior; we know that lack of knowledge and maternal support, beliefs such as “weak milk”, “shallow nipples”, “child not increase weight” are indicated by women as difficulties to promote BF.

**Objective:** To verify the prevalence and analyze the EBF problems until the age of four months.

**Methods:** Descriptive and correlational study. Sample was intentional, no probabilistic with 286 mothers collected by self-report questionnaire, four months after the child's birth.

**Results:** The prevalence EBF at 4 months is 51%. 22.1% of children do BF; 26.9% of children make formula and other food. 20.3% of mothers have previous BF's experience and 94.6% related positive and gratifying experience. 57.8% of women identify different problems during BF experience. From these 51.5% identified problems with breast (inverted nipples, engorgement), 6.7% with production and quality of milk (weak milk), 27.9% with children (not increase weight and difficulty in handle), and 13.9% with mother's conditions (fatigue, work, lack of support).

**Conclusions:** According WHO EBF, until fourth month was little practiced among the interviewed mothers. Health professionals, including midwives, should explain the difficulties of women breastfeeding, in order to support them to continue to breastfeed children beyond 4 months, to promote their health, lower costs and benefit to the society.

**Descriptors:** Exclusive Breastfeeding; Prevalence; Difficulties.

<sup>a</sup> dolores.sardo@gmail.com

<sup>b</sup> armindaanes@gmail.com

115

**MIDWIFERY EMPOWERMENT: THE PERCEPTION OF THE NURSES' MIDWIVES IN PORTUGAL**Rosália Marques<sup>1,a</sup>, Dolores Sardo<sup>2,b</sup>, Arminda Pinheiro<sup>3,c</sup>, Manuela Ferreira<sup>3,d</sup><sup>1</sup>Hospital Garcia de Orta. Lisboa, Portugal<sup>2</sup>Escola Superior de Enfermagem do Porto. Porto, Portugal<sup>3</sup>Escola Superior de Enfermagem da Universidade do Minho. Braga, Portugal<sup>4</sup>Escola Superior de Saúde. Instituto Politécnico de Viseu. Viseu, Portugal

**Introduction:** In Portugal, the practice of nurse's midwives is a regulated job, with a proper range of skills and knowledge. However, not always their power and autonomy are recognized by other professionals and citizens.

**Objective:** Analyze relationships between sociodemographic variables and the empowerment of nurse's midwives in the following dimensions: Effective Management and Interdisciplinary Cooperation, Sustained and Autonomous Practice, Communication and Professional Consent, Recognition of Health Team, Training and Education and Job Satisfaction.

**Methods:** This is a quantitative, descriptive and explanatory cross-correlated study with a non-probabilistic convenient sample of 149 nurse's midwives that voluntarily agreed to fill in the questionnaire online. The evaluation protocol includes Sociodemographic Questionnaire and Perceptions of Empowerment in Midwifery Scale (PEMS), validated for the Portuguese population by Henriques et al (2012). It consists of five dimensions: Effective Management and Interdisciplinary Cooperation, Sustained and Autonomous Practice, Communication and Professional Consent, Recognition of Health Team, Training and Education.

**Results:** This is a group of nurse's midwives, mostly females (91.27%), married (69.12) and post-graduated (65.1%). 85.9% works in public institutions and 57.5% in hospitals. We found that Portuguese nurses midwives' empowerment is low, mainly on two items: Sustained and Autonomous Practice and on Communication and Professional Consent. Training and Education has the best empowerment results. Empowerment is influenced by Job Satisfaction.

**Conclusions:** The empowerment is positively linked to the development of professional autonomy resulting in a greater collective consciousness of the nurse midwives' competence profile. These results allow to thinking about practice, training models in midwifery and job satisfaction.

**Descriptors:** Nurses' midwives; Empowerment; Perception; Autonomy.

<sup>a</sup> rosalia.marques@gmail.com<sup>b</sup> dolores.sardo@gmail.com<sup>c</sup> armindaanes@gmail.com<sup>d</sup> mmcferreira@gmail.com

116

**GENERAL AND MENTAL HEALTH OF POOR AND MULTIPROBLEMATIC FAMILIES**Paula Cristina Martins<sup>1,a</sup>, Ana Cristina Vieira<sup>2,b</sup>, Eduarda Claro<sup>c</sup>, Cláudia Cunha<sup>3,d</sup><sup>1</sup>Escola de Psicologia. Universidade do Minho. Braga, Portugal<sup>2</sup>Segurança Social. Braga, Portugal<sup>3</sup>Direção Regional de Educação do Norte. Braga, Portugal

**Introduction:** The main feature of the so called multiproblematic families is the persistence along time of a set of problems in various areas of the individual's functioning in several family members (Alarcão, 2000; Sousa, 2005). One of these problematic areas or risk domains (Pakman, 2007) is physical and mental health. The coexistence and persistence of many health problems in different individuals of the same families is quite frequent in multiproblematic families, compromising their functioning. Similarly, the relation between poverty and poor health is well established (Barger, 2010). Particularly, persistent poverty is associated with health problems, hindering people's ability to cope with everyday life.

**Objective:** This research study aims: (a) To identify and characterise the major health problems faced by the members of these families; (b) To explore the perceived relevance of these problems; (c) To explore the perceived effectiveness of health care interventions received by respondents; (d) To explore the level of control perceived over these problems.

**Methods:** 20 families, recipients of financial aid from the Portuguese State, living in Oporto, were interviewed according to the protocol proposed by Pakman (2005).

**Results and Discussion:** Results will be presented and their implications for the understanding of these family dynamics and for intervention with these families.

**Descriptors:** Multiproblematic families; high risk families; poor families; general health; mental health.

<sup>a</sup> pcmartins@psi.uminho.pt<sup>b</sup> ana.cristina.vieira@seg-social.pt<sup>c</sup> m.eduarda.claro@seg-social.pt<sup>d</sup> claudia.p.r.cunha@gmail.com

117

### MUSIC PARODIED: APPLICATIONS IN COMMUNITARY HEALTH EDUCATION

Ângela Maria Uchôa Rodrigues<sup>1,a</sup>, Marcélid Berto da Costal<sup>1,b</sup>, Fátima Luna Pinheiro Lamdim<sup>1,c</sup>, Mirna Albuquerque Frotal<sup>1,d</sup>, Bruna Caroline Rodrigues Tamboril<sup>1,e</sup>, Thalita Soares Rimes<sup>1,f</sup>, Pâmela Campelo Paiva<sup>1,g</sup>

<sup>1</sup>Universidade de Fortaleza. Fortaleza, Brasil

<sup>2</sup>Universidade Estadual do Ceará. Fortaleza, Brasil

**Introduction:** The relevance of this study is to consider parodied music as an object of research in communication.

**Objective:** To evaluate the learning process promoted by songs, parodying issues of Health Education in the context of a community.

**Methods:** An exploratory - descriptive study of qualitative character, carried out during the year of 2008 in the city of Fortaleza, Ceará, Brazil. The data collection used the technique of the semi-structured interviews applied to 11 key-informants. The data processing carried the technique of the Collective Subject's Speech. This research is ethically and legally guarded by Opinion.

**Results:** It was proved that the parodied music is a possible intervention strategy for Health Education, for its potential to become effective by using a few resources and leveraging resources/human potentials of the same community. The negative points identified by the participants were that parodied music should not be applied in an isolated form or as an alternative to other education strategies. On the contrary, there was proved a need to associate it with other methodologies in order to achieve the final goal.

**Conclusions:** The strategies calls people's attention and are more attractive than the expository explanations normally applied. Considering the potential disseminators of information in the community, it is believed that the possibility of these people to reproduce the captured content with the resource of the CD, at least, in the family context, among friends and neighbors, which already prints to this resource a significant importance.

**Descriptors:** Health Education; Health Promotion; Music Therapy, Public Health, Community Health Nursing.

<sup>a</sup> angeluchoa@unifor.br

<sup>b</sup> marcelidberto@bol.com.br

<sup>c</sup> lunalandim@yahoo.com.br

<sup>d</sup> mirnafrota@unifor.br

<sup>e</sup> carolinebrcrt@gmail.com

<sup>f</sup> thalita\_rimes@yahoo.com.br

<sup>g</sup> enfapamelapaiva@hotmail.com

118

### CAPSICUM ANNUUM L. WITH DIFFERENT COLORS PROVIDE BIOAVAILABLE PHYTOCHEMICALS WITH HEALTH BENEFITS

Ana Madeira, Carla S. Silva, Sérgio V.P. Barreira, Ana F. Vinha

Faculdade de Ciências da Educação. Universidade Fernando Pessoa. Porto, Portugal

**Introduction:** Sweet peppers (*Capsicum annuum* L.) are more than a versatile green or red vegetable. These vegetable is one of the oldest and most important carotenoid food colorants, and it is widely used in food industry and in pharmaceutical formulations. Carotenoids are some of the most vital colored phytochemicals, and accounting for the brilliant colors of a variety of vegetables, and concentration depends on their growth maturity, variety, concentration of carotenoid isomers, and food processing methods.

**Objective:** The main objective of this work was to examine possible changes in carotenoids contents due to processing, fresh, frozen, and cooked sweet pepper varieties (green, red, yellow, and orange).

**Methods:** Briefly, 1 g sweet pepper samples were extracted with 20 ml of acetone/hexane (2:3, v/v), then the absorbance of the supernatants at 453, 505, 645, and 663 nm were measured by spectrophotometric assay. The contents of chlorophyll a, chlorophyll b, b-carotene and lycopene were calculated according to the following equations: chlorophyll a (mg/100 mL)=0.999A663-0.0989A645; chlorophyll b (mg/100 mL)=-0.328A663+1.77A645; b-carotene (mg/100 ml)=0.216A663-1.22A645-0.304A505+0.452A453; lycopene (mg/100 ml)=-0.0458A663+0.204A645+0.372A505-0.0806A453.

**Results:** In comparison with the water-soluble vitamins, the provitamin A carotenoids and lycopene appear to be relatively stable to processing, and cooking. Significant differences in carotenoids were observed (p<0.05) and correlations with each sweet pepper variety.

**Conclusions:** Major public health benefits could be achieved by increasing consumption of carotenoid-rich vegetables still appears to stand, independently of the type of processing.

**Descriptors:** *Capsicum annuum* L.; Carotenoids; Antioxidant activity; Health benefits.

119

### HUMANIZATION OF HEALTH EDUCATION, PRACTICE REFLECTION AND COMMUNITY EMPOWERMENT

Yolanda A. Paletot<sup>a</sup>, Iaryn G. Aguiar<sup>b</sup>, Julyane F. Coêlho<sup>c</sup>, Helder S. Santos<sup>d</sup>, Séfora L. E. Andrade<sup>e</sup>, Simone S. Damasceno<sup>f</sup>, Larissa N. Azevedo<sup>g</sup>, Regina L. G. P. Farias<sup>h</sup>, Fernanda B. Aguiar<sup>i</sup>, Cristine H. Monteiro<sup>j</sup>

*Universidade Federal da Paraíba. Paraíba, Brasil*

**Introduction:** The University Extension Project “Humanized Training for the Healthcare Professional” has been providing, since 2007, an avenue for undergraduates to experience the reality of the health-disease process in the context of primary health care while focusing on the implementation of lightweight technologies.

**Objective:** This study aims to describe the positive impacts experienced by the future health care professionals, the experienced ones already in service, and the community assisted by the project.

**Methods:** To evaluate this project, several reports describing the 7 years of field experience by the Family Health Unity “Timbo II”, in João Pessoa, PB, Brazil were consolidated and analyzed.

**Results:** A socially relevant training and integration into primary health care, gateway to the Unified Health Service (Brazilian public health system), is shown to be a strategy that can help achieve the humanization of the future health professional’s formation. At the same time, professionals who are already working in the Family Health Team receive a unique opportunity to reflect on their practice in service, and find new strategies. The community assisted by the Team also benefits from the service improvements and experience exchanges provided by “discussion meetings” with participating undergraduate students, which has provided the community empowerment of their responsibility in the health-disease process.

**Conclusions:** We believe that the present results indicate the correction and adaptation of the proposed strategies in the pursuit of the humanization of healthcare professionals.

**Descriptors:** Community-Institutional Relations; health personnel; soft technologies; community; primary health care.

<sup>a</sup> yolandaabrantes10@gmail.com,

<sup>b</sup> iaryngomes@gmail.com,

<sup>c</sup> julyanecoelho@hotmail.com,

<sup>d</sup> helder.fisio.2010@gmail.com,

<sup>e</sup> seforaejoab@hotmail.com,

<sup>f</sup> simonedamasceno@ymail.com,

<sup>g</sup> larissanegromonte@hotmail.com,

<sup>h</sup> rlucia62@yahoo.com.br,

<sup>i</sup> fernanda.burle@yahoo.com.br,

<sup>j</sup> crishirsch2011@gmail.com.

120

### CHARACTERIZATION OF USERS OF SANTA MARIA MAIOR CONTINUOUS CARE UNIT (CCU) AND SOCIAL RESPONSE AFTER DISCHARGE OF USERS WITH CEREBROVASCULAR ACCIDENT (CVA)

Maria Ribeiro<sup>1,a</sup>, Ana Cruz<sup>1</sup>, Ana Gonçalves<sup>1</sup>, Sónia Bernardo<sup>1</sup>, Lopes<sup>1</sup>

*<sup>1</sup>Centro de Estudos Transdisciplinares para o Desenvolvimento. Universidade de Trás-os-Montes e Alto Douro. Vila Real. Portugal. Unidade de investigação para o desenvolvimento do interior. Guarda. Portugal; Instituto Politécnico de Bragança. Bragança, Portugal*

*<sup>1</sup>Escola Superior de Saúde do Instituto Politécnico de Bragança. Bragança, Portugal*

**Introduction:** The stroke is a neurological disease caused by the sudden decrease in blood supply to a particular brain region. It is a state of medical emergency and, in Portugal, is the leading cause of death.

**Objective:** To identify the social responses after discharge of stroke patients.

**Methods:** A cross-sectional, quantitative, observational and descriptive study was developed. This study was conducted at a Continuous Care and Long Term Maintenance Unit. A sample of 222 patients admitted over the period December 2008 to November 2013 was selected. Data collection was made, using Gestcare Integrated Continuous Care, in the last quarter of 2013, after authorization granted by the responsible Unit.

**Results:** Of the 222 patients, 79 were admitted to the CCU with the diagnosis of stroke, noting this pathology a prevalence of 35.6% during the analysis period. From the total CVA patients, the majority were male (53.2%), lived in rural areas (61.3%) and had family support (78.5%). Their ages ranged from 48 years to 95 years old. Patients after discharge, had the following destinations: 25.3% were transferred to other units to receive more specialized care; 24.1% patients enrolled in a nursing home; 13.9% returned to the home with family support; 8.9% patients returned to their home with support of a home care; 3.8% patients went to a foster family and, the remaining (24,1%), died.

**Conclusions:** The family plays a key role in supporting the patient. However, there is also the need for institutions and social support services that meet and complement the needs of the patient and family.

**Descriptors:** Stroke, Cerebrovascular accident, Continuous care; Northeast; Portugal.

<sup>a</sup> xilote@ipb.pt

121

### SEXUAL EDUCATION AND PEOPLE WITH INTELLECTUAL DISABILITIES IN RESIDENTIAL CARE: AN EXPERIENCE

Raquel Correia<sup>a</sup>, Maria Conceição Oliveira<sup>b</sup>*Associação Portuguesa de Pais e Amigos do Cidadão Deficiente Mental Castelo Branco. Castelo Branco, Portugal*

**Introduction:** Children, young people and adults with intellectual disabilities have the right to receive information and support about sexuality, relationships and reproductive health.

**Objective:** This work describes a sexual education program developed with people with intellectual disabilities who live in residential care.

**Methods:** The program was composed by 10 weekly sessions and the themes were defined after an individual interview done with all the participants. The methodology used was based on group dynamics, group discussions, role-plays, quizzes and exploration of materials. The themes involved biological aspects like the body, modification along the lifecycle and reproductive health, and relational aspects like feelings, different kind of relationships and different kind of ways to show affection. The participants were 14 persons with intellectual disabilities, divided in two groups and with ages between 17 and 41, 9 women and 5 men.

**Results:** By the analysis of the session's reports, it's possible to observe that the participants were very motivated and participative, especially in the sessions about the relational themes. Participants expressed interest in continuing the program because they could clarify their doubts and demystify some wrong ideas.

**Conclusions:** People with intellectual disabilities should have the opportunity to benefit from sexual education programs, because they are sexualized individuals too. It's important to apply different and active methods and use accessible language. As this population may present greater difficulties in social skills, it is essential to work further the relational aspects.

**Descriptors:** health promotion; sexual education; intellectual disabilities; adults; residential care.

<sup>a</sup> raquel.a.correia@gmail.com  
<sup>b</sup> oliveiramcg@gmail.com

122

### FACTORS ASSOCIATED WITH ACCESS TO THE FAMILY HEALTH STRATEGY SERVICES

Liliane da Consolação Campos Ribeiro<sup>1,a</sup>, Regina Lunardi Rocha<sup>1,b</sup>, Maria Letícia Ramos Jorge<sup>1,c</sup>, Thamara de Souza Campos<sup>1,d</sup>, Valeria Cristina Leal Batista<sup>1,e</sup>*<sup>1</sup>Universidade Federal dos Vales do Jequitinhonha e Mucuri. Teófilo Otoni, MG, Brasil**<sup>2</sup>Universidade Federal de Minas Gerais. Belo Horizonte, Brasil*

**Introduction:** The aim of the present study was to evaluate factors related to health services and families associated with the reception/access of children aged from zero to six years, in relation to type of health service of choice.

**Methods:** A cross-sectional study was performed of a random stratified sample of 384 parents and/or guardians of children registered with family health teams, using the Primary Care Assessment Tool (PCATool). Descriptive and univariate analysis and multiple logistic regression were performed.

**Results:** In terms of reception/access it was found that the majority of individuals interviewed identified family health teams as a regular source of health care for children (77.6%). Those that reported a degree of affiliation of 1 and 2 had an 89% lower chance of seeking family health care than those who reported a degree of affiliation of 4 ( $p=0.000$ ). Those that were designated to receive family health care had an 18.15 times greater chance of accessing such health care than those who chose their health service. Sick children were 64% less likely to seek treatment from the Family Health Care Strategy in relation to healthy children. Social Classes D/E had a 10.20 times higher chance of using Family Health Care, followed by Class C, which had a 6.11 times higher chance than Class A.

**Conclusions:** There was no significant difference between reception/access to family health care in terms of the type of organization of the service. In conclusion, the present study found that the social conditions of families most affected reception/access to family health care.

**Descriptors:** reception, access to health services; evaluation of health services; family health; children.

<sup>a</sup> lilianeribeiro@hotmail.com  
<sup>b</sup> reginalunardi@hotmail.com  
<sup>c</sup> mlramosjorge@gmail.com  
<sup>d</sup> thamaracampos@yahoo.com  
<sup>e</sup> valeria@hotmail.com

123

### LONELINESS AND DEPRESSION IN THE INSTITUTIONALIZED ELDERLY

Maria Ribeiro<sup>1,a</sup>, Cristiana Rodrigues<sup>11</sup>, Cláudia Gonçalves<sup>11</sup>, Vanessa Sousa<sup>11</sup>

<sup>1</sup>*Centro de Estudos Transdisciplinares para o Desenvolvimento. Universidade de Trás-os-Montes e Alto Douro. Unidade de desenvolvimento do interior. Instituto Politécnico da Guarda. Instituto Politécnico de Bragança. Portugal*

<sup>11</sup>*Escola Superior de Saúde. Instituto Politécnico de Bragança. Bragança, Portugal*

**Introduction:** Institutionalized elderly people often experience feelings of depression and loneliness. However, there are strategies to combat these problems allowing a better quality of life.

**Objective:** To know the feelings of the elderly in relation to their life; To determine the degree of depression; To verify if loneliness is associated with depression.

**Methods:** A cross-sectional, quantitative, observational and analytical study was developed. A questionnaire was developed containing socio demographic questions, the Geriatric Depression Scale and the UCLA Loneliness Scale. A sample of 62 elders (40 women e 22 menaged between 40 and 99 years) that were institutionalized at the Santa Casa de Misericórdia de Vinhais was collected. SPSS 21.0 was used to compute descriptive statistics and Spearman correlation test.

**Results:** It was found that 46.8% of respondents had moderate depression and 45.2% had severe depression. There was no evidence of minor depression among elders. The Spearman correlation test show that there is a significant correlation between the Depression and Loneliness ( $\rho=0,472$ ), this means that the correlation is positive and moderate.

**Conclusions:** Institutionalized elderly presented moderate and severe depression levels. Depression is, significantly, associated with loneliness. The results highlight the need to adopt new strategies for healthy aging, specifically, strategies to decrease the loneliness of the elderly.

**Descriptors:** Loneliness; Depression; Institutionalized elderly; Northeast; Portugal.

124

### EFFECTIVENESS OF EDUCATIONAL TOY IN HAND HYGIENE IN CHILDREN OF A PUBLIC SCHOOL

Almira A. Santos<sup>1,a</sup>, Eliane M.C. Warren<sup>11,b</sup>, Ana M. A. Bomfim<sup>1</sup>, Paulo G. A. Calado<sup>1</sup>, Geraldo M. Teixeira<sup>1</sup>

<sup>1</sup>*Universidade Estadual de Ciências da Saúde de Alagoas. Alagoas, Brasil*

<sup>11</sup>*Health education, Games & Books. Brasil*

**Introduction:** Parasitic diseases are relevant because they produce organic deficit in children, besides affecting their normal development. Simple measures such as washing hands and raw foods, have been effective in fighting infections.

**Objective:** The research aims to assess the effectiveness of an educational toy as a teaching-learning strategy in children 06 to 12 years of age, giving emphasis to changes in habits in schoolchildren.

**Methods:** Explanatory research, relying on the skills assessment, using the model “OSCE” (Objective Structured Clinical Examination) which has as its basic principles the observation of student performance on specific tasks. The OSCE was structured with two scenarios, a reproduction of a bathroom and of a kitchen. 91 students participated in the first phase of this investigation, 62 of which repeated the second phase. The educational resource used in the survey consisted of a doll wearing a backpack with a booklet containing information on how and when to wash their hands.

**Results:** With regards to handwashing at mealtimes, of the 62 subjects assessed 12.90% washed their hands prior to application of the educational tool and 93.55% after application of the educational tool, 9.68% washed their hands after using the bathroom, prior to the application of the tool and 85.48% after its application.

**Conclusions:** It is concluded therefore, that the use of the educational doll was effective for acquiring new behavior concerning hand hygiene before meals and after using the bathroom, promoting behavioral changes interfering directly in the quality of life and promoting health, preventing the enteroparasitoses infestations.

**Descriptors:** Health education; Educational tool; Teaching-learning; Health promotion; Enteroparasitosis.

<sup>a</sup> almira\_alves@yahoo.com.br

<sup>b</sup> elainecwarren@yahoo.com

<sup>c</sup> anamarlusia@yahoo.com.br

<sup>d</sup> gustavo-calado@hotmail.com

<sup>e</sup> magellafisio@yahoo.com.br

125

### HEALTH, SPEECH-LANGUAGE THERAPY AND HEALTH EDUCATION: (RE)VIEW INDIRECT INTERVENTION

Catarina Domingues<sup>1,a</sup>, Isabel Amaral<sup>1,b</sup>

<sup>1</sup>*Instituto de Saúde Pública da Universidade do Porto. Porto, Portugal*

<sup>2</sup>*Escola Superior de Saúde do Instituto Politécnico de Setúbal. Setúbal, Portugal*

**Introduction:** Health, as a “complete state of mental, social and physical well being, and not just the absence of diseases” (WHO, 1946), requires a multi differentiated action from the society, so that, in an informed, conscient and sustainable way, through time, it will acquire and/or keep quality of life. As an indirect intervention, Health Education, as a tool to develop skills to healthy choices, complements the results of the direct Intervention, involving the several partners in the therapeutic success.

**Objective:** Analyze the work of Health Education developed in Portugal by Speech and Language Therapists.

**Methods:** We interviewed 24 Speech Language Therapists. Interviews were content analysed and results can be grouped in four themes: i) Training; ii) Professional experience; iii) Health; iv) Indirect intervention and Health Education.

**Results:** Participants develop actions that fit in Health Education, such as: sharing verbal and written orientations, working with a team and doing activities to sensibelize and inform the community. These actions are facilitated mainly by the right skills and knowledge of the professionals, while the lack of human and material resources are considered the major barriers. Most participants assume his/her contribute to Public Health, relating Indirect Intervention to Health Education.

**Conclusions:** This study demonstrates that Health Education is part of the work of Speech and Language Therapists, whose recognize their role as educators for health.

**Descriptors:** Health, Speech and Language Therapist, Health Education, Indirect intervention.

126

### EFFECTS OF A PHYSICAL ACTIVITY PROGRAM IN THE WORKPLACE: A SANITATION COMPANY CASE STUDY

Pedro G. Morouço<sup>1,II,a</sup>, Dorvalina R. Silva<sup>I</sup>, Fábio S. Dallot<sup>II</sup>, & Vera Ferrinho<sup>III</sup>

<sup>I</sup>*Centro para o Desenvolvimento Rápido e Sustentado do Produto. Instituto Politécnico de Leiria. Leiria, Portugal*

<sup>II</sup>*Escola superior de educação e ciências sociais. Instituto Politécnico de Leiria. Leiria, Portugal*

<sup>III</sup>*Saneamento Integrado dos Municípios do Lis Sa. Leiria, Portugal*

**Introduction:** Studies over workplace physical activity (WPA) programs suggest a number of important advantages for sponsoring corporations. WPA consists in physical exercises carried out in the workplace, aiming to enhance a correct posture and to reduce the strain of repetitive movements. Plus, it also induces a psychological stress reduction and improves the workers quality of life.

**Objective:** The aim of the present study was to analyze possible benefits induced by a WPA intervention in sanitation company employees.

**Methods:** Twenty-seven males with active working (e.g., maintenance and operation) were tested before and after 4 weeks of a 30 min daily session (at the beginning of the day with musculature warm-up and preparation for the working activities).

**Results:** No differences were observed in body mass, but were noticed in improvement of shoulder range of motion ( $\Delta=+2.18\pm 0.15\text{cm}$ ,  $p=0.004$ ), flexibility of the hamstrings muscles and lower back ( $\Delta=+3.18\pm 0.76\text{cm}$ ,  $p=0.004$ ), and hand grip strength ( $\Delta=+2.71\pm 0.86$ ,  $p=0.015$ ).

**Conclusions:** Results confirmed that there was an increase in functional abilities of the employers. A workplace physical activity 30 min session, on a daily basis, may reduce the risk of injury, particularly when its focus is to prepare for the worker activities. Companies should include workplace physical activity programs aiming to improve functionality of their workers.

**Descriptors:** exercise; range of motion; flexibility; strength.

<sup>a</sup> catarinaisabel88@hotmail.com

<sup>b</sup> isabel.maria.amaral@gmail.com

<sup>a</sup> pedro.morouco@ipleiria.pt



127

### PROJECTS OF HEALTH EDUCATION IN SCHOOL: FROM EVALUATION TO PRACTICE

Maria Leonor da Costa Dias<sup>a</sup>

*Didática e Formação. Ramo Avaliação. Agrupamento de Escolas Viseu Norte. Viseu, Portugal*

**Introduction:** The analysis of the implementation process of Health Education in the Portuguese school reality should involve assessment procedures that contribute to the optimization of qualitative interventions.

**Objective:** In the light of this assumption, with this communication we have the major goal of disseminating the main results and conclusions of the qualitative research entitled “School, Health and Society: Evaluation Studies of Health Education Projects”, that we have carried out.

**Methods:** The study focused on five Health Education Projects (HEP) in progress during the academic year 2009/2010. The evaluation has been founded in a démarche de référentialisation, following Figari (1996). Therefore, an Evaluation Framework has been elaborated with the purpose of characterizing reference practices in what concerns the process of constructing a HEP, considering the principles of the Health Promoting Schools (IUHPE, 2009; Navarro, 1999).

**Results:** The five HEP showed reference practices in its dynamics. However, only one project registered the quality criteria defined for a “good” project. Based on the literature and the data collected we prepared the document “Reference practices in HEP- Guide the implementation in schools” constituting an added value in the implementation of HEP.

**Conclusions:** The study demonstrates quality of HEP, which were implemented. Thus, independently of the political and economic decisions that the Ministry of Education might take, it is clear thinking that the HEP “must stay” strategically placed in schools, helping to manage the uncertainty factors of a turbulent context of contemporary society, and to find solutions to the integral formation of our teenagers.

**Descriptors:** Health Education Projects; Evaluation; Reference practices.

128

### MOST SIGNIFICANT SOCIALIZATION AGENTS IN ADOLESCENT SEXUALITY

Ana Certo<sup>l,a</sup>, Manuel Alberto Morais Brás<sup>ll,b</sup>, Ana Galvão<sup>lll,c</sup>

*<sup>l</sup>Instituto Politécnico de Bragança. Bragança, Portugal*

*<sup>ll</sup>Departamento das Ciências de Enfermagem. Instituto Politécnico de Bragança. Bragança, Portugal; Núcleo de Investigação e Intervenção no Idoso. Porto, Portugal*

*<sup>lll</sup>Departamento das Ciências Sociais e Gerontologia. Instituto Politécnico de Bragança. Bragança, Portugal; Núcleo de Investigação e Intervenção no Idoso. Porto, Portugal*

**Introduction:** The teenage years are a stage of human progress which is the transition from childhood to adulthood. This causes in the young a set of turbulences, described as a moment of grief caused by the disappearance of childhood and the ritual of entry into adulthood. It means a period of discoveries of their own limits and questioning of values. So, it's a time of learning and ruptures, a stage characterized by the need for social integration, the search for self-affirmation and individual independence and sexual definition (Silva & Mattos, 2004). The teenager, in the process of evolution, faces a whirl of feelings in an intense and very incongruent manner (Nasio, 2011). Sex education is a process that determines the structure and maturation of the personality of the individual, which depends on the culture in which it is inserted.

**Objective:** Identify nurses' opinion in the context of primary health care on the most significant agent of socialization in adolescent sexuality.

**Methods:** descriptive, transverse and quantitative study. A questionnaire was administered to a sample of 1735 nurses from various Portuguese Health Centers.

**Results and Conclusions:** Nurses reported that the most important agent of socialization in adolescent sex roles is the family (37,4%), followed by the peer group (34.2%). Chi-square ( $P < 0.01$ ), we conclude that the most important agent of socialization in adolescent sexual roles is not significantly independent of age, marital status, place of residence, qualifications, specific training to deal with adolescents about sexuality and by nurses.

**Descriptors:** Adolescent; Sexuality; Sexual Education; Socialization Agent; Primary Health Care.

<sup>a</sup> nono10@sapo.pt

<sup>a</sup> catarinacerto@hotmail.com

<sup>b</sup> mambras@gmail.com

<sup>c</sup> anagalvao@ipb.pt

129

**SYMPTOMS AND DIAGNOSIS OF RESPIRATORY DISEASE IN ELDERLY PEOPLE - GERIA STUDY\***Teresa Palmeiro<sup>1,a</sup>, Iolanda Caires<sup>1,b</sup>, Pedro Martins<sup>1,II,c</sup>, Ana Mendes<sup>III,d</sup>, Amália Botelho<sup>1,e</sup>, Nuno Neuparth<sup>1,II,f</sup><sup>1</sup>*Centro de estudos das doenças crônicas. Departamento de Fisiopatologia. Faculdade de Ciências Médicas. Universidade Nova de Lisboa. Lisboa, Portugal*<sup>II</sup>*Serviço de Imunoalergologia. Hospital de Dona Estefânia. Centro Hospitalar de Lisboa Central. Lisboa, Portugal*<sup>III</sup>*Instituto Nacional de Saúde Dr. Ricardo Jorge. Porto, Portugal***Introduction:** Chronic respiratory diseases (CRD) are prevalent worldwide, even though CRD are not properly studied on the elderly. Moreover aging is considered a risk factor for poor perception of symptoms.**Objective:** To assess prevalence of respiratory symptoms and known diagnosis of respiratory disease in elderly people living in nursing homes in Lisbon and Oporto.**Methods:** Within the Phase I of the GERIA study 53 elderly care centers (ECC) – 33 from Lisbon and 20 from Oporto – were selected through proportional stratified random sampling. From September 2012 to April 2013 all the elderly from the selected ECC were invited to participate in the study. After informed consent, a Portuguese version of the BOLD questionnaire was administered by an interviewer. Clinical files from the participants were reviewed in order to collect information about CRD. A descriptive analysis of the data was performed.**Results:** 931 out of 2,110 elderly participated in the study (79% were female and the mean age was 84.1±7.2 years). Respiratory symptoms were referred by 21% of respondents, of which 55% had no diagnosis of respiratory disease. According to the clinical files, 20% of the elderly had registration a respiratory disease. These elderly reported coughing, sputum and wheezing in the last 12 months only in 33%, 30% and 22% respectively.**Conclusions:** These results show a possible underdiagnosis of respiratory diseases in elderly people that emphasize the importance of diagnosis and follow-up of respiratory disease in elderly people, particularly residents in ECC. Use of pulmonary function tests could fulfill this gap.**Descriptors:** Elderly; respiratory symptoms; respiratory diseases.

\*Granted by FCT – Project GERIA PTDC/SAU-SAP/116563/2010.

<sup>a</sup> teresa.palmeiro@fcm.unl.pt<sup>b</sup> iolanda.aires@fcm.unl.pt<sup>c</sup> pmartinsalergo@gmail.com<sup>d</sup> asesteva@gmail.com<sup>e</sup> amalia.botelho@fcm.unl.pt<sup>f</sup> nuno.neuparth@fcm.unl.pt

130

**MARKERS OF VULNERABILITY FOR BULIMIA AND ANOREXIA: PERCEPTIONS OF HEALTH PROFESSIONAL**Nathalia Ribeiro Pinho de Sousa<sup>1,a</sup>, Francisco Rafael de Araújo Rodrigues<sup>II,b</sup>, Mônica Taynara Muniz Ferreira<sup>1,c</sup>, Letícia Ricci Mendes<sup>1,d</sup>, Sílvia Christine Pinto Martins<sup>1,d</sup><sup>1</sup>*Universidade Federal do Ceará. Fortaleza, Brasil*<sup>II</sup>*Instituto de Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto, Portugal***Introduction:** The anorexia and bulimia are eating disorders around five time more common in young adults. It is necessary an approach congruent with demands (biological, cultural, social and psychological) of people living with eating disorders.**Objective:** Identify the markers of vulnerability for Bulimia and Anorexia, from the perception of health professionals.**Methods:** The study is descriptive and exploratory. It was conducted in a Center to Eating Disorders in Fortaleza, Ceará, Brazil. We did no-structured interviews, with 12 health professionals (dietitians and psychologists), in accordance with the criterion of theoretical sampling. The ethical principles were respected. The speeches were submitted to content analysis.**Results:** The family conflicts and sexual conflicts, the low self-esteem and the stress in job were identified as antecedents to illness. The stereotype and the beauty concept, favor the rejection of self-image and non-acceptance the eating disorder symptoms. These are most frequent obstacles to improving the health condition of these people. The difficulties in establishing empathy and trust with the health team, tends to increase the risk of non-compliance to treatment.**Conclusions:** The social influences are promoters negative behaviors to these diseases. The instrumental support of the multidisciplinary team is essential for social cohesion in the care process and better adherence to therapeutic regimen.**Descriptors:** Bulimia; Anorexia; Feeding behavior.<sup>a</sup> nathaliaribeiro@yahoo.com.br<sup>b</sup> rafaelrodrigues.rfl@gmail.com<sup>c</sup> taynara\_mf@yahoo.com.br<sup>d</sup> chris\_scpm@hotmail.com<sup>e</sup> riccileticia@hotmail.com

131

### PREVENTION OF PATHOLOGICAL ONLINE GAMBLING IN ADOLESCENTS

Maria José Cao Torija<sup>a</sup>, Maria José Castro Alija<sup>b</sup>, José Mairia Jiménez Pérez<sup>c</sup>

*Facultad Enfermería de Valladolid. Valladolid, Spain*

**Introduction:** Gambling and online gambling have risen sharply in recent years and more so in the adolescent population. In 2012 over 1 million online players in Spain, with an annual cost between 500 and 600 euros were recorded. In Spain there are 44 companies online that offer different types of games, representing 83% of the total. The impact of gambling addiction manifests with serious social and health problems.

**Objective:** Design a program of health education in order to prevent online gaming addiction among adolescents, and for them to identify risky behaviors.

**Methods:** Planning a program of health education educational structured in 4 sessions of 50 minutes to 20 adolescents aged 15-17 in a district of Valladolid upper-middle class who were to conduct an initial assessment in which identify adolescents at risk for pathological gambler, and a final evaluation will test the effect of the program.

**Results:** Planning education program structured in 4 sessions, each in which the technique is described: Brainstorming. Current status of online gambling; Talk healthy habits I; Role playing; Talk healthy habits II.

**Conclusions:** The application of a health program in adolescents can avoid in the future pathological gambling and associated problems. With the initial and final program evaluation people at risk and the effectiveness of the program will be identified.

**Descriptors:** Program; health education; gambling; adolescent; online game.

<sup>a</sup> mjcaotorija@gmail.com

<sup>b</sup> mjcasalija@gmail.com

<sup>c</sup> jose.m.j.p@hotmail.com

132

### RESPIRATORY SYMPTOMS IN ELDERLY WITH DEPRESSION AND/OR DEMENTIA - GERIA STUDY\*

Iolanda Caires<sup>1,a</sup>, Teresa Palmeiro<sup>1,b</sup>, Pedro Martins<sup>1,II,c</sup>, Ana Mendes<sup>III,d</sup>, Amália Botelho<sup>1,e</sup>, Nuno Neuparth<sup>1,II,f</sup>

*<sup>I</sup>Departamento de Fisiopatologia. Faculdade de Ciências Médicas. Universidade Nova de Lisboa. Lisboa, Portugal*

*<sup>II</sup>Serviço de Imunoalergologia. Hospital de Dona Estefânia. Centro Hospitalar de Lisboa Central. Lisboa, Portugal*

*<sup>III</sup>Instituto Nacional de Saúde Dr. Ricardo Jorge. Porto, Portugal*

**Introduction:** Studies describe changes of emotional state in patients with chronic diseases. It is known that depression tends to increase with age and is a risk factor for dementia. This association makes the elderly with respiratory disease more vulnerable.

**Objective:** To characterize respiratory symptoms in elderly with depression and/or dementia living in elderly care centers (ECC) in Lisbon and Oporto.

**Methods:** Within the Phase I of the GERIA study 53 ECC were randomly selected. From September 2012 to April 2013, we applied a Portuguese version of respiratory BOLD questionnaire, MMS to assess dementia and GDS-15 to assess depressive state. A descriptive analysis of the data was performed.

**Results:** 931 out of 2110 elderly participated in the study (79% were female and the mean age was 84.1±7.2 years). Depressive states were found in 59% of the elderly, dementia state in 61% and both in 39%. Only 18% showed no change in these states. Cough was the most common respiratory symptom, reported in 69% of residents with depression, in 67% with dementia, in 48% who had depression plus dementia and in 11% without any mental changes. Elderly with changes in both mental states reported coughing, sputum and wheezing in the last 12 months in 25%, 17% and 16% respectively.

**Conclusions:** In general, residents of ECC with depressive and dementia changes had a considerable prevalence of respiratory symptoms. Cough was the most common respiratory symptom. These results show the importance of respiratory symptoms for the diagnosis and monitoring of elderly people with comorbidities.

**Descriptors:** Elderly; respiratory symptoms; dementia; depression; comorbidity.

\*Granted by FCT – Project GERIA PTDC/SAU-SAP/116563/2010.

<sup>a</sup> iolanda.caires@fcm.unl.pt

<sup>b</sup> teresa.palmeiro@fcm.unl.pt

<sup>c</sup> pmartinsalergo@gmail.com

<sup>d</sup> asestevao@gmail.com

<sup>e</sup> amalia.botelho@fcm.unl.pt

<sup>f</sup> nuno.neuparth@fcm.unl.pt

133

### THE INFLUENCE OF OBSTETRIC FACTORS IN THE PREVALENCE OF BREASTFEEDING: WEANING REASONS

Dolores Sardo<sup>a</sup>*Escola Superior de Enfermagem do Porto. Porto, Portugal*

**Introduction:** WHO recommends exclusive breastfeeding (EBF) for the first six months of life to optimize the health and the infants' development. Portugal, Breastfeeding Report 2012 indicates: 65.2% do EBF to the discharge and 26% do during the first 4 months. To understand why mothers stop breastfeeding we develop this study in North of Portugal.

**Objective:** To identify the obstetric factors associated with weaning and to relate them with the reasons for not breastfeeding after 4 months.

**Methods:** Quantitative, cross-correlated study. Non-probability, convenience sample (n=286). Data collection using a structured interview self-report at 4 months in postpartum.

**Results:** We have obtained: 79.7% primiparous, 45.5% had normal delivery and 20.3% had previous breastfeeding experience. All infants were breastfed in maternity. The weaning rate was 14% and 32.2% respectively in 1st week and 4th month of child' life. 74.8% reported to have support during this experience. 57.3% had breastfeeding' difficulties reported to mothers (fatigue, shallow nipples), child (not want to breastfeed) and milk production. The reasons for weaning were related with: production and quality of milk (48.9%), difficulties in handle and sucking baby (23.9%), problems with breast and nipple (17.3%) and with mother' conditions (9.7%). Analyzing the obstetric variables (mother' problems, number of children, weeks gestation, type birth, sex and weight of newborn) only significant association was found between weeks gestation and weaning at four months ( $X^2=13.971$ ;  $p=0.003$ ).

**Conclusions:** Results enhance more intervention of health professionals to support breastfeeding. We need more programs to demystify the women's beliefs and more participation of family/community.

**Descriptors:** Breastfeeding; Weaning; Factors.

<sup>a</sup> dolores.sardo@gmail.com

134

### 3RD CYCLE STUDENTS' KNOWLEDGE ON DATING VIOLENCE: EFFECTIVENESS OF AN EDUCATION SESSION

Ana Soares<sup>1,a</sup>, Célia Ferreira<sup>1,b</sup>, Sabrina Couto<sup>1,c</sup>, Tânia Cassiano<sup>1,d</sup>, Lília Stahi<sup>1,f</sup>, Clementina Gordo<sup>1,g</sup>, Helena Catarino<sup>1,h</sup>*<sup>1</sup>Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal**<sup>11</sup>Unidade de Investigação em Saúde. Leiria, Portugal*

**Introduction:** Many teenagers begin their loving relationships with expectations of love, friendship, sex and happiness, however for some, may be a met with violence or aggression (Oliveira, 2004).

**Objective:** This research aims to assess students' knowledge on dating violence; to evaluate the students' practices and behaviours in dating; to identify the students' beliefs and myths about love; to evaluate the effectiveness of a health education session concerning violence on dating.

**Methods:** This is a quantitative, quasi-experimental, pre-test post-test study, without control group, applied on a convenience sample of 74 students. Two questionnaires compose by the Scale of the Myths on Love (Pérez et al, 2007) validated for the Portuguese population by Catarino et al (2010) and the Scales of Practices and Behaviours on Violence and Knowledge about Dating Violence (Dixe et al, 2010) were applied (before and after the education session).

**Results:** Most students do not present practices and behaviours of violence on dating (68%). After the session, on average, the students referred best practices and behaviours about violence in the dating. Also, they presented a proactive attitude towards violence on dating. The students' knowledge increased ( $M1=35.5\pm6.5$ ;  $M2=40.4\pm5.5$ ), and there were statistically significant differences between the level of knowledge before and after the session ( $Z=-6.969$ ;  $p\leq0.05$ ).

**Conclusions:** Health education is an important tool for prevention and health promotion, which should arise in people's attitude to think and rethink their habits and lifestyle and lead them to modify their environments to reduce their vulnerability and improve their quality of life.

**Descriptors:** Adolescent; knowledge; violence; effectiveness; education.

<sup>a</sup> aninha.sms@hotmail.com

<sup>b</sup> celiacnferreira@gmail.com

<sup>c</sup> sabrimrcouto@gmail.com

<sup>d</sup> taniafaisca18@hotmail.com

<sup>e</sup> lilia.stahi@gmail.com

<sup>f</sup> clementina.gordo@ipleiria.pt

<sup>h</sup> helena.catarino@ipleiria.pt

135

### FOOD INTAKE OF PREGNANT ADOLESCENTS ATTENDED AT A HOSPITAL-SCHOOL IN COLOMBO, PR, BRAZIL

Gisele P. Raymundo<sup>a</sup>, Juliana Caputo<sup>b</sup>*Pontifícia Universidade Católica do Paraná. Brazil*

**Introduction:** Adolescent pregnancy is considered a risk condition for several reasons. The young woman should have an adequate diet for her own development and for the healthy growth of her offspring.

**Objective:** Since food intake during adolescence and during pregnancy is highly relevant, current research delineates the social and economical situation, schooling, food intake and diet quality of adolescent pregnant women attended at a hospital-school in Colombo, PR, Brazil.

**Methods:** The medical records of 39 patients who participated in the Health Promotion for Pregnant Adolescents project of the Health Alliance were evaluated. The project involved the Pharmacy, Psychology, Nursing, Social Service, Medicine and Nutrition Courses.

**Results:** Results showed that 46% of pregnant adolescents were between 10 - 15 years old and 54% were between 16 and 19.9 years old. Most belonged to social class C and 23% and 77% had a high and junior school certificate, respectively. Diet proved to be nutritionally imbalanced since social and economical conditions impaired access to information. All pregnant adolescents were schooled by receiving information directions, educational leaflets and clinical orientations by professionals from the courses above.

**Conclusions:** Due to constant lack of proper diet, nutritional follow-up of the adolescents is required, especially during the pre-natal period so that satisfactory results may be obtained without impairing the teenagers' physical development.

**Descriptors:** Teen pregnancy; Nutritional profile during pregnancy; Food intake by pregnant young women.

136

### MOTHERS' PERCEPTION WITH REGARD TO CARE IN THE INTRODUCTION OF SUPPLEMENTARY FOOD

Gisele P. Raymundo<sup>a</sup>, Addressa Nardelli, Amanda K. Mello, Jeanine T. Carvalho*Pontifícia Universidade Católica do Paraná. Brazil*

**Introduction:** The World Health Organization recommends exclusive breast-feeding in the first six month of children's life. At this point, most breast-fed children reach a general and neurological development which make them capable of intaking different sort of food and thus complementary food should be supplied progressively.

**Objective:** Current research analyzes knowledge of puerperas on the introduction of supplementary food to breast-fed children.

**Methods:** Current exploratory and descriptive study features a sample of 51 puerperas hospitalized in a maternity hospital in Colombo, PR, Brazil. Inclusion criteria comprised women over 18 years old, without any obstetric complications, and with live-born offspring. Knowledge was evaluated by a questionnaire and data were submitted to statistical analysis. Research was approved by the Committee for Ethics of the PUC-PR, Brazil.

**Results:** 95.7% state that newly-born children should not quit breast-feeding after supplementary feeding. Most mothers would give a sort of mashed meal to their six-month-old children; after 12 months, they would start giving solid food and industrialized feedings. Further, 78.43% of the mothers had only an average idea on supplementary feeding. After the interview, the mothers were informed on the start of supplementary food and educational leaflets, prepared by the authors, were handed out.

**Conclusions:** Mothers have many doubts on supplementary feeding and health professionals should developed educational practices to inform them of the importance of healthy feeding.

**Descriptors:** Supplementary food; Food introduction to breast-fed children; Nutrition to breast-fed children; Food for breast-fed children.

<sup>a</sup> giselepr@terra.com.br<sup>b</sup> gpontaroli@yahoo.com.br<sup>a</sup> giselepr@terra.com.br

137

### PRENATAL HEALTH EDUCATION: THE NURSING ACTION IN BRAZILIAN COMMUNITY

Tiago de Sousa Barros<sup>1,a</sup>, Sofia de Moraes Arnaldo<sup>11,b</sup>, Sonia Samara Fonseca de Morais<sup>111,c</sup>, Elizian Braga Rodrigues Bernardo<sup>1111,d</sup>, Karine de Castro Bezerra<sup>11111,e</sup>, Jamilly Feitosa Torres<sup>11111,f</sup>, João Paulo Xavier Silva<sup>11111,g</sup>

<sup>1</sup>Universidade Federal de Pernambuco. Brazil

<sup>11</sup>Universita Sapienza di Roma, Italy

<sup>111</sup>Universidade Estadual do Ceará. Brazil

<sup>1111</sup>Universidade Federal do Ceará. Brazil

**Introduction:** Considering the importance of prenatal care for maternal and fetal health and based on both: reality of Women and Family Health Strategy (FHS) we noticed the need of to carry out a project that would allow interventions and educational activities focused on women, originated from detection of the main difficulties encountered in health education.

**Objective:** This study aimed to contribute in build a learning process to pregnant women inside a Brazilian community. It works by removing about doubts and curiosities during pregnancy, childbirth and postpartum through educational nursing interventions.

**Methods:** This is a descriptive study with qualitative approach, where were performed fieldworks. The study was conducted in the City of Juazeiro do Norte, CE, Brazil, from September 2013 to December 2013 with the participation of 12 pregnant women.

**Results:** The participants were interviewed about the difficulties and dilemmas for participate in health educational programs in health. Then, discussed the importance of prenatal consultations and participation in health education activities, which had cleared doubts and curiosities about all changes during the pregnancy, thus removing fears and tensions.

**Conclusions:** Were concluded that when the intervention in health education is developed in a dynamic and participatory manner which where the information exchanges occurs to be directed to that specific audience, it facilitates the participants learning process of participants and contributes to improves the greater community adherence to the future educational practices that may be future performed.

**Descriptors:** Nursing, Women's Health; Prenatal care; Health education; Family Health.

<sup>a</sup> tiago\_sousajn@yahoo.com.br

<sup>b</sup> sofia-jua@hotmail.com

<sup>c</sup> enfoniasamara@hotmail.com

<sup>d</sup> elizbernardo@hotmail.com

<sup>e</sup> karineufc@gmail.com

<sup>f</sup> jamilly.farma@hotmail.com

<sup>g</sup> jp-master17@hotmail.com

138

### LOVE & VIOLENCE ON DATING: PERSPECTIVE OF THE ADOLESCENTS

Helena Catarino<sup>a</sup>, Maria dos Anjos Dixe<sup>b</sup>

*Unidade de Investigação em Saúde. Escola Superior de Saúde. Instituto Politécnico de Leiria. Portugal*

**Introduction:** The violence in romantic relationships is not restricted to the relationship between adult and marriage, increasingly frequent acts of violence in adolescence and early romantic relationships among adolescents (Almeida, 2008).

**Objective:** This research aims to identify the adolescents' myths associated to romantic love and characterize their behaviours towards violence in dating.

**Methods:** This descriptive study was developed in a non-probabilistic convenience sample of 289 adolescents (52.2% of boys and 47.8% of girls) with an average 14.5 ( $\pm 7$ ) years. A questionnaire comprised by socio-demographic and dating questions and the Scales of "Behaviours in a situation of Violence" (Dixe et al, 2010) and "Myths Related to Love" (Catarino et al, 2011) was applied.

**Results:** Among the teenagers, 17% of them were dating ( $M=4.7$ ;  $\pm 7$  months) 2.8% report having been a victim of violence in dating and 20.1% of them report knowing a friend who has experienced dating violence situations. The data revealed that 26.6% of teens don't know how and who to ask for help, which is a lower ratio comparing the value (38%) pointed by the Networks Knowledge (2011). Mostly young people reveal proactive behaviours on situations of dating violence, because 75.8% believe, 90.7% advised and 88.9% help. Moreover, a minority criticized (10%) and did nothing (4.2%). Regarding the myths about love, on average, the highest levels of agreement are associated with romantic love and the lower are associated with violent behaviours.

**Conclusions:** These findings prove that the implementation of a peer education program can be a tool to address dating violence.

**Descriptors:** Adolescents; dating; violence; myths; behaviours.

<sup>a</sup> helena.catarino@ipleiria.pt

<sup>b</sup> maria.dixe@ipleiria.pt

139

**KNOWLEDGE TO INTERVENTION IN LIFESTYLES ON HOTEL WORKERS**

Isabel Silva, Clementina Morna, Otilia Freitas, Gregório Freitas

*Universidade da Madeira. Funchal, Portugal*

**Introduction:** The lifestyles affect the health of individuals and constitute themselves as candidates for control and modification. Know them subsidizes nursing interventions promoting health, especially in the work environment.

**Objective:** Describe the lifestyles of hotel workers; Diagnose and prioritize needs, plan-nursing interventions promoting healthy lifestyles.

**Methods:** We use the methodology of planning in health. For health diagnosis, we proceeded to a descriptive study on workers (194) of a hotel group in Madeira Island, Portugal. The data collected included sociodemographic questions and the application of the modified scale “Lifestyle FANTASTIC” ( $\alpha=0.69$  in validated for the Portuguese population by Anez, Kings and Petroski, 2008 release). The prioritization was developed taking into account the recommendations advocated by health and planned interventions were addressed to prioritized needs.

**Results:** The participants, mostly female gender (59%), with a median age of 42 showed the final score that points to health behaviours of very good (50.5%) and good (37.4%) level. However there was a need to plan interventions in priority areas such as exercise, nutrition and ergonomics since 46.9% of the population reveals low levels of physical activity, 64.1% report that it makes a balanced diet regularly and 55, 1% refers to the positions not usually apply the appropriate body to the tasks they perform.

**Conclusions:** Although the global score of lifestyles evidencing proper influence or many health benefits, the results also demonstrated the need to intervene in promoting physical activity, nutrition and ergonomics. Are ongoing interventions to meet the prioritized needs.

**Descriptors:** Hotel workers; Lifestyles; Interventions.

140

**DIAGNOSIS OF LIFESTYLES OF ADOLESCENTS IN MIDDLE SCHOOL**

Isabel Silva, Clementina Morna, Otilia Freitas, Gregório Freitas

*Universidade da Madeira. Funchal, Portugal*

**Introduction:** Health behaviors are the result of individual choices, influenced by social groups. During adolescence, a step of acquiring values, is established opportunities for modeling behaviors. The health education enables people to better manage and control their wellness.

**Objective:** to diagnose the lifestyles and implement interventions promoting healthy behaviors in adolescents.

**Methods:** A perspective of action research developed a descriptive study in a school in Madeira (Portugal) to attend the 5th and 6th year, by a questionnaire adapted from the “Health behavior in school-aged children” (WHO) after pretest. The population was 270 students.

**Results:** 31.4% is lower than the brushing habits recommended; 71.8% changes the brush teeth upper 3 months; 82% do not use or use dental floss sometimes; daily intake: 32.3% do 3 meals; 35.3% consumed refrigerants once or more times; 51.3% did not consume raw vegetables; 60.9% did not consume cooked vegetables; 28.1% do not eat fruit; 42% do not eat meat, fish or eggs; 58.5% did not consume legumes; 31.4% and 25.6% consume sweets pastry one or more times; 25.2% consumed fried salted or one or more times; 23.6% drink coffee once or more times; 11% exceed over 5 hours of daily television and 20% occupies 2-3 hours with electronic games; Consumption of psychoactive substances: 3% tobacco; 6% alcohol; 1% bloom or cannabis and 7% was incited to drug.

**Conclusions:** the results express the priorities for action in this context. In partnership, specific objectives were outlined and designed interventions to be implemented in the next school year.

**Descriptors:** Health behaviors; Adolescents; Health promotion.

141

### RISK ASSESSMENT TO HYPERTENSION IN A WORKING POPULATION IN THE CITY OF SÃO PAULO

Susi Mary de Souza Fernandes<sup>a</sup>, Edeli Simioni de Abreu<sup>b</sup>, Eder Pincinato<sup>c</sup>, Erico Caperutto<sup>d</sup>, Fabiano Fonseca<sup>e</sup>, Magda Medhat Pechliye<sup>f</sup>, Sonia Cavalcanti Corrêa<sup>g</sup>

*Centro de Ciências Biológicas e da Saúde. Universidade Presbiteriana Mackenzie. São Paulo, Brazil*

**Introduction:** Hypertension is a multifactorial clinical condition considered risk factor for complications in adult health. In most cases it is asymptomatic and diagnosis is neglected. Actions aimed at the early identification of hypertension and adherence to treatment are important for the prevention of chronic diseases.

**Objective:** Risks assessment to hypertension in employees of an educational institution in the city of Sao Paulo.

**Methods:** Cross-sectional study which proposes a multi-disciplinary assessment of 10 physical predictors of hypertension. Data collected included: age, family history of diseases, cigarette smoking, alcohol consumption, body mass index, waist circumference, blood pressure, diet, a 6-minute walk test; International Physical Activity Questionnaire (IPAQ). The presence from 06-10 of the evaluated items were characterized as high risk, 02-05 medium risk, 0-01 low risk. The participants were oriented and informed about the risk factors found.

**Results:** 124 participants were evaluated. Only 41 (33%) completed all stages, 60.98% female and 39.02% male, mean age 27.46 (±8). 12.2% (n=5) were categorized as high risk, 85.4% (n=35), medium risk and 2.4 % (n=1) low risk. None of the studied participants reported hypertension medical diagnosis. The most important factors influencing the risk were related to lifestyle.

**Conclusions:** The assessment was effective in the early identification of risk factors favoring the targeting of prevention hypertension. The continuity of the project should increase employee participation and control of these risk factors.

**Descriptors:** Health Education; Hypertension; Health Behavior; Workers.

<sup>a</sup> susifernandes@mackenzie.br

<sup>b</sup> edeli@mackenzie.br

<sup>c</sup> eder.pincinato@mackenzie.br

<sup>d</sup> erico.caperuto@mackenzie.br

<sup>e</sup> fabiano.silva@mackenzie.br

<sup>f</sup> magda.pechliye@mackenzie.br

<sup>g</sup> sonia.correa@mackenzie.br

142

### RISK ASSESSMENT FOR OCCUPATIONAL DISEASES ACCORDING TO THE INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH

Susi Mary de Souza Fernandes<sup>a</sup>, Denise Loureiro Vianna<sup>b</sup>, Janina Manzieri Prado<sup>c</sup>, Gisela Rosa Franco Salerno<sup>d</sup>, Étria Rodrigues<sup>e</sup>, Marcelo Fernandes<sup>f</sup>, Zodja Graciani<sup>g</sup>

*Centro de Ciências Biológicas e da Saúde. Universidade Presbiteriana Mackenzie. São Paulo, Brazil*

**Introduction:** Occupational Diseases are prevalent co morbidities in the working population. Multifactorial in origin a review that meets the biopsychosocial model proposed by WHO may set health strategies at different levels of care.

**Objective:** Develop a model of amplified assessment that corresponds to the domains proposed by CIF.

**Methods:** 33 employees from the administrative department of a private university in the city of São Paulo were evaluated in three stages for subsequent classification. To respond to the domain structure and function of the body of a questionnaire on sociodemographic and health conditions and the presence of pain and discomfort skeletal muscle was used. For the domain of activity and participation used the WHODAS 2.0. And to respond to the environment domain was rated the job through the Modified Checklist Couto.

**Results:** 33 subjects were evaluated (70% women and 30% men with mean age of 38 years) 50% of the subject reported mild discomfort in column (s760.1), 23% in upper limbs (s760.1) and 27% had no complaints. Most part of the participants were physical active and had no complaints in items related to body functions, daily life and practice activities. The workstations were considering barriers to the optimal work performance.

**Conclusions:** The amplified assessment allowed a reliable investigation of disabilities and disadvantages. Clinical findings have no impact in functions and participation, which justifies preventive strategies in the workstation.

**Descriptors:** Health Evaluation; International Classification of Functioning, Disability and Health; Occupational Diseases; Program of Risk Prevention on Working Environment.

<sup>a</sup> susifernandes@mackenzie.br

<sup>b</sup> denise.vianna@mackenzie.br

<sup>c</sup> janina.prado@mackenzie.br

<sup>d</sup> gisela.franco@mackenzie.br

<sup>e</sup> etria.rodrigues@mackenzie.br

<sup>f</sup> marcelo.fernandes@mackenzie.br

<sup>g</sup> zodja.graciani@mackenzie.br



143

### LONG-TERM EFFECTIVENESS OF HEALTH EDUCATION PROGRAM IN SECURITY GUARDS: A 12-MONTHS FOLLOW-UP STUDY

Susi Mary de Souza Fernandes<sup>a</sup>, Denise Loureiro Vianna<sup>b</sup>, Janina Manzieri Prado<sup>c</sup>, Gisela Rosa Franco Salerno<sup>d</sup>, Étria Rodrigues<sup>e</sup>, Marcelo Fernandes<sup>f</sup>, Zodja Graciani<sup>g</sup>

*Centro de Ciências Biológicas e da Saúde. Universidade Presbiteriana Mackenzie. São Paulo, Brazil*

**Introduction:** several healthy programs are proposed to improve workers health; however, they do not motivate them to adopt a lifestyle that encourages wellness, and a sense of personal responsibility for health.

**Objective:** To promote a sense of personal responsibility for health and encourage the adoption of a healthy lifestyle in security guards of an educational institution in Sao Paulo city.

**Methods:** follow-up study of 12 months, used a demographic questionnaire, general health and body posture adopted by REBA method Assessment Worksheet. Intervention consisted of a 2-week school-based postural education program (the subjects were oriented and encouraging to adopt postural changes during work activities and regular physical activity in the workplace) implemented by a physical therapist. At the end of the study, the participants were reassessed and training frequency was investigated by controlling the enrollment and attendance.

**Results:** 55 participants male, (36 mean age, body weight 70.5 kg, height 1.72 cm, and 6 years and 2 months in worker) adopt upright standing posture for 6 hours and 30 minutes per day. The REBA score changed from 81.9% to 90.2% ( $p=0.04$ ) for low risk classified as negligible 1.8% to 9.8% ( $p<0.01$ ) after the intervention. Physical activity increased from 40% to 63.6% at the end ( $p<0.01$ ) of the program.

**Conclusions:** The program was effective to develop a sense of personal responsibility for health and motivate a healthy lifestyle in security guards of an educational institution in the city of Sao Paulo.

**Descriptors:** Health Education; Health Behavior; Workers.

<sup>a</sup> susifernandes@mackenzie.br

<sup>b</sup> denise.vianna@mackenzie.br

<sup>c</sup> janina.prado@mackenzie.br

<sup>d</sup> gisela.franco@mackenzie.br

<sup>e</sup> etria.rodrigues@mackenzie.br

<sup>f</sup> marcelo.fernandes@mackenzie.br

<sup>g</sup> zodja.graciani@mackenzie.br

144

### SOCIODEMOGRAPHIC CHARACTERIZATION OF DIABETIC PATIENTS ASSISTED IN PRIMARY CARE

Eva Menino<sup>a</sup>, Maria dos Anjos Dixe<sup>b</sup>, Maria Clarisse Louro<sup>c</sup>

*Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

**Introduction:** It is essential to understand the sociodemographic characteristics and history of the onset of diabetes in diabetic patients, both for intervention or research purposes.

**Objective:** To characterize the demographic data and diabetes history of the diabetic monitored in primary health care during 2013, in 9 health units from a group of health centers (ACES) in Portugal.

**Methods:** Descriptive study with 129 users with diabetes interviewed during the routine diabetes appointments.

**Results:** The sample under study is composed by 49.6% males and 50.4% females, with an average age of 67.6 (SD=8.8). Most patients are married (79.5%) and have 4 years of education (primary school) or less (85.9%), among which 7.0% are illiterate or unable to read or write. Regarding the financial situation, most (58.3%) reported having enough for their needs. On average, men have presented diabetes for 9.9 years (SD=8.4) and women for 8.0 years (SD=6.4). The age of the patients when type 2 diabetes was diagnosed was on average 58.0 years old (SD=10.3) for men and 59.1 (SD=12) for women. The patients have been medicated with oral antidiabetic therapies, on average, for 8.5 years (SD=7.1).

**Conclusions:** Patients with type 2 diabetes treated at the ACES centers had a mean age of 67.6; were mostly female and had 4 years of schooling or less. Both genders had diabetes for over than 8 years, on average. With the present data, intervention projects can be drawn, particularly for specific groups.

**Descriptors:** public health; health education; diabetes mellitus; chronic disease; diagnosis.

<sup>a</sup> eva.guilherme@ipleiria.pt

<sup>b</sup> manjos.dixe@gmail.com

<sup>c</sup> clarisse.louro@ipleiria.pt

145

### HEALTH PROFILE OF DIABETICS ASSISTED IN PRIMARY CARE

Eva Menino<sup>a</sup>, Maria dos Anjos Dixe<sup>b</sup>, Maria Clarisse Louro<sup>c</sup>

*Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

**Introduction:** Patients with Diabetes mellitus type 2 generally develop relevant acute and chronic complications, both from individual and social point of views. Therefore, the metabolic control and management of these diseases are crucial for preventing further complications.

**Objective:** To characterize the health profile of type 2 diabetic patients assisted in primary care facilities, during 2013.

**Methods:** Simple descriptive study carried out with 97 diabetic of both genders, with a mean age of 67.6 (SD=8.9).

**Results:** A percentage of 54.7% patients reported no health problems other than diabetes. Conversely, osteoarticular and cardiovascular problems were the most reported by the respondents, who suffered from health problems, other than diabetes. Additionally, whereas 92.7% of the diabetics used oral antidiabetic therapy and only 7.3% used an association between insulin and oral antidiabetic therapy. Regarding the mean values and standard deviation (SD) of the anthropometric and analytical parameters the following results were obtained: systolic blood pressure -144 mmHg (SD=18.5), diastolic blood pressure -81 mmHg (SD=10.8); waist circumference -103 cm (SD=10.3); glycated hemoglobin -6.8 (SD=1.2), body mass index (BMI) -9.6 (SD=3.8).

**Conclusions:** The study reveals an unsatisfactory control of blood pressure, BMI and waist circumference, although glycated hemoglobin is, on average, within recommended limits. Hence, adequate strategies for metabolic control and self-management of the disease should be developed.

**Descriptors:** public health; adults; diabetes mellitus; disease management; health promotion.

<sup>a</sup> eva.guilherme@ipleiria.pt

<sup>b</sup> manjos.dixe@gmail.com

<sup>c</sup> clarisse.louro@ipleiria.pt

146

### PROCEDURE OF NURSING AND DENTISTRY IN THE INFANT CARE: A LITERATURE REVIEW

Cristiane Melo da Silva Santos<sup>1,a</sup>, Maria Lúcia do Carmo Cruz Robazzi<sup>11,b</sup>, Lenira Maria Wanderley dos Santos<sup>111,c</sup>, Márcia Teles de Oliveira Gouveia<sup>1111,d</sup>, Elainy Priscilla Bezerra Fidelis<sup>11111,e</sup>, Marília Alonso Piva da Silva<sup>111111,f</sup>

<sup>1</sup>Università degli Studi di Roma Tor Vergata. Rome, Italy

<sup>11</sup>Universidade de São Paulo. Brazil

<sup>111</sup>Escola de Enfermagem e Farmácia. Universidade Federal de Alagoas. Brazil

<sup>1111</sup>Universidade Federal de Pernambuco. Brazil

**Introduction:** The practice and duration of exclusive breastfeeding up to six months of life the infant is a exercise of close relationship between breastfeeding and the nutritional, immunological and the stomatognathic system of child development. Further, stimulates physical and psychological interaction between mother and child. The breast milk contains immunological substances that protect infants against bacterial infections of the gastrointestinal system, polio, allergies, obesity and certain metabolic diseases. The presence of breastfeeding increases the chance of the child properly develop their oral skills, whereas with bottle feeding, decreases the number of sucks having not only a reduction of motor stimulation, as well as a greater likelihood of developing oral diseases such as early childhood caries.

**Objective:** Analyze the existing scientific literature on the importance and intervention of nursing and dentistry in breastfeeding in public health.

**Methods:** Literature review on the databases of Lilacs, SciELO and PubMed, between 2004-2013, from the following descriptors: breastfeeding, infant, public health and stomatognathic system.

**Results:** Were found 46 articles, but 17 composed the sample. The selected articles showed that breastfeeding is a factor of great importance in the stomatognathic and nutritional maturity of the child.

**Conclusions:** Having the absence of breastfeeding, the chances of having physiological changes in normal motor development of infants are increased significantly.

**Descriptors:** Breastfeeding, Infant; Public Health; stomatognathic system.

<sup>a</sup> cristianemeloss@gmail.com

<sup>b</sup> avmlccr@eerp.usp

<sup>c</sup> lenirawanderley@gmail.com

<sup>d</sup> marcia06@gmail.com

<sup>e</sup> elainy\_fidelis16@hotmail.com

<sup>f</sup> marilia\_piva@hotmail.com

147

### BODY COMPOSITION ASSESSMENT IN LEIRIA'S 7TH GRADERS – A 5 YEAR COMPARISON (2009-2013)

Luís Coelho<sup>1,a</sup>, Nuno Amaro<sup>1,b</sup>, Rui Matos<sup>1,c</sup>, Nuno Santos<sup>1,d</sup>, Catarina Leitão<sup>1,e</sup>, Pedro Morouço<sup>1,f</sup>, João Cruz<sup>1,g</sup>

<sup>1</sup>Research Centre for Human Movement Sciences. Instituto Politécnico de Leiria. Portugal

<sup>11</sup>Investigation Centre in Life Quality. Instituto Politécnico de Leiria. Portugal

<sup>111</sup>Centre for Rapid and Sustainable Product Development. Instituto Politécnico de Leiria. Portugal

**Introduction:** The assessment of body composition in children has taken on greater significance because of the need to study the prevalence of obesity in children and youth and changes over time in a given population.

**Objective:** The aim of this study was to evaluate the variation over time of body composition in young adolescents, and compare results between sexes.

**Methods:** A total of 654 7th graders were monitored over a 5 year period in Leiria. Height (H), weight (W), fat mass % (FM) and waist circumference (WC) were accessed.

**Results:** Overall, no statistically significant differences were found for H, FM and WC averages per year. Statistically significant differences were found for W, between the years 2010 and 2013 ( $p=0.006$ ) (2009=50.5kg±12.7; 2010=53.0kg±11.8; 2011=51.6kg±10.7; 2012=49.5kg±10.3; 2013=48.1kg±8.4). Filtered by sex, statistically significant differences were found for W (2009=50.0kg±14.5; 2010=53.7kg±13.1; 2011=53.4kg±10.7; 2012=50.8kg±12.4; 2013=48.8kg±8.5;  $p=0.032$ ) and FM (2009=14.1%±8.0; 2010=16.9%±7.8; 2011=15.7%±7.6; 2012=15.4%±7.9; 2013=23.5%±6.6;  $p=0.000$ ) for boys. Girls' W (2009=51.0kg±10.2; 2010=52.0kg±9.9; 2011=49.4kg±10.3; 2012=47.9kg±7.0; 2013=47.0kg±8.2;  $p=0.031$ ) and FM (2009=23.9%±6.9; 2010=25.1%±6.7; 2011=22.6%±8.7; 2012=22.5%±6.3; 2013=14.2%±6.2;  $p=0.000$ ) were significantly different.

**Conclusions:** Body composition in these specific population has maintained rather stable, with very similar results for the last 5 year period, except for 2013. However, if data is computed without sex differentiation, wrong interpretations are made. We didn't find significant differences for FM when all data were put together, but when sex is taken into account, for 2013, we could see boys being fatter and the opposite for girls, with statistically significant differences.

**Descriptors:** Body composition; Fat mass; Weight; Waist circumference; Children's health.

<sup>a</sup> coelho@ipleiria.pt

<sup>b</sup> nuno.amaro@ipleiria.pt

<sup>c</sup> rui.matos@ipleiria.pt

<sup>d</sup> nuno.santos@ipleiria.pt

<sup>e</sup> catarina.leitao@ipleiria.pt

<sup>f</sup> pedro.morouco@ipleiria.pt

<sup>g</sup> joaocruz@ipleiria.pt

148

### PARENTING IN THE FIRST YEARS OF CHILD'S LIFE: AREAS OF NURSING INTERVENTION

Maria da Saudade de Oliveira Custódio Lopes<sup>1,a</sup>, Filipa Daniela de Oliveira Custódio, Figueiredo Lopes<sup>1,b</sup>

<sup>1</sup>Escola Superior de Saúde. Instituto Politécnico de Leiria. Portugal

<sup>11</sup>Centro Hospitalar do Oeste. Portugal

**Introduction:** Parenting involves a complex set of responsibilities that must be understood by parents and supported by professionals. They fit into five functional dimensions. A study, which had a nonprobability sample of 1,011 parents of children under age three years, showed the need to support parents in all items of parenting's dimensions. So, it would be necessary to know if these items were considered areas of nursing intervention.

**Objective:** This study aimed to determine areas of nursing intervention in parents' support.

**Methods:** The 25 items, distributed over 5 dimensions, which measure the parents' need of support, were considered a group of a questionnaire with two groups of questions. The second group was used to characterize the 43 expert nurses representing all health regions of Portugal who formed the nonprobability sample this descriptive study.

**Results:** All items of the five dimensions were considered areas of nursing intervention. The degree of participants' agreement ranged from 93% and 100% in the items of three dimensions (The child's physical needs; the child's safety; and positive communication with the child), from 95% and 97% in the items of the dimension development and stimulation of the child and from 88% and 95% in the dimension positive discipline.

**Conclusions:** The results showed areas of nursing intervention based on the parents' needs. The knowledge of these areas will contribute to guide the nursing support and for a training more directed to the needs of the population and a more productive research.

**Descriptors:** Child; child rearing; parents; parenting; nursing.

<sup>a</sup> saudade.lopes@ipleiria.pt

<sup>b</sup> filipa.lopes24@gmail.com

149

### NON-STEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDS) PATTERN USE IN CENTRAL REGION OF PORTUGAL\*

Carina Monteiro<sup>1,a</sup>, Cláudia Miranda<sup>1,b</sup>, Filipa Brito<sup>1,c</sup>, André R.T.S. Araujo<sup>1,d</sup>

<sup>1</sup>Escola Superior de Saúde. Instituto Politécnico da Guarda. Portugal

<sup>II</sup>Unidade de Investigação para o Desenvolvimento do Interior. Instituto Politécnico da Guarda. Portugal

**Introduction:** Non-steroidal anti-inflammatory drugs (NSAIDs) are among the most widely used of all therapeutic agents. In spite of their therapeutic efficacy, concern over the widespread use of NSAIDs is largely related to their side-effects in different organic systems.

**Objective:** The present work intends to characterize the pattern of consumption of NSAIDs by the adult residents in the districts of Aveiro, Viseu, Guarda and Castelo-Branco, as well as to assess the promotion of the rational use of these drugs by health professionals.

**Methods:** The study is descriptive, transversal and quantitative, in which it were conducted 450 surveys by questionnaire between October and November of 2013.

**Results:** The majority of respondents are female (63%), aged between 18 and 29 years (39%), living in urban areas (66%) and with the secondary education (33%). The prevalence of NSAIDs use in the last 6 months was 58%, which 42% reported to use ibuprofen. The self-medication was 58%. Most of NSAIDs users consider them effective and presenting a remarkable safety profile and referred as main indication the headaches. Of the respondents who are taking other medicines at the same time (n=100), 42 showed drug interactions. It was also found that 29% of respondents never or rarely received counsel from professionals.

**Conclusions:** Taking in consideration the high consumption, the easy-access and the warning findings, it is worth to develop strategies to minimize the associated risk with the use of NSAIDs, focused on re-education of the population, as well as stressing the importance of the consultative role of the health professionals.

**Descriptors:** Nonsteroidal anti-inflammatory drugs (NSAIDs); Pharmacoepidemiology; Rational use of drugs; Self-medication; Health professionals.

\*PEst-OE/EGE/UI4056/2014 - Project financed by Fundação para a Ciência e Tecnologia (FCT) - Portugal.

<sup>a</sup> carinamonteiro19@hotmail.com

<sup>b</sup> claudiamiranda-17@hotmail.com

<sup>c</sup> lipa.b@hotmail.com

<sup>d</sup> andrearaujo@ipg.pt

150

### ATTITUDES TOWARDS CONSUMPTION, RECYCLING AND POTENTIAL OF REUTILIZATION OF MEDICINES\*

Cristina Lourenço<sup>1,a</sup>, Maura Tavares<sup>1,b</sup>, Patrícia Ferreira<sup>1,c</sup>, João Leitão<sup>1,d</sup>, Paula Coutinho<sup>1,e</sup>, André R.T.S. Araujo<sup>1,f</sup>

<sup>1</sup>Escola Superior de Saúde. Instituto Politécnico da Guarda. Portugal

<sup>II</sup>Unidade de Investigação para o Desenvolvimento do Interior. Instituto Politécnico da Guarda. Portugal

**Introduction:** The remarkable increased consumption of medicines over the years led to an increase of the waste associated to medicines out of use and their packaging.

**Objective:** This work of investigation has been done in Beira Interior, in the districts of Castelo Branco, Guarda and Viseu, and it was aimed to evaluate the consumption and recycling attitudes related to medicines.

**Methods:** 360 surveys were conducted by questionnaire, using the method of convenience sampling between October 2012 and June 2013.

**Results:** The great majority of the sample are female (68.9%), 78% is between the 18 and 50 years old group and 69.9% of them have academic qualifications up to Secondary Education. It was found that the majority acquire analgesic and anti-inflammatory drugs (62.8%), and 76.1% acquire the all medicines prescribed by the physician. This group of respondents still affirms to acquire most medicines in "order to have them at home" corresponding to 12.2% of the population, which in turn generates a highly significant volume of medicines with passed expiration dates, representing 66.1% of the population.

**Conclusions:** We conclude that the existence of unused medicines within the expiration date potentiates reuse programs of medicines. On the other hand, the existence of a great number of medicines out of use clearly pointed out the necessity of recycling this vast volume of medication and therefore reinforces the priority of adapting the collection, the triage and the recycling system to the attitudes of the population. These results justify all the present study and the further development in progress.

**Descriptors:** Medicines; Recycling; Reuse; Consumption; Attitudes.

\*PEst-OE/EGE/UI4056/2014 - Project financed by Fundação para a Ciência e Tecnologia (FCT) - Portugal.

<sup>a</sup> kristymara@hotmail.com

<sup>b</sup> maura\_tavares25@hotmail.com

<sup>c</sup> plferreira989@gmail.com

<sup>d</sup> jcleitao@ipg.pt

<sup>e</sup> coutinho@ipg.pt

<sup>f</sup> andrearaujo@ipg.pt

151

## IMPACT OF A WALKING PROGRAM ON TYPE 2 DIABETIC SUBJECTS

João R. Cruz<sup>1,a</sup>, Catarina Leitão<sup>1</sup>, Luís Coelho<sup>1,II</sup>, António Esperança<sup>1</sup>, Pedro Morouço<sup>1,III</sup>, Rui Matos<sup>1,II</sup>

<sup>1</sup>Research Centre for Human Movement Sciences. Instituto Politécnico de Leiria. Portugal

<sup>II</sup>Investigation Centre in Life Quality. Instituto Politécnico de Leiria. Instituto Politécnico de Santarém. Portugal

<sup>III</sup>Centre for Rapid and Sustainable Product Development. Instituto Politécnico de Leiria. Portugal

**Introduction:** Diabetes Mellitus is a very important risk factor for cardiovascular disease and has been responsible for over 4 million deaths around the world in 2011. The prevalence of diabetic Portuguese population ranging 20-79 years-old was 12.4% in 2010. Physical activity is associated with benefits and improvements on body composition, fitness, HbA1c and blood pressure.

**Objective:** The purpose of the present study was to analyze the impact of a walking program in diabetic elderly people, on HbA1c and other cardiovascular risk factors.

**Methods:** 10 diabetic subjects (HbA1c $\geq$ 6.5%) aged 60-72 years-old volunteered for a 10 week walking program at VO2R60%. HbA1c, blood pressure, waist circumference, fat mass and cardiorespiratory fitness were monitored.

**Results:** HbA1c (6.9% $\pm$ 0.95 vs. 6.2% $\pm$ 0.51; p=0.001), Systolic Blood Pressure (134.6mmHg $\pm$ 7.92 vs. 129.2mmHg $\pm$ 5.41; p=0.014), body fat (35.9% $\pm$ 8.75 vs. 32.5% $\pm$ 8.21; p=0.005), Waist Circumference (102cm $\pm$ 10.82 vs. 99cm $\pm$ 10.24; p=0.002), and VO2Max (18.2ml.kg.min $\pm$ 7.45 vs. 23.1ml.kg.min $\pm$ 6.62; p=0.000) improved significantly over the 10 week program. There was a significant improvement on women's HbA1c (7.1% $\pm$ 1.24 vs. 6.3% $\pm$ 0.66; p=0.012), body fat (39.9% $\pm$ 7.92 vs. 36.4% $\pm$ 7.45; p=0.041), waist circumference (101.3cm $\pm$ 13.88 vs. 99.2cm $\pm$ 13.36cm; p=0.032) and VO2Max (14.5ml.kg.min $\pm$ 6.53 vs. 19.7ml.kg.min $\pm$ 5.92; p=0.005) and men's HbA1c (6.7% $\pm$ 0.10 vs. 6.2% $\pm$ 0.21; p=0.006), body fat (30.1% $\pm$ 6.94 vs. 26.6% $\pm$ 5.00; p=0.049), visceral adiposity (15.8 $\pm$ 2.22 vs. 14.0 $\pm$ 2.45; p=0.018), waist circumference (103.0cm $\pm$ 5.29 vs. 98.8cm $\pm$ 4.11; p=0.013), systolic blood pressure (134.0mmHg $\pm$ 4.55 vs. 125.8 $\pm$ 4.35mmHg; p=0.013) and (23.8ml.kg.min $\pm$ 5.07 vs. 28.2ml.kg.min $\pm$ 3.4; p=0.014).

**Conclusion:** a 10week walking program at VO2R60% has a positive impact on diabetic control and associated risk factors.

**Descriptors:** diabetes; risk factors; cardiorespiratory fitness; waist circumference; fat mass.

<sup>a</sup> joacruz@ipleiria.pt

152

## THE REALITY OF CRACK IN A NORTHEASTERN BRAZILIAN CITY: THE USER LOOK

Antonio Francisco Luz Neto<sup>a</sup>, Anderson Miranda de Azevedo<sup>b</sup>, Marcia Astres Fernandes<sup>c</sup>, Nadyelle Elias Santos Alencar<sup>d</sup>, Anna Karolinne de Oliveira Silva<sup>e</sup>, Renata Dias da Silva Santos<sup>f</sup>, Francisca Fabiana Fernandes Lima<sup>g</sup>

Universidade Federal do Piauí. Brazil

**Introduction:** The use of crack has grown in recent years mainly due to the low cost and the profound effects of this drug. The crack is a public health problem in the country and has challenged professionals in the prevention and management of the problem.

**Objective:** To describe the user vision in relation to drug use and to role of the state.

**Methods:** This was a descriptive qualitative study, conducted in 2012, through interviews with users of crack in a reference hospital in the care of patients who use alcohol and drugs in Northeastern of Brazil. The study was approved by the Research Ethics Committee, CAAE protocol 0516.0.045.000-11 and obeyed the National Health Council 466/2012.

**Results:** Data were analyzed and divided into four categories: the user look on the drug; reasons that led to the consumption; impacts of drug abuse; the state's role in combating crack use by user look. As a result, the crack was unanimously linked to negative consequences and feelings. The beginning of use occurred by curiosity or friends influence. Were cited as life impacts, abandonment of employment, loss of family ties and friendship, as well as changes in behavior. For users, the state has been failed to combat the use of crack, and the rehabilitation strategies is deficient.

**Conclusions:** The study provides relevant information so that we can reflect on the current policy of reducing the use of crack. In addition, warn that the process of rehabilitation should be associated with social support, aiming reintegration.

**Descriptors:** Crack Cocaine; Drug Users; Public Policies; Brazil.

<sup>a</sup> luzantonioneto@hotmail.com

<sup>b</sup> amafisico@hotmail.com

<sup>c</sup> m.astres@bol.com.br

<sup>d</sup> nadyelle-elias@hotmail.com

<sup>e</sup> annakrol@hotmail.com

<sup>f</sup> renatadias92@hotmail.com

<sup>g</sup> ffabiana-fl@hotmail.com

153

### PHYSICAL AND SPORT ACTIVITIES IN SCHOOL AND COMMUNITY CONTEXT: WHAT IMPACT ON HEALTH INDICATORS?

Jorge Manuel Ribeiro<sup>1,a</sup>, Luís Paulo Rodrigues<sup>1,b</sup>, Luísa Santos<sup>1,c</sup>, Graça S. Carvalho<sup>1,d</sup>

<sup>1</sup>Centro de Investigação em Estudos da Criança. Instituto de Educação. Universidade do Minho. Braga, Portugal

<sup>II</sup>Escola Superior de Saúde. Instituto Politécnico de Viana do Castelo. Viana do Castelo, Portugal

**Introduction:** Health promotion interventions usually occur at school, where young people stay longer. However, physical/sport activity can be organized also out of school, in the community. Thus, it is important to look up to the impact of physical activities/sports at school or in the community, using different health indicators.

**Objective:** To assess the relationship between physical/sport activity (in and out of school), body composition and physical fitness in adolescents.

**Methods:** A sample of 98 adolescents (mean 14.5 years) from a secondary school was analyzed. Physical activity was assessed using pedometers for an all week, and sport activity through a questionnaire. Teenagers were tested in the Fitnessgram battery to assess healthy fitness zone (HFZ) in body composition and physical fitness.

**Results:** Adolescents within the percentage of fat mass HFZ were significantly more active during school hours. Moreover, in most physical fitness tests, adolescents classified within the HFZ are in average more active in and out of school hours. A significant relationship between involvement in sports activity in the community and the HFZ classification in aerobic fitness was also found.

**Conclusions:** Physical and sport activities developed at school and in the community seem to have a significant impact on body composition and physical fitness of adolescents.

**Descriptors:** pedometers; aerobic fitness; body composition.

154

### PREVALENCE AND RISK FACTORS FOR OVERWEIGHT/OBESITY IN LEIRIA'S 7<sup>TH</sup> GRADERS (2009-2013)

João R. Cruz<sup>1,a</sup>, Nuno Amaro<sup>1</sup>, Rui Matos<sup>1,II</sup>, Nuno Santos<sup>1</sup>, Luís Coelho<sup>1,II</sup>

<sup>1</sup>Research Centre for Human Movement Sciences. Instituto Politécnico de Leiria. Portugal

<sup>II</sup>Investigation Centre in Life Quality. Instituto Politécnico de Leiria. Instituto Politécnico de Santarém. Portugal

**Introduction:** Overweight/obesity (Ow/Ob) are well documented risk factors for cardiovascular disease (CVDRF), and its prevalence has been increasing even in children and adolescents, over the past decades.

**Objective:** This study monitors the change over a 5 year span (2009-2013) in Ow/Ob and CVDRF in a Leiria's middle school.

**Methods:** This was a cross-sectional assessment that comprised 654 7th grade students. Body Mass Index (BMI), fat mass (FM) and waist circumference (WC) were monitored.

**Results:** Throughout the 5 years, 25.7% of individuals were Ow/Ob (BMI). According to FM, there were 26.5% of Ow/Ob subjects, with a statistical difference among the 5 years ( $p=0.000$ ) – 42.9%, 22.2%, 19.8%, 13.9% and, 30.3% in 2009/10/11/12/13, respectively. Surprisingly, there were 32.5% of Underfat individuals (47.9% in 2009). BMI misclassified more than 50% of BMI's Normal Weight individuals (40.0% were Underfat and 17.1% were Ow/Ob); 46.2% of BMI Ow/Ob individuals were classified as Healthy (35.4%) and Underfat (10.8%) when fatness was assessed via bioimpedance, whereas only 53.8% kept BMI's Ow/Ob classification. 18.4% of the individuals are at risk/high risk for developing CVD according to WHO's classification for WC. However, using the reference data for Portuguese young population, 27.5% of individuals were below the 25th percentile, 37.2% at the 50th-75th percentile and 35.5% over the 85th.

**Conclusions:** No changes have been reported in the prevalence of Ow/Ob, FM and WC in the past 5 years in this school. BMI fails to monitor fat mass. More than one third of the individuals are at risk/high risk of developing CVD.

**Descriptors:** youth; obesity; waist circumference; waist circumference; cardiovascular disease.

<sup>a</sup> jorgemanuelpereiraribeiro@gmail.com

<sup>b</sup> lprodrigues@esdl.ipvc.pt

<sup>c</sup> luisasantos@ess.ipvc.pt

<sup>d</sup> gracia@ie.uminho.pt

<sup>a</sup> joaocruz@ipleiria.pt

155

### FOOD SUPPLEMENTS LABELS AND HEALTH CLAIMS: IMPLEMENTATION OF EUROPEAN UNION REGULATION\*

P. Coutinho<sup>1,II,a</sup>, A. Vasconcelos<sup>II,b</sup>, F. Almeida<sup>II,c</sup>, M.J. Menino<sup>II,d</sup>, T. Barata<sup>II,e</sup>, M.F. Roquel<sup>f</sup>, M.P. Ribeiro<sup>II,g</sup>

<sup>1</sup>Unidade de Investigação para o Desenvolvimento do Interior. Instituto Politécnico da Guarda. Portugal

<sup>II</sup>Escola Superior de Saúde. Instituto Politécnico da Guarda. Portugal

**Introduction:** The consumption of food supplements have increased exponentially in last years, mainly as attractive adjuvants in the prevention/treatment of diseases. Commission Regulation (EU) 432/2012 of 16 May 2012 establish a list of permitted health claims made on foods, and consequently all food supplements with labels not conform must be outflow until June 14 of 2013.

**Objective:** The present study aimed to verify the legal compliance of the food supplements labels in different places of sale in the period following the established limit date in the EU regulation.

**Methods:** For different categories were analyzed a total of 187 products marketed in herbalists, Over The Counter Stores, pharmacies, supermarkets and internet, and registered the legal compliance of its labels through the registration of the compliance of legal mandatory criteria and subsequent quantitative analysis, during the period of Sept to December 2013.

**Results:** The results obtained show the existence of some food supplements available to consumers whose labelling are still in uniform according to the new UE Regulation. In Supermarkets have not been recorded any non-conformity on labels analyzed. Internet and herbalists were the market places with higher number of nonconformities, and in pharmacies and drugstores were registered lower number of nonconformities.

**Conclusions:** In accordance with the Regulation all food supplements not conform must be outflow until June 14 of 2013, what is not confirmed in our study. With this study we confirm the need to pursue the verification and improvement of effective application, accompanied by health professionals counseling.

**Descriptors:** Labeling; Food Supplements; Commission Regulation (EU) 432/2012 of 16 May 2012; Health claims; Nonconformities.

\*This work was supported by Foundation for Science & Technology (Fundação para a Ciência e Tecnologia - FCT) [Pest-OE/EGE/UI4056/2014] from the Portuguese Ministry of Science & Education.

<sup>a</sup>coutinho@ipg.pt

<sup>b</sup>ana-vasconcelos@portugalmail.pt

<sup>c</sup>fernanda.pnva@gmail.com

<sup>d</sup>maria\_menino@hotmail.com

<sup>e</sup>tbaratabarata@hotmail.com

<sup>f</sup>froque@ipg.pt

<sup>g</sup>mrbeiro@ipg.pt

156

### FROM MEANINGS OF SPIRITUALITY TO THE CHALLENGES OF NURSES IN FAMILY INTERVENTION

Maria Henriqueta Figueiredo<sup>1,a</sup>, Zaida Charepe<sup>II,b</sup>, Manuel Brás<sup>III,c</sup>, Palmira Oliveira<sup>II,d</sup>, Pedro Melo<sup>II,e</sup>

<sup>1</sup>Escola Superior de Enfermagem do Porto. Portugal

<sup>II</sup>Universidade Católica Portuguesa. Portugal

<sup>III</sup>Instituto Politécnico de Bragança. Portugal

**Introduction:** Spirituality incorporates key principles of family rituals that determine to be in family and being with others, involving the search for a sense of family continuity. As a field of family assessment and intervention requires nurses to promote their own spiritual health and acknowledge their spiritual needs.

**Objective:** understand the meanings of spirituality for nurses, describe their experiences of spiritual care with families, recognizing the value assigned to the spiritual dimension in assessment and family intervention and identify the expectations of nurses in the optimization of spirituality as a resource for care.

**Methods:** The study is qualitative, sustained on systemic thinking. The methodological approach was the Appreciative Inquiry. Participants were twenty nurses working in Primary Health Care. Appreciative Interview was used and data analysis was supported by content analysis.

**Results:** The following categories of analysis emerged: Meanings of spirituality, Spiritual care experiences with their families; Value assigned to the spiritual dimension in assessment and family intervention. Spirituality stands out as a multidimensional belief concept (bodily, emotional and relational), lived with families mostly in contexts of suffering and end of life. Nurses value this dimension by associating it with respect, authenticity and holism.

**Conclusions:** The need for improve spirituality education and sharing experiences evidenced as key resources in the optimization of care focused on the family system.

**Descriptors:** Family Nursing Spirituality, Appreciative Inquiry.

<sup>a</sup>henriqueta@esenf.pt

<sup>b</sup>zaidacharepe@ucp.pt

<sup>c</sup>mambbras@gmail.com

<sup>d</sup>palmiraoliveira@esenf.pt

<sup>e</sup>pedromelo@ucp.pt

157

**BEHAVIORS OF OUTDOOR WORKERS  
CONCERNING SUN EXPOSURE\***

Luís Fonseca<sup>1,a</sup>, Ana Lima<sup>1,b</sup>, Cátia Lopes<sup>1,c</sup>, Cristina Gonçalves<sup>1,d</sup>, Maximiano Prata Ribeiro<sup>1,II,e</sup>, Paula Coutinho<sup>1,II,f</sup>, Fátima Roque<sup>1,II,g</sup>

<sup>1</sup>*Escola Superior de Saúde. Instituto Politécnico da Guarda. Portugal*

<sup>II</sup>*Unidade de Investigação para o Desenvolvimento do Interior. Instituto Politécnico da Guarda. Portugal*

**Introduction:** Exposure to solar ultraviolet radiations is well known as an important factor on skin cancer development. In Portugal, outdoor workers are too long exposed to the sun, and consequently to the ultraviolet radiation effects. Sun protection behaviors are important to the prevention of skin cancer.

**Objective:** identify the behaviors of outdoor workers, concerning sun exposure.

**Methods:** A cross-sectional study was performed. A questionnaire was applied by an interview to 80 subjects with outdoor activities (farmers, construction workers, life-guards and fishermen).

**Results:** Most of the workers (76,3%) have reported their concern about sun exposure, and 61 of the 80 subjects surveyed, have already suffered a sunburn, but just 43,8% use sunscreen protection. Hat and clothes are the protection more mentioned by the workers. From the subjects that referred to use sunscreen protection, just 6% use it over all the year. The price of sunscreens was the main factor mentioned for not using them, followed by the discomfort of their use during activities.

**Conclusions:** Although many general campaigns about the sun ultraviolet radiations exposition on the skin have been made, it is necessary an intervention directed to outdoor workers to improve their behaviors related to sunscreen protection. Reimbursement of costs with sunscreen protection, to these workers, must also be discussed by authorities, as an important public health measure.

**Descriptors:** Sun exposure; sun protection; behaviors; outdoor workers.

\*This work was supported by Foundation for Science & Technology (Fundação para a Ciência e Tecnologia - FCT) grant [Pest-OE/EGE/UI4056/2014] from the Portuguese Ministry of Science & Education.

<sup>a</sup> luis.fonseca023@gmail.com

<sup>b</sup> ana.lima@outlook.com

<sup>c</sup> catia\_other@hotmail.com

<sup>d</sup> cristinagoncalves\_05@hotmail.com

<sup>e</sup> mribeiro@ipg.pt

<sup>f</sup> coutinho@ipg.pt

<sup>g</sup> froque@ipg.pt



## HEALTH LITERACY

158

### STRESSFUL SITUATIONS: DIAGNOSING TO EDUCATE IN SPEECH THERAPY

Patrícia Nogueira<sup>1,a</sup>, Zaida Azeredo<sup>1,b</sup>, Manuela Oliveira<sup>1,c</sup>

<sup>1</sup>*Escola Superior de Saúde, Universidade do Algarve, Faro, Portugal*

<sup>11</sup>*Unidade de Investigação e Formação sobre Adultos e Idosos. Instituto de Ciências Biomédicas de Abel Salazar. Porto, Portugal*

<sup>111</sup>*Universidade Portucalense Infante D. Henrique. Porto, Portugal*

**Introduction:** Work presents an imperative for every human being. It enables us to achieve personal and professional goals, obtain social support, recognition, give meaning to our days and weeks, or even to our lives. However, rapid globalization and technological progress led to significant changes in the working environment, which caused the increase of certain occupational hazards and even the emergence of new risks. Health professionals, within which fall the Speech-Language Pathology professionals, are one of the professional classes at high risk for developing occupational stress and burnout due to the characteristics involving their work activity.

**Objective:** Diagnosing levels and major sources of stress among Portuguese Speech-Language Pathologists; Identify the training needs in the area of psychosocial risks; Propose educational measures to promote health and well-being of this professional class.

**Methods:** We applied the Stress in Health Professionals Questionnaire (QSPS) to 375 Speech Therapists, by email, and performed the statistical analysis using the SPSS20 program.

**Results:** The results showed that 89.3% of professionals have significant experience of stress associated in particular with factors relating to the dimensions of “Career and remuneration”, “Overwork” and “Dealing with clients”. Most professionals (76.5%) prove to need training in occupational stress management.

**Conclusions:** Development and implementation of programs that promote occupational health in these professionals prove to be essential and urgent. Thus, it has been pointed out some measures/actions to be undertaken with Speech Therapists, especially in areas that have been identified as major stressors.

**Descriptors:** Speech-Language Pathology. Occupational Stress. Education/Training. Health.

<sup>a</sup> patricia.doutoramento@gmail.com

<sup>b</sup> zaida.azeredo@gmail.com

<sup>c</sup> moliveira@uportu.pt

159

### STRENGTHEN THE MATERNAL AND CHILD HEALTH COMPETENCY AMONG NURSES BY BLENDED CONTINUING EDUCATION PROGRAM

Yae Yoshino, Altanbagana Surenkholoo, Yuka Yabashi  
*Kitasato University School of Nursing, Sagamihara, Japan*

**Introduction:** In Mongolia, nurses must renew licenses with 30 Continuing Education (CE) credits. Nurses had been faced with difficulties to maintain licenses and competencies. Severe financial and time constraints, geographical and infrastructural barriers provided nurses very little CE opportunities over the last decades, especially in remote area. Developing inexpensive and sustainable CE system was crucial. We have been engaged the maternal and child health (MCH) nurses to launch the blended program, by Video Conference (VC) and face to face (FF) seminars.

**Objective:** To establish low cost CE system for the sustainable development.

**Methods:** Programs designed in collaboration with Mongolian professional bodies and 4 Mongolian national universities, and a Japanese University. Interactive VC seminars between Japan and 6 sites including 4 remote areas across Mongolia via World Bank satellite system, and FF seminars. Moodle enabled all participants to access to course materials, including text documents, lecture videos, and references for free of charge whenever they need.

**Results:** Over 6,000 participants enrolled VC seminars in 2008-2013, which is equivalent to 60% of all nurses in Mongolia. VC reduced traveling cost of Japanese lecturers and Mongolian participants, and also increased the connecting sites which resulted in enlarging number of participants. All VC seminar materials were edited by local leaders, and then the first MCH nursing textbook were published and distributed across the country.

**Conclusions:** VC seminars provided platforms not only for collaboration and communication between Japanese and Mongolia, and within the country. We now seek further how to promote hands-on teaching.

**Descriptors:** Continuing Education. Maternal and Child Health. Nurse Competency. Video Conference.

160

### THE NURSES' EXPERIENCE ON NURSING STUDENTS AND THEIR CLINICAL LEARNING PROCESS IN HOSPITAL

Yolanda Raquel Lapeña-Moñux<sup>a</sup>, Luis Cibanal-Juan<sup>b</sup>, M<sup>a</sup> Loreto Maciá-Soler<sup>c</sup>, M<sup>a</sup> Isabel Orts-Cortés, Ariadna Martínez-Martínez<sup>d</sup>, Domingo Palacios-Ceña<sup>e</sup>

*Departamento Enfermería; Facultad Ciencias de la Salud; Universidad Jaume I, Castellón de la Plana, Espana*

**Introduction:** Nursing studies program, and relationships between University academic program and Hospitals, all influence bedside nurses' experience on nursing clinical learning process.

**Objective:** Describe the bedside nurses' experience of Spanish nursing students and their clinical learning process.

**Methods:** A qualitative phenomenological approach was followed. An initial purposeful sampling of Spanish bedside nurses in Santa Barbara Hospital in the Western area of Soria was conducted. A theoretical sampling was also implemented in order to gain a more in-depth understanding of nursing students and their learning process. Data were collected using unstructured and semi-structured interviews. Data were analysed using the Giorgi proposal.

**Results:** Twenty-one bedside nurses with a mean age of 46 were included. Three main themes that describe the experience of bedside nurses emerged from the data: a) Making the first contact. The first contact is the key to future nurse-student relationship and is conditioned by several factors, b) defining the role of the student in practice. Nurses should prioritize key learning points as the field of nursing, nurses must unify their actions to the student, and the use of technology versus basic care, and c) building bridges between clinical settings and university. The relationship between clinical settings (hospital) and university influences the implementation of the educational program of the university and student tracking clinical practices.

**Conclusions:** Understanding the meaning of nursing students and their clinical learning process with bedside nurses might gain deeper insight into their expectations. It is requested to involve clinical settings in the educational nursing program.

**Descriptors:** Nursing. Nursing students. Nursing education. Hospitals. Qualitative Research.

<sup>a</sup> ylapena@uji.es

<sup>b</sup> luis.cibanal@uan.es

<sup>c</sup> loreto.macia@ua.es

<sup>d</sup> ariadna.martinez@urjc.es

<sup>e</sup> domingo.palacios@urjc.es

161

### A FALL PREVENTION MANUAL FOR OLDER ADULTS ACCORDING TO HEALTH LITERACY DEMANDS

Anabela Correia Martins<sup>1,a</sup>, Isabel Maria Andrade<sup>1l</sup>, Catarina A. Gomes da Silva<sup>1</sup>

*<sup>1</sup>Departamento de Fisioterapia. Escola Superior de Tecnologia da Saúde de Coimbra. Coimbra, Portugal*

*<sup>1l</sup>Departamento de Ciências Complementares. Escola Superior de Tecnologia da Saúde de Coimbra. Coimbra, Portugal*

**Introduction:** The prevention of falls can be achieved through multiple factorial interventions, including the educational approach. In order to enhance the compliance to strategies for the prevention of falls, it is important to focus on the development of health information materials, which should take into consideration the health literacy level of the target population, be user-friendly and include fitted information.

**Objective:** Review health literacy demands of fall prevention manuals dedicated to the elderly, using the *Health Literacy INDEX* tool and develop a manual adapted to Portuguese population.

**Methods:** Search for fall prevention manuals dedicated to the elderly in search engines and in government web portals (DGS, CDC e EUNESE), using as keywords *fall prevention booklet, fall prevention manual, older people, seniors, fall prevention materials, educational materials, manual de prevenção de quedas, idosos*. Selection of a sample of 11 manuals for evaluation published after 2006.

**Results:** Overall scores generated by INDEX in 10 out of the 11 manuals were higher than 50% and above 75% for 4 of them. Physical activity, strategies in case of falls, home modifications and vision were the main indicators developed in the manuals. These findings allowed us to develop a manual adapted to the Portuguese seniors.

**Conclusions:** *Health Literacy INDEX* is a comprehensive tool with evidence for reliability and validity that was helpful to evaluate the health literacy demands of fall prevention materials. Additional research is warranted to examine the association between contents and layout of the Portuguese manual and individual understanding, behaviors, and improved health.

**Descriptors:** Health literacy. Fall prevention. Educational manual. Elderly. Falls.

<sup>a</sup> anabelacmartins@estescoimbra.pt

162

### PREVALENCE OF URINARY INCONTINENCE DURING PREGNANCY AND POSTPARTUM IN BRAZILIAN WOMEN

Júnia Lima<sup>1,a</sup>, Maria Helena Lopes<sup>II</sup>

<sup>I</sup>Faculdade Dinâmica Vale do Piranga. Ponte Nova, Brasil

<sup>II</sup>Faculdade de Ciências Médicas. Universidade Estadual de Campinas. Campinas, Brasil

**Introduction:** The urinary incontinence (UI) is a symptom that occurs frequently in pregnancy and may be a transient condition or stay after birth for months or even years.

**Objective:** to evaluate the UI in the pregnancy-puerperium cycle and to verify in which phase of the cycle initiates the UI, the urinary loss characteristics, the types of UI.

**Methods:** this was a transversal and correlational type study, conducted from August 2008 to March 2009. They were interviewed 220 puerperal women, in the period between 30 to 180 days of postpartum, attended a basic health unit of the city of Itapeverica da Serra, metropolitan region of Sao Paulo, Brazil, using a form built and validated for this study. The study was approved by the Ethics Committee of the Medical Faculty, UNICAMP (Protocol 110/2008).

**Results:** the UI can occur since the beginning of the pregnancy, being more frequent in the last trimester. It is more frequent in the pregnancy (43.6%) than in the puerperium (10%). The majority presented a small loss in the pregnancy as the puerperium, but around 13% referred to lose a large volume. The mixed UI was the most frequent type in the pregnancy (20%) and the stress UI in the puerperium (4.5%).

**Conclusions:** the UI generally initiated in the end of the gestation and its frequency decreased in the puerperium, the types of UI change according to the phase of the pregnancy-puerperium cycle and the urinary loss generally is small.

**Descriptors:** Prevalence. Urinary Incontinence. Pregnancy. Postpartum period. Nursing.

<sup>a</sup>junia.leonne@bol.com.br

163

### RISK FACTORS FOR URINARY INCONTINENCE IN PREGNANCY AND POSTPARTUM

Júnia Lima<sup>1,a</sup>, Maria Helena Lopes<sup>II</sup>

<sup>I</sup>Faculdade Dinâmica Vale do Piranga. Ponte Nova, Brasil

<sup>II</sup>Faculdade de Ciências Médicas. Universidade Estadual de Campinas. Campinas, Brasil

**Introduction:** Urinary incontinence (UI) is a common symptom during pregnancy and puerperium that interfere negatively in the quality of life of women.

**Objective:** to verify the types of UI during the pregnancy and puerperium and the association with factors considered of risk.

**Methods:** This was a transversal and correlational type study, conducted from August 2008 to March 2009. They were interviewed 220 puerperal women, in the period between 30 to 180 days of postpartum, attended a basic health unit of the city of Itapeverica da Serra, metropolitan region of Sao Paulo, Brazil, using a form built and validated for this study. For statistical analysis were used the McNemar test and Chi-square test or Fisher Exact test. The study was approved by the Ethics Committee of the Medical Faculty, UNICAMP (Protocol 110/2008).

**Results:** The mixed UI was the most frequent type in the pregnancy (20%) and the stress UI in the puerperium (4.5%). The frequency of UI in the pregnancy was associated with the increased of maternal age ( $p=0,0004$ ), multiparity ( $p=0,0035$ ), vaginal delivery in previous pregnancy ( $p=0,0075$ ) and urine loss occurrence in the previous pregnancy ( $p=0,0002$ ). In the puerperium, the occurrence of UI was associated with the multiparity ( $p<0,0001$ ), actual body mass index (BMI) ( $p=0,0233$ ) and UI in the present pregnancy ( $p=0,0008$ ).

**Conclusions:** The types of UI range according to the pregnancy-puerperium cycle phase and urine loss is usually small. Except for multiparity, the risk factors associated with UI during pregnancy were not associated with UI during the puerperium.

**Descriptors:** Risk factors. Urinary incontinence. Pregnancy. Postpartum period. Nursing

<sup>a</sup>junia.leonne@bol.com.br

164

### MEDIA APPROACHING BEHAVIORS IN NURSING: A DESCRIPTIVE STUDY

Rodrigo Cardoso<sup>1</sup>, João Graveto<sup>11</sup>, Fernando Zamith<sup>11</sup>

<sup>1</sup>*Instituto de Ciências Biomédicas Abel Salazar. Universidade do Porto; Escola Superior de Enfermagem do Porto. Porto, Portugal*

<sup>11</sup>*Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal*

<sup>111</sup>*Faculdade de Letras. Universidade do Porto. Porto, Portugal*

**Introduction:** Nurses are among the most important healthcare providers, as they are responsible for caring for sick and vulnerable people, and promoting the independence of patients. These professionals have difficulties in talking to journalists and to be quoted as sources in health-related news. If nurses maintain a low visibility in the news media, that will influence resource allocation, public trust and the staff recruitment. Knowledge on media approaching behaviors (MAB's) by nurses is expected to contribute to the creation of educational programs that aim the media literacy.

**Objective:** To describe MAB frequencies in Portuguese nurses.

**Methods:** Between October and November of 2013, 529 nurses have completed an online questionnaire composed by two sections: 13 socio-demographical questions and MAB's survey. The latest is an instrument composed by 27 type-Lickert items, ranging from never to always (0-4). Each item evaluates the frequency of a particular MAB.

**Results:** The majority of the respondents are female (79%), have a license degree (76%) and are bedside nurses (69%). The answers "never" and "rarely" got combined scores that ranged from 69% to 99%. The most frequent MAB was "sharing nursing events information with communication professionals" and the less frequent was "developing content to and participating in radio shows".

**Conclusions:** Portuguese nurses revealed very low MAB's frequencies. In addition, they do not interact with the media very often, which is suggested to affect nursing visibility. Further research on MAB's and the development of educational programs on media literacy could help bring nursing to the public.

**Descriptors:** Nursing. Mass Media. Media Literacy. Media Visibility. Communication Skills.

<sup>1</sup> rcardoso50@gmail.com

<sup>11</sup> jgraveto@esenfc.pt

<sup>111</sup> zamith@gmail.com

165

### OPIOID SUBSTITUTION PROGRAMS IN PORTUGAL: UNDERSTANDING THE DECISION MAKING PROCESS

Soraia Teles<sup>a</sup>, Helena Moura<sup>b</sup>, Pedro Machado<sup>c</sup>, Joana Vilarés<sup>d</sup>, Cristiana Pires<sup>e</sup>, Marta Pinto<sup>f</sup>

*Agência Piaget para o Desenvolvimento. Instituto Piaget. Portugal*

**Introduction:** Similarly to other European countries, Portugal offers a heterogeneity of therapeutic modalities directed at people who use drugs, being the most currently used the programs with opioid agonists. This diversity provides the opportunity for professionals and patients analyse and select together the most viable treatment.

**Objective:** This research proposal stems from the desire to understand the decision making processes concerning the integration of drug users in Opioid Substitution Programs (OSP). It aims to comprehend the relative weight of each intervener within it and, particularly, patient's involvement in the decision and the investment made in previously building his/her capacity to decide. The patient's knowledge about the available treatment options (using different substitution substances), as well the access to the most suitable one, will also be object of analysis.

**Methods:** In order to assess the perspectives of the professional and the patient on these topics, the study articulates qualitative and quantitative methodologies using questionnaires (N=200 professionals; 200 patients), focal points (N=5 from each group) and interviews (N=15 from each group). Those eligible to participate are patients integrated in OSPs in State schemes for drug addiction, and professionals responsible for the prescription.

**Results and Conclusions:** Data are now being collected and the main source, for now, is the universe of people who use drugs. By the time of the conference it will be possible to present the patient's views on access to treatment and his/her participation in the decision making process. It will also be possible to provide information on health literacy levels found.

**Descriptors:** Health literacy. Opioid Substitution Programs (OSP). Decision making process.

<sup>a</sup> soraia.teles@apdes.pt

<sup>b</sup> helena.moura@apdes.pt

<sup>c</sup> pedro.machado@apdes.pt

<sup>d</sup> cristiana.pires@apdes.pt

<sup>e</sup> joana.vilares@apdes.pt

<sup>f</sup> marta.pinto@apdes.pt

166

### HEALTH LITERACY ASSESSMENT AT THE PRIMARY HEALTH CARE: A STRATEGY FOR FALLS PREVENTION

Isabel Andrade<sup>1</sup>, Anabela Martins<sup>1,a</sup>, Lúcia Marques<sup>1</sup>, Ana Silva<sup>1</sup>, Cândida Ramos<sup>1</sup>, Célia Morais<sup>1</sup>, Tânia Silva<sup>1</sup>

<sup>1</sup>*Escola Superior de Tecnologia da Saúde. Instituto Politécnico de Coimbra. Coimbra, Portugal*

<sup>11</sup>*Departamento de Saúde Pública. Administração Regional de Saúde do Centro. IP, Portugal*

**Introduction:** The current paradigm of health predicts full integration of health promotion in the exercise of citizenship, implying that each individual is able to use health care, transmit accurate information to the health professional and also, daily manage its health/disease. Several studies show that to enhance positive outcomes in health, health literacy (HL) should be incremented, as well as the training of skills in the field of e-health literacy (e-HL). It is therefore important to characterize the different individual profiles of HL and of e-HL to reduce the asymmetry of knowledge, which constitutes a barrier to the partnership among patients, health professionals and informal caregivers.

**Objective:** To assess the level of HL and e-HL at the primary health care in the Centre region of Portugal, allowing the development of empowerment strategies addressing the different profiles, under the framework of the governmental program “Programa Nacional de Prevenção de Quedas”.

**Methods:** Application of the Portuguese version of the questionnaires Newest Vital Sign, e-HEALS and Health Improvement Card, complemented by a demographic characterization.

**Results:** After a pre-test in 66 individuals (33% males; 67 years old in average), frequenters of 2 senior universities (district of Coimbra), the findings suggest the need to maximize strategies to promote HL/e-HL and prevent the risk of falls, allowing the citizens to make healthy choices and fully profit from their health and well-being potential.

**Conclusions:** “Healthy policies” must promote strategies in communication and marketing that enhance literacy in general and HL/e-HL in particular, and thus, the citizens’ empowerment.

**Descriptors:** Health Literacy. E-Health Literacy. Primary Health Care. Fall prevention.

<sup>a</sup> imandrade@estescoimbra.pt

167

### HEARING HEALTH PROMOTION IN CHILDREN FIVE YEARS OLD: A NEED TO UNDERTAKE!

Margarida Serrano<sup>a</sup>

*Escola Superior de Tecnologia da Saúde, Instituto Politécnico de Coimbra. Coimbra, Portugal*

**Introduction:** Among five year old children, we found a peak of middle ear pathology that often goes unnoticed by parents and educators due to oscillation and uni-laterality. However, these changes may have an impact on present and future life of the child, in particular in reading and writing learning.

**Objective:** To assess the hearing of five year old children at three moments through the school year.

**Methods:** Otoscopy, tympanogram and the “listen/don’t listen” method to 15 dB at frequencies between 500 and 6000 Hz were used.

**Results:** The audiological evaluation of 106 children showed: 9 (8.49%) children with bilateral type B or C2 tympanogram and 8 (7.55%) children with auditory deficit, at the three moments. Moreover, a questionnaire answered by parents revealed that: only 76.6% of children held the newborn screening; 30% of children had an otitis history; in the previous year, an ear infection had been diagnosed to 22 children and 3 children had been operated; only 11% of parents thought his son couldn’t hear well.

**Conclusions:** These data reveal a need for audiological field intervention before entry to basic education in order to detect early changes in quality/quantity of hearing, as well as a continuous work of raising awareness among parents and the society for the importance of children’s hearing.

**Descriptors:** Hearing Health; Five Years Old; Children; Tympanogram; Hearing Test.

<sup>a</sup> mserrano@estescoimbra.pt

168

## HEALTH LITERACY - A PATHWAY TO PATIENTS' DETERMINATION

Teresa Denis<sup>a</sup>

*Escola Superior de Tecnologia da Saúde de Lisboa. Lisboa, Portugal*

**Introduction:** This paper focuses on the discussion of health as a social and human right, in the sense that is not enough to provide the service alone, but also harmonize health care services with information and communication oriented to patients' determination.

**Objective:** The objectives intent an analytic and critical reflection about patients' situation inside health institutions and about the relationship between professionals and patients, in the sense of understanding if there is paternalistic relation, where professionals see their patients like objects, or instead creating a relationship with them. In this case concern focus on disease and people, with interest about their status and life experiences, seeking and encouraging them to understand what is going on and what can be done by them and health professionals – to help within a relationship of active partnership fostering their determination.

**Methods:** The methodology focuses on a case study matrix, standing in the particular context of the *Instituto de Oftalmologia Dr. Gama Pinto* Sub-Vision Department, where during more than eight months we did a direct observation focused in relationships, communication and interaction between health professionals and patients.

**Results and Conclusion:** The results of the empirical work demonstrated that this department presents a human health perspective looking for a concerted response, through different valences, to patients' needs by promoting physical, psychic and social health, with a particular focus on literacy, determination and capacitating patients – who always have the final decision about the treatment or therapy to follow.

**Descriptors:** Patient; Partnership; Empowerment; Literacy; Self-determination.

169

## GROUP CHRONICLES ON A COP: A TOOL FOR COLLABORATIVE ANALYSIS AND IMPROVING REFLEXION

Taís Quevedo Marcolino<sup>1,a</sup>, Aline Maria de Medeiros Reali<sup>11,b</sup>

*<sup>1</sup>Departamento de Terapia Ocupacional. Universidade Federal de São Carlos. São Paulo, Brasil*

*<sup>11</sup>Departamento de Teorias e Práticas Pedagógicas. Universidade Federal de São Carlos. São Paulo, Brasil*

**Introduction:** Health care policies in Brazil are increasingly incorporating humanizing and networking care. Those changes demand continuing education of the professionals. Viewing professional practice on its complex and tacit aspects, changes in practice demand that professionals become aware of otherwise subtle/hidden aspects of his/her work and get engaged on the project.

**Objective:** This study was based on an action research with 18 face meetings of a community of practice (CoP) of beginners occupational therapists. We were interested both in understanding aspects of professional development and improving clinical reasoning. This paper discusses the “group chronicles” – the story of events from the previous meeting containing the interpretation of what was spoken and some excerpts as examples – as a formative-investigative tool able to both facilitate reflection on practice and serve as a primary collaborative analysis (researcher/participants).

**Methods:** Thematic analysis of 31 excerpts from the transcripts of personal meetings that contained the word “chronicle”.

**Results:** The data analysis revealed five functions of this tool: facilitating communication (starting discussion, guiding conversation, decreasing anxiety); encouraging engagement and construction of group identity (promoting identification with what was discussed, one finds oneself in speech); ensuring the memory of the group and continuity of learning (reification of group production, access to information for those who missed, rescue of topics already discussed); enabling awareness of implicit aspects; enabling collaborative analysis by appraisal of interpretation.

**Conclusions:** This tool seems to meet educational projects to improve health care practices by deepening reflexion of practitioners.

**Descriptors:** Education, Continuing; Qualitative Research; Health Knowledge, Attitudes, Practice; Health Manpower; Narrative.

<sup>a</sup> [teresa.denis@estesl.ipl.pt](mailto:teresa.denis@estesl.ipl.pt)

<sup>a</sup> [taisquevedo@ufscar.br](mailto:taisquevedo@ufscar.br)

<sup>b</sup> [darr@ufscar.br](mailto:darr@ufscar.br)

170

### OT COMMUNITY OF PRACTICE AS CONTINUING EDUCATION: MENTAL HEALTH ASSISTANCE ON PRIMARY CARE

Taís Quevedo Marcolino<sup>1,a</sup>, Eliane Nascimento Fantinatti<sup>1,b</sup>, Gabriela Mitiê Takayama<sup>1,c</sup>, Alana de Paiva Forneretto-Gozzi<sup>1,d</sup>, Siliani Martinelli<sup>1,e</sup>, Gisele Giovanetti<sup>1,f</sup>, Janaína Junqueira<sup>1,g</sup>

<sup>1</sup>*Departamento de Terapia Ocupacional. Universidade Federal de São Carlos. São Paulo, Brazil*

<sup>11</sup>*Universidade Federal de São Carlos. São Paulo, Brazil*

<sup>111</sup>*Prefeitura Municipal de São Carlos. São Paulo, Brazil*

**Introduction:** Brazilian Mental Health Policy are increasingly incorporating mental health assistance in primary care (PC). Occupational therapists have been included on work teams, for care and team support. Those changes demand continuing education, in order to create and systematize better forms of practice.

**Objective:** This study presents preliminary findings of an ongoing action research with monthly face meetings of a community of practice (CoP) of occupational therapists working on PC of a city in the middle of São Paulo state, Brazil. We were interested both in understanding general and particular aspects of professional activities, particularly in mental health care, and improving reflection of practice.

**Methods:** Thematic analysis of the transcripts of the first eight meetings.

**Results:** The analysis revealed that the group production wobbled between procedural aspects of occupational therapy and mental health care in PC. In the second pole, professionals have been valorized the proximity of everyday life of subjects; better opportunities for case management; tension with the biomedical model, valuing the practice on health family workplaces; ethical issues in information record relating to mental health; the fragility of psychosocial network; the barriers on construction of co-ownership of PC teams about users bearers of psychological distress, and the trap of the exclusive care responsibility for “mental health” professional.

**Conclusions:** These preliminary results show strengths and weaknesses in working with mental health on PC. Taking the potentiality of CoP, as formative-investigative strategy, these results must trigger reflection and actions that consider the complexity of care on a second phase of the action research.

**Descriptors:** Education, Continuing; Health Knowledge, Attitudes, Practice; Occupational Therapy; Mental Health; Primary Care.

<sup>a</sup> taisquevedo@ufscar.br

<sup>b</sup> elianefantinatti@gmail.com

<sup>c</sup> takayamagabriela@gmail.com

<sup>d</sup> alanaforneretto@gmail.com

<sup>e</sup> siliani\_martinelli@yahoo.com.br

<sup>f</sup> giselegiovanetti@gmail.com

<sup>g</sup> janaina.junqueira@gmail.com

171

### PATIENT CARE IN BRAIN DEATH: WEAKNESSES OF A NURSING STAFF

Camila Santos Pires Lima<sup>1,a</sup>, Ana Cláudia de Oliveira Batista<sup>1,b</sup>, Sayonara de Fátima Faria Barbosa<sup>1,11,c</sup>, Sabrina Guterres da Silva<sup>111,d</sup>

<sup>1</sup>*Grupo de Pesquisa em Tecnologias, Informações e Informática em Saúde e Enfermagem. Universidade Federal de Santa Catarina. Florianópolis, Brasil*

<sup>11</sup>*Departamento de Enfermagem. Universidade Federal de Santa Catarina. Florianópolis, Brasil*

<sup>111</sup>*Grupo de Estudos no Cuidado de Pessoas nas Situações Agudas de Saúde. Universidade Federal de Santa Catarina. Florianópolis, Brasil*

**Introduction:** Patient care in brain death requires preparation and qualifications of nursing staff that goes beyond the scientific expertise in the maintenance of the potential donor. It is essential to know the weaknesses permeating this process in order to manage strategies promoting excellence of care.

**Objective:** To identify the weaknesses of a nursing staff in the potential organ donor's care.

**Methods:** Descriptive research, exploratory, qualitative, developed in the Intensive Care Unit of a Brazilian public hospital. The subjects were 8 nurses and 18 nursing technicians. Data collection occurred in October and November 2010 by a semi-structured questionnaire. For treatment of the data the thematic analysis of Bardin was used.

**Results:** The weaknesses identified were grouped into three categories: 1) Family Relationship of the potential donor: professionals raised the difficulty in acting against the suffering of family members considering the step more complex of the organ donation process. 2) Lack of knowledge in the care of the patient in brain death: mainly cited the patients' lack of viable maintenance parameters. 3) Institution Logistic and Administrative Structure in the process of organ donation, highlighted the delay in confirmation of brain death tests, lack of human and material resources.

**Conclusions:** The study was to understand the main difficulties of nursing professionals in caring for the brain death's patient. It was important continuing education for qualification of these professionals and improving assistance to the potential organ donor.

**Descriptors:** brain death; intensive care unit; nursing staff; organ donation; organ transplant.

<sup>a</sup> camilasp87@gmail.com

<sup>b</sup> anacobatista@gmail.com

<sup>c</sup> sayonara.barbosa@ufsc.br

<sup>d</sup> sabinaguterres@gmail.com

172

## HEALTH ILLITERACY IN STUDENTS OF A POLYTECHNIC INSTITUTE

Pedro Jorge de Matos Gonçalves<sup>1,a</sup>, Orlindo Gouveia Pereira<sup>1</sup>, Students of the 4<sup>th</sup> year - Dietetics 2013/2014<sup>1</sup>

<sup>1</sup>*Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

<sup>11</sup>*Universidade Nova de Lisboa. Lisboa, Portugal*

**Introduction:** The study of health illiteracy in fashion, but more important than the ignorance of procedures that prevent the behavioral diseases are unhealthy habits and life styles.

**Objective:** Comparison of levels of illiteracy, habitual stress and health habits between the students of the Higher School of Health with those of the other four schools of IPL.

**Method:** Inquiry by questionnaire. Subjects: ESSlei (164), ESAD (93), ESECS (149), ESTG (98) and ESTM (114). Total: 618.

**Results:** As expected from the theoretical analysis of the problem we found no significant differences among the schools, except in the greater use of “drugs” and tobacco at the Higher School of Art and Design, Increased use of alcohol and the addition of salt to meals in upper School of Tourism and Maritime Technologies, and also addition of sugar at the Higher School of Education and Social Sciences. The level of current stress in the School of Health students is higher than in the other Schools. There are no differences of literacy among all the students.

**Conclusion:** The above attests that the knowledge conveyed is not sufficient to correct habits and life styles. Any program to overcome illiteracy in health shouldn't focus on health education, transmitter of mere knowledge, but has to intervene in behavioral and expressive habits and should take into account the situation of the persons to whom it is addressed.

**Descriptors:** Health illiteracy, healthy habits, life style, psychosocial interventions.

<sup>a</sup> pjmatosg@ipleiria.pt

173

## INFLUENCE OF THE ECONOMIC SCENARIO IN THE PROLIFERATION OF PHARMACEUTICAL COUNTERFEITING

Mariana Balby<sup>1</sup>, André Madeira<sup>1</sup>, Diogo Repas<sup>1</sup>, Bruno Mendes<sup>11,a</sup>

<sup>1</sup>*Escola de Ciências e Tecnologias da Saúde. Universidade Lusófona de Humanidades e Tecnologias. Lisboa, Portugal*

<sup>11</sup>*Grupo de Gestão de Qualidade e Estratégia em Saúde. Escola de Ciências e Tecnologias da Saúde. Universidade Lusófona de Humanidades e Tecnologias. Lisboa, Portugal*

**Introduction:** The failure in the global financial management had an important impact in the macro, meso and microeconomic scenarios, leading to adverse events. The pharmaceutical counterfeiting appears as a public health vulnerability, acquiring 1% of the pharmaceutical market in the developed countries and 10%-30% in the African, Asian and Latin American countries. This weakness in the medicines quality and patient safety has been promoted by legal impunity and also supported by the high profit under the reduced investment required.

**Objective:** The evaluation of Portuguese studies, guidelines and stakeholder perspective in this matter, emerges as a priority and as our goal.

**Methods:** The group applied closed-ended question inquiries on a random sample of 175 users as well as retrospective and prospective interviews to stakeholders representing the pharmaceutical chain (ANF - APIFARMA - GROQUIFAR - INFARMED). The results were expressed through two-dimensional matrices, followed by a cross-study with standards.

**Results:** Regarding the stakeholders, we observed a correction range between 37,5% and 85,7%, with irregularities correlated with the implemented measures, influence of the economic sector and concerning with the public warning systems. Regarding the users, the correction range was 50%, in a predominantly female population, age range of 20-29 years and with secondary education level.

**Conclusions:** In conclusion, the majority of the stakeholders don't establish the country economic situation as the causal agent of the counterfeiting proliferation, contrary to international studies. The project registered also the necessity of reinforcement of risk management measures and healthcare literacy of users.

**Descriptors:** Health; Regulation; Economy; Pharmaceuticals; Counterfeiting.

<sup>a</sup> bruno.mendes@ulusofona.pt



174

### THE IMPORTANCE OF THE ELECTROCARDIOGRAM IN THE SPORTS MEDICAL EVALUATION

José Teixeira<sup>a</sup>, Lucinda Sofia Carvalho, Bruno Valentim, Alexandre Pereira

*Escola Superior de Saúde Dr.Lopes Dias. Instituto Politécnico de Castelo Branco. Castelo Branco, Portugal*

**Introduction:** Sudden Death in competitive athletes has developed an intense debate about in detection strategies cardiovascular diseases. The center of the debate is the cost-effective of the addition of the 12-lead electrocardiogram to the personal history and physical examination.

**Objective:** To define the electrographic specific alterations in athletes comparing to subject nonathletes. Define the “Athlete’s Heart”.

**Methods:** The study includes 140 males subjects, 70 are competitive athletes and 70 are non-athletes, with an average of 23.11±4.39 years old (between 18-36 years old). The sample collection was based on inquest of quick response and in the making of a 12-lead electrocardiogram.

**Results:** The average heart rate, the medium Sokolow-Lyon index and medium Cornell index showed statistically significant differences between groups ( $p<0.01$ ). Athletes had an average heart rate lowest and higher amplitudes of the QRS complex. There were also statistically significant at the heart rate middle in the group of athletes in relation to the burden of stress ( $p<0.01$ ), competition time ( $p=0.04$ ) and number of training per week ( $p<0.01$ ). There were also statistically significant differences on the heart rate average in the group of athletes in relation to the effort amount ( $p<0.01$ ), competition time ( $p=0.04$ ) and number of weekly training ( $p<0.01$ ).

**Conclusions:** The lack of specific criteria that to define “Athlete’s Heart” made it impossible to reach the main objective of the study. There were differences between the two groups, derived from “cardiovascular remodeling” associated to the physical effort.

**Descriptors:** Sudden Death; Athlete; Electrocardiogram; Heart Rate.

<sup>a</sup> zeteixeira1991@gmail.com

175

### IMPACT OF PSYCHO EDUCATION ON ANXIETY AND PERSPECTIVES FACE TO DEATH AMONG HEALTH PROFESSIONALS OF A UNIT OF PRIMARY HEALTH CARE

Cláudia Mourão<sup>a</sup>

*Agrupamento de Centros de Saúde do Médio Tejo, Unidade de Cuidados na Comunidade do Almourol. Vila Nova da Barquinha, Portugal*

**Introduction:** Death has always been a current theme because it’s part of life. It is something natural and should see itself as such. A reflection on life and death constitutes an effective self - care from fear and anxiety, and it is important to the training of health professionals on the processes of mourning.

**Objective:** To evaluate the impact of psycho education on anxiety and perspectives of death among health professionals of a Unit of Primary Health Care of central Portugal.

**Methods:** This is a quantitative, quasi-experimental study of type pretest and posttest, with a group of seven individuals selected by non-probability sampling. The Specific Psychoeducational Intervention Program with six sessions of two hours per week, held from April to July 2011. We applied the Death Anxiety Questionnaire and Brief Scales about Various Perspectives of Death before and after the sessions and a qualitative evaluation “Evaluation of achievements” was taken after the Program. The average scores obtained before and after the intervention were determined and compared with the Wilcoxon test ( $p\leq0.05$ ), using the SPSS 14.0 program.

**Results:** The mean anxiety decreased ( $M_a=35.42$ ,  $M_d=29.28$ ), with statistically significant differences ( $Z=-2.043$ ,  $p=0.041$ ). Perspectives of death showed no statistically significant differences ( $p>0.05$ ). The content analysis performed served to support some findings and indicated positive achievements.

**Conclusions:** The strategy of psycho education points to positive impact, and can be replicated to different professionals.

**Descriptors:** death anxiety; psycho education; health professionals.

<sup>a</sup> claudiamourao1972@gmail.com

176

### VULNERABLE POPULATION TO LOW HEALTH LITERACY: A SYSTEMATIC REVIEW

Claudiana Donato Bauman<sup>1,a</sup>, Ezequiel Novais Neto<sup>1,b</sup>, João Gabriel Silva Souza<sup>1,c</sup>, Adélia Dayane Guimarães Fonseca<sup>1,d</sup>, Liliane Lacerda Silva<sup>1,e</sup>, Andréa Maria Eleutério de Barros Lima Martins<sup>1,f</sup>

<sup>1</sup>Universidade Estadual de Montes Claros. Montes Claros, MG, Brasil

<sup>2</sup>Universidade de Campinas. Campinas, SP, Brasil

**Introduction:** Health literacy seeks to understand the ability of individuals to access, understand, evaluate and apply information related to health. A low health literacy may disqualify individuals to manage their own health, reducing adherence to measures of health promotion and disease prevention. Vulnerable populations to low health literacy are in a context of fragility, disfavor and even helplessness or abandonment.

**Objective:** To identify groups and/or populations vulnerable to low health literacy.

**Methods:** This is a systematic review of the literature conducted from Lilacs, SciELO and MEDLINE (PubMed) database using the following descriptors: “Health Literacy”, “Vulnerable Population”, “Health Vulnerability”, used in isolation and combined. The articles were initially selected by title and then by reading summaries to decide which ones would have the full text read. Scientific articles from year 2004 to 2014 were included. We excluded editorials, reviews, conference proceedings and articles of specific pathologies. The scientific papers were read in full by two evaluators and in discordant cases a third reviewer decided on the inclusion of the work.

**Results:** The literature search yielded 10.843 results, with 62 read in full. Of these, 16 met the inclusion criteria. The main groups considered vulnerable to low health literacy were older people with low income and illiterate, immigrants, individuals with few socioeconomic resources, psychiatric patients and institutionalized elderly.

**Conclusions:** Increasing age, as well as health problems or socioeconomic may be associated with low health literacy.

**Descriptors:** Health Literacy; Vulnerable Population; Health Vulnerability.

<sup>a</sup> rcardoso50@gmail.com

<sup>b</sup> jgraveto@esenfc.pt

<sup>c</sup> caubauman@gmail.com

<sup>d</sup> ezequielnovaisneto@gmail.com

<sup>e</sup> jgabriel.ssouza@yahoo.com.br

<sup>f</sup> adeliadayane@yahoo.com.br

<sup>g</sup> liliane-silva@ig.com.br

<sup>h</sup> martins.andreambl@gmail.com

177

### HEALTH LITERACY AND ITS MEASUREMENT TOOLS: A SYSTEMATIC REVIEW

Ezequiel Novais Neto<sup>1,a</sup>, Claudiana Donato Bauman<sup>1,b</sup>, João Gabriel Silva Souza<sup>1,c</sup>, Adélia Dayane Guimarães Fonseca<sup>1,d</sup>, Liliane Lacerda Silva<sup>1,e</sup>, Andréa Maria Eleutério de Barros Lima Martins<sup>1,f</sup>

<sup>1</sup>Universidade Estadual de Montes Claros. Unimontes. Montes Claros, MG, Brasil

<sup>2</sup>Universidade de Campinas. Campinas, SP, Brasil

**Introduction:** health literacy is a relatively new concept in health sciences. It is related to the patient’s skill to access, analyze and make decisions about information related to his/her health. A poor health literacy is related to poorer clinical outcomes and higher costs to health services.

**Objective:** To assess the evidences concerning health literacy and its measurement tools.

**Methods:** It’s a systematic review of the literature conducted from Lilacs, MEDLINE (PubMed) and SciELO database using the descriptors “Health Literacy”, “tools”, “instruments”, and “questionnaires” used in isolation and combined. The articles were initially selected by title and then by reading summaries to decide which ones would have the full text read. Scientific articles until January 2014 were included. We excluded reviews, conference proceedings and editorials. The scientific papers were read in full by two evaluators and in discordant cases a third reviewer decided on the inclusion of the work.

**Results:** The literature search yielded 5199 results, with 56 read in full. Of these, 41 met the inclusion criteria. We found diverse instruments that can accurately measure health literacy, specially REALM, TOHFLA and SAHLSA, which were used in more articles. At least one instrument (STOFHLA) can be used by paper and electronic administration.

**Conclusions:** Health literacy can be efficiently assessed and its tools can be successfully adapted to diverse linguistic, population, clinical and cultural settings.

**Descriptors:** health literacy; measurement; instruments; tools.

<sup>a</sup> ezequielnovaisneto@gmail.com

<sup>b</sup> caubauman@gmail.com

<sup>c</sup> jgabriel.ssouza@yahoo.com.br

<sup>d</sup> adeliadayane@yahoo.com.br;

<sup>e</sup> liliane-silva@ig.com.br;

<sup>f</sup> martins.andreambl@gmail.com

178

### HEALTH PROMOTION & EMOTIONAL EDUCATION: DEVELOPMENT OF A WEBSITE

Nuno Fernandes<sup>a</sup>, Hugo Martins<sup>b</sup>, Joana Rodrigues<sup>c</sup>, Maria João Caeiro<sup>d</sup>, Patrícia Baltare, Paula Diogo<sup>f</sup>

*Unidade de Investigação & Desenvolvimento em Enfermagem. Escola Superior de Enfermagem de Lisboa. Lisboa, Portugal*

**Introduction:** Emotions are powerful motivators of human behavior and determine social relationships. Thus, the concept of emotional education emerges as the development of five basic emotional skills that allow the person to deal with emotionally intense situations, allowing for quality of life through healthy social interactions. Information technology has alluring transformational capabilities in health-related matters; as so, it may be used as an important tool in emotional education.

**Objective:** This project aims at studying emotional education as a means for health promotion and by developing strategies that raise awareness on this subject and promote emotional literacy among health professionals and general public.

**Methods:** Conducting a systematic literature review and creating a website that will allow for scientific publication and discussion regarding emotional education as well as the development of an e-learning platform, conducted by nurses and researchers, based on evidence-based approach.

**Results:** Contributing for emotional education of health professionals and general public, leading to their emotional literacy, through e-health and e-learning.

**Conclusions:** Emotional literacy is essential for the development of human potential, being achieved through emotional education. In health promotion, learning new concepts and behavioral patterns is insufficient, as it requires actions directed at the needs and emotions that mediate behavior and knowledge, as emotions are responsible for the way we perceive the world. Thus, experiencing positive emotions is essential for minimizing suffering, recovering from illness and for self-actualization both professionally and personally. Information technologies are an important and cost-effective tool of health education that is still underused.

**Descriptors:** nursing; e-health; emotional education; emotional literacy; health promotion.

<sup>a</sup> fernandes.npfs@gmail.com

<sup>b</sup> martins.hgoncalves@gmail.com

<sup>c</sup> guarda.joana@gmail.com

<sup>d</sup> mariajoaoacaeiro@gmail.com

<sup>e</sup> pbaltar@gmail.com

<sup>f</sup> pmdiogo@esel.pt

179

### TYPES OF INFORMATION AND COMMUNICATION TECHNOLOGIES USEFUL TO PROMOTE HEALTH LITERACY IN PATIENTS WITH COPD

José Miguel Padilha<sup>a</sup>, Paulino Sousa<sup>b</sup>, Filipe Soares Pereira<sup>c</sup>

*Escola Superior de Enfermagem do Porto. Porto, Portugal*

**Introduction:** Chronic pulmonary obstructive disease (COPD) is one of the greater cause of mortality and morbidity in the world, characterized as a chronic and progressive disease that challenges patients ability to: skillfully manage the level of power available to the achievement of self-care, and to control the disease progression aiming to maintain the patients' quality of life.

**Objective:** To identify types of technological support and information content used to promote health literacy and self-care management in patients with COPD.

**Methods:** Quantitative, exploratory, descriptive, and transversal approach. The authors used a questionnaire based on a literature review and on two models: model of technology acceptance and one model of the determinants for patients' perceived ease of use.

**Results:** Patients who had higher literacy and higher technological literacy reported that web-based technologies were the most useful. Those who had lower literacy and lower technological literacy reported higher usefulness, easiness and intention to use mobile phone, books, and videos in the access to information.

**Conclusions:** Information and Communication Technologies (ICT) can be a resource for health professionals optimizes the self-care management of chronic patients. The development and availability of these resources must be mediated by the technological literacy, perceived usefulness and intention to use technologies by the patient.

**Descriptors:** Pulmonary disease, Chronic Obstructive; Education nursing; Computer literacy; Health literacy; Self-care management.

<sup>a</sup> miguelpadilha@esenf.pt

<sup>b</sup> paulino@esenf.pt

<sup>c</sup> filipereira@esenf.pt

180

### MOUTH SELF-EXAMINATION RATES ARE HIGHER AMONG USERS OF SUS: EVALUATION BASED ON A MODEL OF HEALTH LITERACY

Andréa Maria Eleutério de Barros Lima Martins<sup>1,a</sup>, Raquel Conceição Ferreira<sup>11,b</sup>, João Gabriel Silva Souza<sup>111,c</sup>, Desireé Sant'Ana Haikal<sup>11,d</sup>, Efigênia Ferreira e Ferreira<sup>11,e</sup>, Isabela Almeida Pordeus<sup>11,f</sup>

<sup>1</sup>Universidade Estadual de Montes Claros. Minas Gerais, Brasil

<sup>11</sup>Universidade Federal de Minas Gerais. Minas Gerais, Brasil

<sup>111</sup>Universidade de Campinas. São Paulo, Brasil

**Introduction:** in the context of health promotion, educational activities are a priority in the primary health care (PHC) provided by Brazil's public health care system (SUS). The effectiveness of these actions is demonstrated by the adherence to mouth self-examination and reduction in morbidity and mortality rates of oral cancer.

**Objective:** to identify the prevalence of mouth self-examinations among elders and verify if the prevalence was higher among SUS users based on a model of health literacy.

**Methods:** cross-sectional study between complex samples, probabilistic by conglomeration of elderly (65-74 years). SPSS® was used for estimation, with corrections to design effects of the magnitudes (OR/CI95%) of associations of mouth self-examination with individual determinants, services used, health costs, health related behaviors and health outcomes.

**Results:** among the 740 study subjects, 492 elderly met the inclusion criteria (response rate 92%). Of these, 101 (22.4%) report that they practice self-examinations of the mouth. This behavior was more frequent among elderly who used public dental services provided by SUS, those who had higher per capita income, those who had more schooling, those who used removable dental prosthesis and those without mouth disorders; it was less frequent among those who used dental services as routine and among those who didn't drink alcohol.

**Conclusions:** the prevalence of mouth self-examination among the elderly was low, but higher among public healthcare users. Teaching routines of self-examination should be included in all standards of treatment, including among those who use private, complementary and philanthropic services.

**Descriptors:** Mouth Neoplasms. Aged. Health literacy. SUS. Self-examination. Oral health.

<sup>a</sup> martins.andreambl@gmail.com

<sup>b</sup> ferreira\_rc@hotmail.com

<sup>c</sup> jgabriel.ssouza@yahoo.com.br

<sup>d</sup> desireehaikal@gmail.com

<sup>e</sup> efigeniaf@gmail.com

<sup>f</sup> isabela.pordeus@gmail.com

181

### CROSS-INFECTION RISK IN CLINICAL DENTISTRY PERFORMED BY STUDENTS

André Arderius<sup>1</sup> Nélio Veiga<sup>1,a</sup>, Cláudia Ribeiro<sup>111,b</sup>, Maria Godinho<sup>1,c</sup>, Rute Rio<sup>111,d</sup>

<sup>1</sup>Universidade Católica Portuguesa. Porto, Portugal

<sup>11</sup>Centro Hospitalar do Porto. Hospital Santo António. Porto, Portugal

<sup>111</sup>Faculdade de Medicina Dentária do Porto. Porto, Portugal

**Introduction:** Cross-infection is a problem in all dental offices. In order to prevent this problem, there are various control measures. This occurs through the transmission of pathogenic micro-organisms from one patient to another, the patient to the Dentist.

**Objective:** Checking the knowledge by dentistry students about cross infection, through questionnaire that aimed to observe the methods of asepsis in dentistry clinical practice.

**Methods:** The questionnaire contained questions about the procedures for decontamination of surfaces, rotary instruments and clinical appliances. The survey was completed by 138 students of Catholic University.

**Results:** It was found that aseptic chain is not always respected, often through ignorance or unconscious acts. However, students have demonstrated knowledge of the cross-infection risk, since 96.4% disinfects the box after each appointment and 89.1% use sterile material during the appointment. We verified that one of the potential sources of cross-infection between patients is to use the same packing material, including the adhesive and composite. In turn, the lack of means of protection, such as goggles, face shield and caps by the majority of students, may allow infections between patient and student of Dental Medicine.

**Conclusions:** Cross-infection is present in day-to-day student of Dentistry. These may occur between patients and/or between patient and student. The aseptic protocols should be reviewed and students, for their own safety and as future health professionals, should be advised to adopt conservative measures and reduce or even eliminate cross-infection.

**Descriptors:** Measures; Cross-infection; Disinfection Sterilization; Dentistry; Dental Office.

<sup>a</sup> arderius112@hotmail.com

<sup>b</sup> nelioveiga@gmail.com

<sup>c</sup> claudiaribeiro.usc@gmail.com

<sup>d</sup> maria\_godinho@hotmail.com

<sup>e</sup> rute\_rio\_@hotmail.com

182

### INTERNET ADDICTION RELATED-SYMPTOMS IN A SAMPLE OF YOUNG-ADULTS

Maria João Martins<sup>1,a</sup>, Mariana Maia de Carvalho<sup>1,b</sup>, Sandra Vieira<sup>1,c</sup>, Maria da Luz Vale-Dias<sup>1,d</sup>, Vera Raposo<sup>1,e</sup>

<sup>1</sup>*Faculdade de Psicologia e Ciências da Educação da Universidade de Coimbra; Coimbra. Portugal.*

<sup>II</sup>*Centro Hospitalar da Universidade de Coimbra. Coimbra. Portugal*

**Introduction:** Internet addiction or excessive computer use are concepts derived from the virtual-technological contemporary society. As a recent clinical condition proposed by medical professionals and recognized by DSM-V, Internet Addiction Disorder (IAD) refers to mood balances, excessive or poorly controlled preoccupations, urges or behaviours regarding computer use or internet navigation leading to family conflicts, diminished social life, adverse work or academic problems (Cash, Rae, Steel & Winkler, 2012; Weinstein & Lejoyeux, 2010). Although it can severally affect subjects from different life-span stages, adolescents and young-adults seem to be at higher risk for IAD in terms of its neurobiological mechanisms and psychosocial vulnerability.

**Objective:** This study aimed to: a) evaluate the presence of IAD related-symptoms in a sample of young-adults; b) clarify the IAD criteria, its causes and consequences c) contribute to the evaluation of the Portuguese version of the Internet Addiction Test (Young, 1988) properties.

**Methods:** Using exploratory quantitative design, a sample of 455 young-adults filled the Internet Addiction Test (Young, 1988) and a sociodemographic questionnaire.

**Results:** The results found suggest that a considerable amount of our sample uses internet excessively. Preliminary analyses show that the IAD test has appropriate psychometric properties.

**Conclusions:** The results highlight the urgency for prevention programs in the college community so that prevention strategies described by other authors and therapeutic interventions being tested are succinctly recommended. Regarding the interest of internet addiction for Developmental Psychology and Clinical Practice we relate our results to the major challenges healthy development.

**Descriptors:** internet; addiction; young-adults; risk.

<sup>a</sup> martins.mjrv@gmail.com

<sup>b</sup> marianaportocarrero@hotmail.com

<sup>c</sup> sandrammvieira@gmail.com

<sup>d</sup> valedias@fpce.uc.pt

<sup>e</sup> veraposo@gmail.com

183

### YOUNG'S MENTAL HEALTH LITERACY: A SYSTEMATIC REVIEW

Tânia Morgado<sup>1,a</sup>, Glória Toletti<sup>1,b</sup>, Luís Loureiro<sup>1II,c</sup>, Maria Antónia Botelho<sup>1II,d</sup>, Manuel Gonçalves-Pereira<sup>1II,e</sup>

<sup>I</sup>*Centro Hospitalar. Universidade de Coimbra. Coimbra, Portugal*

<sup>II</sup>*Escola Superior de Enfermagem de Lisboa. Lisboa, Portugal*

<sup>III</sup>*Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal*

<sup>IV</sup>*Universidade Nova de Lisboa. Lisboa, Portugal*

**Introduction:** Worldwide, approximately 20% of children and adolescents suffer from a mental disorder (WHO, 2003) and about 8% of teenagers have anxiety disorders (NIMH, 2011). Studies emphasize the importance of promoting young's mental health literacy.

**Objective:** Identify the levels of young's mental health literacy about anxiety.

**Methods:** A systematic literature review was conducted on EBSCOhost: CINAHL and MEDLINE during December and January 2014 for results from 2008 to 2014. Articles were analyzed according to selection criteria and assessed for quality by two reviewers.

**Results:** Were included 5 articles. 1) In a sample of young aged 16-24, more than one in four experienced mental disorders, included anxiety, in the proceeding 12 months, but less than 1/4 accessed health services (Reavley, Cvetkovski, Jorm, Lubman, 2010). 2) About 33% young 15-25 years of a representative sample identified the post-traumatic stress and only 3% social phobia (Reavley, Jorm, 2011). 3) In a representative sample of undergraduate students, 80% acknowledged social phobia and obsessive-compulsive disorder in vignettes, however less than half labeled the panic disorder or anxiety generalized correctly (Coles, Coleman, 2011). 4) Beyondblue awareness was associated with more accurate recognition of the disorder portrayed in all vignettes, except social phobia by young 15-25 years (Yap, Reavley, Jorm, 2012). 5) In a convenience sample of middle and high school, students levels of recognition of mental disorders were low, 27.5% identified anxiety (Olsson, Kennedy, 2010).

**Conclusions:** Studies show reduced levels of young's mental health literacy about anxiety and it's necessary to develop interventions to promote it.

**Descriptors:** mental health literacy; anxiety; young; adolescents.

<sup>a</sup> tmorgado@gmail.com

<sup>b</sup> gmtoletti@esel.pt

<sup>c</sup> luisloureiro@esenfc.pt

<sup>d</sup> rbotelho@esel.pt

<sup>e</sup> gpereira.sm@fcm.unl.pt

184

### HEALTH EDUCATION - ANALYSIS OF CURRICULUM MATRIX OF THE COURSE OF NURSING

Raquel Barretto<sup>1,a</sup>, Laurineide Cavalcante<sup>11,b</sup>, Fátima Landim<sup>11,c</sup>, Lia Jacob<sup>11,d</sup>, Maria Tereza Borges<sup>11,e</sup>, Sara Karbage, Rithianne Carneiro

<sup>1</sup>Faculdade do Nordeste. Fortaleza, CE, Brasil

<sup>11</sup>Universidade de Fortaleza. Fortaleza, CE, Brasil

**Introduction:** The nursing course currently has the goal of training professionals in the protection, promotion and restoration of health and prevention of diseases. Health education requires knowledge of both the payment of health and education as well as psychology, sociology, philosophy and anthropology, namely, health education is a multifaceted field. The problem of this investigation was: how is the supply of the discipline of health education in course nursing of Fortaleza-Ceará-Brazil.

**Objective:** To analyze the supply of the discipline of health education in the curriculum matrices of nursing courses offered by IES in Fortaleza-Ceará-Brazil.

**Methods:** This was in 2013 a exploratory-descriptive documentary study. The search for the corpus took place in the electronic IES of Fortaleza-Ceará-Brazil offered that the nursing course sites.

**Results:** According to the e-MEC (Brazil, 2013) had 14 nursing courses, two of these in the distance (UNIDERP and UNESA). Regarding the availability of the curriculum at the site of IES: in two IES, the matrix was not available online (FATECI and FMN). Regarding supply of the discipline of health education: only 04 IES, the offered (UNICHRISTUS, FIC ESTACIO, UECE and FANOR).

**Conclusion:** Health education is the core of nursing education therefore should be included in the curriculum of the course.

**Descriptors:** Health education; Nursing; Curriculum Matrix; Higher.

<sup>a</sup> rbareto@fanor.edu.br

<sup>b</sup> lauridiniz@yahoo.com.br

<sup>c</sup> lunna@unifor.br

<sup>d</sup> lia\_maristela@hotmail.com

<sup>e</sup> mariatborges@uol.com.br

185

### WATER INTAKE AS A PROMOTER OF HEALTH BEHAVIOUR WITH CHILDREN

Dolores Estrela Alveirinho<sup>a</sup>, Helena Margarida Tomás<sup>b</sup>, Margarida Afonso<sup>c</sup>, Paula Esteves<sup>d</sup>

*Instituto Politécnico de Castelo Branco. Escola Superior de Educação. Castelo Branco, Portugal*

**Introduction:** Promoting health literacy is important in the education of future early childhood educators. It is critical that during initial teacher training, future educators have the opportunity to develop and implement educational practices with young children that promote healthy behaviours and that they critically reflect on those practices.

**Objective:** To analyse the impact of a practice developed by future early childhood educators around the theme of water intake, as a means to promote a healthy lifestyle.

**Methods:** Qualitative exploratory case study involving 5 future early childhood educators and 24 young children. A content analysis of the continuous reflections of future educators and of the drawings made by the children before and after the intervention was conducted.

**Results:** Future early childhood educators were unanimous in recognizing the importance of experiential educational practices in promoting their empowerment in the field of health literacy. They reported the advantages of project work based on problem solving, of teaching resource production, of planning and carrying out activities with young children and of maintaining a continuous reflexive attitude, all of which contributed to promote their ability to think critically and strategically the importance of the health literacy. Children understood the importance of drinking and eating foods rich in water and internalized this behaviour as a promoter of a healthy lifestyle what is indicative of the effectiveness of the practice conducted by the future educators.

**Conclusions:** Practices of the type performed can help improve effectively and sustainably the health literacy for increase control over health of the students and the children.

**Descriptors:** Health literacy; early childhood education; initial teacher training; water intake; children..

<sup>a</sup> jdolores.alveirinho@ipcb.pt

<sup>b</sup> helenatomas@ipcb.pt

<sup>c</sup> margarida.afonso@ipcb.pt

<sup>d</sup> paula.esteves@ipcb.pt

186

### COMMUNICATIVE STYLES OF A PERSON WITH APHASIA AFTER BRAIN INJURY

Gabriela Teixeira<sup>a</sup>, Ana Rita Reis<sup>b</sup>, Barbara Santiago<sup>c</sup>, Márcia Marques<sup>d</sup>, Sónia Pós de Mina, Maria dos Anjos Dix

*Escola Superior de Saúde, Instituto Politécnico de Leiria, Portugal*

**Introduction:** A brain injury that affects the areas of language, will have several biopsycosocial repercussions in the patient. Knowing the impact that communication deficits, secondary to brain injury, have on the patient and their interpersonal relationships, the speech therapist can establish more realistic therapeutic goals, increasing the success of the intervention.

**Objective:** To identify communicative changes of the person with aphasia after brain injury.

**Methods:** Simple descriptive study involving 7 individuals diagnosed with aphasia, to whom was applied the CAPPA - P [Conversation Analysis Profile for People with Aphasia (Whitworth, Perkins & Lesser, 1997)], specifically the scale that assesses changes between premorbid (before injury) and postmorbid (after injury) conversations. In data collection, conducted through interviews, were met all the principles of the Declaration of Helsinki.

**Results:** The patients were asked about: self communication features, communicative partners, situations and conversational themes and non-verbal communication. There was a regression in performance after the brain injury, in themes relative to communicative style [in features like “talkative” (57.1%) and “speak clearly” (42.9%)], and to the topics of conversation [the most significant were “future plans” and “family”]. There was an improvement in non-verbal communication, with the increasing use of gestures (57.1%). Some topics remain unchanged after the brain injury, due to the most variable internal and external factors.

**Conclusions:** Despite the small number of participants, it was evident that patients showed significative changes in their communicative styles and would benefit from Speech and Language Therapy.

**Descriptors:** aphasia; communication; conversation; caregivers; speech therapy.

<sup>a</sup> gabriela.teixeiro88@gmail.com

<sup>b</sup> ritaspreis@hotmail.com

<sup>c</sup> barbaracomtiago19@gmail.com

<sup>d</sup> marciacmarques@hotmail.com

187

### SHAME AND SOCIAL ANXIETY IN ADOLESCENCE: THE EXPERIENCE OF SHAME SCALE FOR ADOLESCENTS

Maria do Céu Salvador<sup>a</sup>, Eva Rodrigues<sup>b</sup>

*Faculdade de Psicologia e Ciências da Educação, Universidade de Coimbra, Portugal*

**Introduction:** Symptoms associated with social anxiety disorder (SAD) and shame arise mainly during early adolescence, during which period all changes call attention to the self and its exposure, anxiety and shame being typically associated with the perception of being scrutinized by others.

**Objective:** We first aimed to explore the psychometric properties of the Experience of Shame Scale (ESS; Andrews, Qian & Valentine, 2002) in a Portuguese adolescent sample (Study 1). This self-report measure assesses characterological, behavioral and bodily shame, and was used in Study 2 to explore the relationship between social anxiety and shame among different groups.

**Methods:** 326 adolescents (mean age=15.30), participated in the study of the questionnaire (Study 1) and 102 adolescents ( mean age=15.6), participated in Study 2, which comprised adolescents with SAD (N=45), adolescents with other anxiety disorders (N=24) and adolescents without any psychopathology (N=33). Both samples were collected from schools. All the participants answered several self-report questionnaires and all the participants of Study 2 were assessed using ADIS-C.

**Results:** The ESS revealed good psychometrics properties, confirming a 3 factor structure and demonstrating excellent reliability and good convergent and discriminant validity. In Study 2, shame was positive and significantly correlated with social anxiety among adolescents with SAD. The ESS's total score and the characterological and behavioral shame factors were significant predictors of social anxiety. Also, the ESS significantly discriminated between adolescents with SAD from adolescents with other anxiety disorders or with no psychopathology.

**Conclusions:** These results suggest that the ESS is a valid instrument for clinical assessment and research on adolescent social anxiety disorder.

**Descriptors:** Shame; Adolescence; Experience of Shame Scale (ESS); Reliability; Social Anxiety Disorder (SAD).

<sup>a</sup> ceusalvador@gmail.com

<sup>b</sup> eva\_s1013@hotmail.com

188

## VESTIBULAR EFFECTS OF COCHLEAR IMPLANTATION

Inês Araújo<sup>a</sup>

*Escola Superior de Tecnologia da Saúde. Instituto Politécnico de Coimbra. Portugal*

**Introduction:** The Cochlear Implant (CI) is a therapeutic option for patients with severe sensorineural hearing loss. The CI is a prosthesis which main purpose is to substitute Corti organ when compromised. The CI allows the hearing sensation and the recognition of sounds and speech. The CI performance has been investigated by many researchers, but only a few studies analysed its impact in body balance.

**Objective:** To verify the effects of CI surgery on vestibular system, using a systematic review.

**Methods:** The literature review was made between the 6<sup>th</sup> and 8<sup>th</sup> of May 2013. The papers were searched on the following databases: PubMed; Elsevier-Science Direct; Springer Link; Taylor & Francis; Web of Knowledge, Web of Science; Wiley; and B-On. In this review were included original papers in English and Portuguese language, from 2003 to 2012. Keywords used were: “postural balance”, “cochlear implants”, “vestibular disorders”, and “vestibular alterations”.

**Results:** A total of 21 publications were found, and after reading the abstract only 14 corresponded to the inclusion criteria.

**Conclusions:** The several authors present different conclusions: some argue that CI surgery interferes with vestibular function and so affects body balance; but others say that there is any interference and that can even improve body balance. Although this results, there are some grey areas that can be researched to clarify this theme: the effects of bilateral CI and its effects on daily live balance.

**Descriptors:** postural balance; cochlear implants; vestibular disorders; vestibular alterations.

<sup>a</sup> ines@estescoimbra.pt

189

## THE HEALTH LITERACY AND EMPOWERMENT OF CITIZENS: INTEGRATIVE REVIEW

Maria José Rosado Martins<sup>a</sup>

*Instituto de Ciências da Saúde, Universidade Católica Portuguesa, Lisboa, Portugal*

**Introduction:** The health literacy is a set of individual and social skills, which gives the ability to access, understand and use health information and consequent empowerment of citizens in promoting health and its relationship to daily life.

**Objective:** Analyze scientific literature on the health literacy, their relationship with their health.

**Methods:** Integrative review. Electronic research databases in the B-ON, LILACS, SciELO, RCAAAP and repositories of Portugal Universities. Keywords: health literacy; literacy; empowerment; citizens; promotion of health. The survey was conducted from January to February 14, 2014.

**Results:** There is a direct relationship between health literacy and health status. Low health literacy is associated with less knowledge about the prevention and management of health problems and ineffective behaviors, inappropriate use of drugs, excessive use of health services or inefficacy in dealing with emergency situations. High literacy is related to better health outcomes, increased longevity, healthy lifestyle habits and lifestyles.

**Conclusions:** Health professionals should set up projects at regional level to identify users with low health literacy, in order to promote an adequate level of health literacy, which in turn increases the capacity of health of each citizen, providing skills for were active in dealing with the health system and the management of their health and disease. The health system centered on the user requires an active role of the citizen, becoming an integral part of decision making in health care, in order to change their lifestyles to ensure a healthier life, and lower costs to the state and obtain health gains.

**Descriptors:** health literacy; literacy; empowerment; citizens; promotion of health.

<sup>a</sup> mariajmartins@sapo.pt



190

## BEHAVIOUR FACE TO PACKAGING WASTE AND DRUGS OUT OF USE

Luís M. Nascimento<sup>1</sup>, Xavier Taboada<sup>1</sup>, Marisa Cardoso<sup>1</sup>,  
Laura Figueiredo<sup>1</sup>, Ivo Lopes<sup>1</sup>, Rui Torres<sup>1</sup>

<sup>1</sup>*Departamento de Tecnologias de Diagnóstico Terapêutica. Escola Superior de Saúde. Instituto Politécnico de Bragança. Bragança, Portugal*

<sup>11</sup>*Escola Superior de Saúde. Instituto Politécnico de Bragança. Bragança Portugal*

**Introduction:** According to Directive No. 2004/12/EC of 11 February, up to the present calendar year (2011), Portugal should meet established with respect to the recycling of packaging waste and discarded drug targets. For this, it is essential that the population has acquired over the past few years, the necessary information. So, for that it is important the active participation of everyone in this delivery, in places due to the effect.

**Objective:** The objectives of this research consisted in knowing what they know and do students of Health School of Sciences, in Polytechnic Institute of Bragança. The medicines and no longer use and its packaging, thus evaluating the delivery behavior of this type of waste in pharmacies.

**Methods:** To achieve these goal, we selected the school referred to earlier as a case of study, using as an analytical tool, a questionnaire to be applied manually. The questionnaire was administered to a sample of 356 students from the Health School of Bragança.

**Results:** The results showed that most respondents only disposes drugs left over when finish their expiration date, and archive them first at home and then giving them as a destination in the first place, the dust and then the pharmacy. It is mainly women who goes to the pharmacy delivery medicines out of use, having as main reasons the binomial environment/health. It was also noticeable that people who do not deliver the medicines in pharmacies still overlap those that deliver them in pharmacies.

**Conclusions:** These results, which allow a better understanding of the behavior of the students of the Health School of Bragança face to medicines, provide an important communication strategies and actions to improve the rates of recovery and recycling waste contribution.

**Descriptors:** Behavior; medicines out of use; waste; pharmacy.

<sup>a</sup> luis.miguel@ipb.pt

<sup>b</sup> xavier.t.costa@gmail.com

<sup>c</sup> a19119@alunos.ipb.pt

<sup>d</sup> a20799@alunos.ipb.pt

<sup>e</sup> a19569@alunos.ipb.pt

<sup>f</sup> a19583@alunos.ipb.pt

191

## KNOWLEDGES OF BRAZILIAN ACADEMICS OF NURSING ON BURNS

Flavia Dayana Ribeiro da Silveira<sup>1,a</sup>, Geovana Gallas Ferreira da Silva<sup>11,b</sup>, Maria de Jesus Lopes Mousinho Neiva<sup>111,c</sup>, Grazielle Roberta Freitas da Silva<sup>11d</sup>, Nadyelle Elias Santos Alencar<sup>11e</sup>, Anna Karolinne de Oliveira Silva<sup>11f</sup>, Priscila do Vale Machado<sup>11g</sup>

<sup>1</sup>*Universidade Federal do Piauí. Brazil*

<sup>11</sup>*Faculdade de Saúde, Ciências Humanas e Tecnológicas Do Piauí. Brazil*

<sup>111</sup>*Universidade Estadual do Maranhão. Brazil*

**Introduction:** The annual incidence of burns has been high in Brazil. This kind of occurrence, very frequently, is totally preventable. Health professionals as well as health students are very important to change this reality. Is necessary to focus in education strategies to help to reduce these avoidable occurrences.

**Objective:** To assess the knowledge of nursing students about burns and preventive measures.

**Methods:** This is a qualitative research which was realized with 15 students in the 3<sup>th</sup> year of Nursing graduation at a private university in a capital of Northeast of Brasil. For the data collection, interviews were conducted based on a semi-structured script. The students' knowledge on burns, prevention and treatment were analysed and grouped in three categories: Concept and classification of burn; burns: preventing and wound care and; population more likely to suffer burn.

**Results and Conclusions:** It was observed that is not difficult for students conceptualize burns. However, just few them described correctly the classification of burns. About prevention of burns, almost all students interviewed said correctly what to do to prevent this kind of accident. In other hand, the treatment of these lesions was not well explained by students. In addition, almost all students were right to say that children and elderly are the most vulnerable people to suffer burns. It is hoped that this study can to encourage the implementation of new knowledges and abilities in the Nursing graduate curriculum, based on the main weaknesses of students.

**Descriptors:** Wounds and Injuries; Therapeutics; Education Nursing; Evaluation; Brazil.

<sup>a</sup> flaviadayana@gmail.com

<sup>b</sup> geovanagallas@hotmail.com

<sup>c</sup> jesusmousinho@gmail.com

<sup>d</sup> grazielle\_roberta@yahoo.com.br

<sup>e</sup> nadyelle-elias@hotmail.com

<sup>f</sup> annakrol@hotmail.com

<sup>g</sup> prisciladovale@live.com

192

**FISH CONSUMPTION IN COLLEGE STUDENTS**

Adriana Silva<sup>1,a</sup>, Andreia Rodrigues<sup>1,b</sup>, Daniela Martins<sup>1,c</sup>,  
António Fernandes<sup>1,III,d</sup>, Vera Ferro-Lebres<sup>1,e</sup>

<sup>1</sup>*Escola Superior de Saúde. Instituto Politécnico de Bragança. Portugal*

<sup>II</sup>*Escola Superior Agrária. Instituto Politécnico de Bragança. Portugal*

<sup>III</sup>*Centre of Transdisciplinary Development Studies. Universidade de Trás-os-Montes e Alto Douro. Portugal*

**Introduction:** Fish is an important part of a healthy diet, the possibility of substituting meals with a higher content of saturated fat raising cardiovascular diseases risk, by meals with fish has innumerable health benefits.

**Objective:** This study aimed to study the consumption of fish in higher education students, and its socio demographic cofactors.

**Methods:** A sample of 238 Portuguese higher education students was used in a cross sectional study. A questionnaire regarding socio demographic and fish consumption habits was used. Statistical data analysis was performed using Statistical Package for Social Sciences, version 21.0. Kolmogorov-Smirnov with Lilliefors correction, Levene, Wilcoxon and Kruskal-Wallis, were the tests used.

**Results:** Results revealed that females and students from up-country have a significantly higher consumption of fish. It was also evident that students consume significantly more fish when eating out.

**Conclusions:** These data were consistent with previous researches that concluded that women consume significantly more fish and other healthy food items, like fruits and vegetables. These results suggest that the contexts of a fishy diet in higher education students are not the same as for adults. Further studies regarding the determinants of a healthy diet as a whole are needed.

**Descriptors:** Fish Consumption; Diet; Students; Health; Portugal.

<sup>a</sup> a23677@alunos.ipb.pt

<sup>b</sup> a23686@alunos.ipb.pt

<sup>c</sup> a23692@alunos.ipb.pt

<sup>d</sup> toze@ipb.pt

<sup>e</sup> vferrolebres@ipb.pt

193

**BODY IMAGE AND BODY COMPOSITION IN STUDENTS FROM TWO SECONDARY EDUCATION SCHOOLS OF BRAGANZA CITY, PORTUGAL**

Filipa Rebelo<sup>1,a</sup>, Marisa Santos<sup>1,b</sup>, Vera Ferro-Lebres<sup>1,c</sup>,  
António Fernandes<sup>1,III,d</sup>

<sup>1</sup>*Escola Superior de Saúde. Instituto Politécnico de Bragança. Portugal*

<sup>II</sup>*Escola Superior Agrária. Instituto Politécnico de Bragança. Portugal*

<sup>III</sup>*Centre of Transdisciplinary Development Studies. Universidade de Trás-os-Montes e Alto Douro. Portugal*

**Introduction:** Adolescence is a period of life characterized by physical, emotional and social changes. The changes observed in the look and body composition lead to a restructuring of body image.

**Objective:** To study the correlation between body image and body composition (% of fat mass) in adolescents from two high schools located in Braganza city, Portugal.

**Methods:** A cross-sectional, quantitative, observational and analytical study was developed. To carry out this study, a sample of 282 adolescents was collected. These adolescents were aged between 15 and 19 years, and were enrolled in the academic year (2012/2013). The adolescents were assessed for body image through the Body Image Questionnaire; and, the distribution of fat mass was measured using SECA bioelectrical impedance balance. To do the data treatment, SPSS 21.0 statistical program was used as well as the Spearman test.

**Results:** The average body fat percentage was higher in females (27.7%) compared to males (19.2%). Females showed a higher prevalence in all categories of body image distortion. And among the female students, 14.5% had a minor distortion, 9.9% had a moderate distortion and 6.9% had a severe distortion. Among the male students, 3.3% had a minor distortion, 4.6% had a moderate distortion and 2.0% had a severe distortion. A moderate correlation between body image and body fat percent was observed (Spearman correlation coefficient =0.535).

**Conclusions:** Female adolescents had a mean of body fat percentage above the male gender. There was found a moderate correlation between body image and body fat percentage.

**Descriptors:** Adolescents; Body image; Body composition; Secondary education; Braganza city, Portugal.

<sup>a</sup> filipa.rebelo@live.com.pt

<sup>b</sup> marisasantos12@hotmail.com

<sup>c</sup> vferrolebres@ipb.pt

<sup>d</sup> toze@ipb.pt

## MEASUREMENT AND DECISION MAKING

194

### THE MEASUREMENT OF ADAPTIVE BEHAVIOUR IN PORTUGAL

Sofia Santos<sup>a</sup>, Pedro Morato<sup>b</sup>

*Centro de Estudos de Educação Especial. Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal*

**Introduction:** In Portugal, is possible to observe the still “exploitation” of north-American normalized instruments. Only since the 2000s has Portugal included a functional evaluation of Adaptive Behaviour (AB) to describe people’s competences in community settings. It has gained prominent attention in human services over the last years in Portugal, and its measurement has become an integral part of the Intellectual Disability’ (ID) diagnosis, which remains exclusively based on IQ measures.

**Objective:** This situation suggests the construction of originally Portuguese measures. Our goal is to present the adaptation and validation process of the Portuguese version of the Adaptive Behaviour Scale (PABS), due to the need of proper and coherent devices to evaluate Portuguese population with ID.

**Methods:** PABS was applied to 1800 persons with ID (6-60 years), living in institutional settings to assess their AB level. Simultaneously, it was also applied to 75 so-called “normal” participants, in the same range of ages, for comparison. The Portuguese version of Adaptive Behaviour Scale was used.

**Results:** Results of the study are discussed in terms of the reliability and validity of scale’. Normative indexes and scale Portuguese version had become logical steps. Its importance in curricula is also discussed.

**Conclusions:** The PABS appears to be a valid and reliable assessment of AB in Portuguese individuals with ID. Portuguese policy towards disability needs be more focused on AB rather than being exclusively based in academic-scholar content: importance of the quality of interactions between individual and everyday environmental demands vs. “individual deficits”.

**Descriptors:** Adaptive behaviour. Evaluation. Intellectual disability. Portuguese Adaptive Behavior Scale.

195

### CHARACTERIZATION OF ACCIDENTS RELATING EXPOSURE TO BIOLOGICAL MATERIAL INVOLVING THE STAFF OF A UNIVERSITY HOSPITAL

Ingrid Amorim<sup>I,II,a</sup>, Erico Amorim<sup>II,b</sup>, Rafael Morais<sup>III,c</sup>, Miclecia Bispo<sup>III,d</sup>, Ana Mendonça<sup>II,e</sup>, Luciana Ribeiro<sup>III,f</sup>

<sup>I</sup>Hospital Universitário Onofre Lopes

<sup>II</sup>Universidade Federal do Rio Grande do Norte. Caicó, Brasil

<sup>III</sup>Universidade Potiguar. Natal, Brasil

**Introduction:** Health institutions are recognized by an offer complex services that have various risks for workers health. The handling of sharps containing organic materials may cause the employee to be an accident.

**Objective:** The objective of this research was to characterize accidents relating exposure to biological material involving the nursing staff of a university hospital in Natal/RN.

**Methods:** The population consisted of 62 nursing and technicians who had accidents with biological material in the period from 2008 to 2012 and were recorded in reporting forms of work accident investigation involving exposure to biological material. Data collection was performed using the TabWin program, in Sistema de Informação de Agravos Notificáveis (SINAN-NET).

**Results:** Among the accidents reported the nursing staff was the most rugged (76.54%), with the highest incidence for nursing technicians (74.07%), female (95%), usually on second (48.39%) and third decades of life (32.26%). The blood was the organic matter present in most accidents (83.87%), whose circumstances involved the administration of medication subcutaneously (26.92%), recapping the needle (25%) and improper disposal floor (15, 38%). Professionals who have had exposure to biological materials, 71.15% used gloves and 90.32% have been vaccinated against hepatitis B.

**Conclusions:** The identification of accidents involving exposure to biological material allows the planning and implementation of appropriate measures by healthcare professionals, employers and administrators.

**Descriptors:** Health care. Occupational accidents. Exposure to biologic agents. Accident prevention.

<sup>a</sup> Ingridgurgel88@gmail.com

<sup>b</sup> erico\_gurgel@hotmail.com

<sup>c</sup> rafamorais.med@gmail.com

<sup>d</sup> micleciabispo@yahoo.com.br

<sup>e</sup> a.elza@uol.com.br

<sup>f</sup> lurossiter@yahoo.com.br

<sup>a</sup> sofiasantos@fmh.ulisboa.pt

<sup>b</sup> pmorato@fmh.ulisboa.pt

196

## THE USE OF IMAGES IN SPEECH AND LANGUAGE THERAPY IN PORTUGAL

Ana Paula Monteiro<sup>a</sup>

*Centro de Linguística. Universidade de Lisboa. Lisboa, Portugal*

**Introduction:** In clinical context of Speech and Language Therapy, images are used as an assessment tool and as a strategy to enhance the development of perceptual and cognitive abilities that are undeveloped or disturbed in subjects without schooling and/or with communication and language disorders.

**Objective:** To obtain objective information about the use of images in the clinical context of Speech and Language Therapy in Portugal, namely to know the opinion of the Portuguese Speech-Language Pathologists (SLP) about the importance and use of images in their daily clinical practice.

**Methods:** It was used a on-line questionnaire that was answered by 54% of the Portuguese SLP.

**Results:** All SLP uses images in their clinical practice. The most used images are drawings and photographs in order to stimulate communication and language production (vocabulary, utterances and discourse). Facing an image, the linguistic instructions formulated by SLP show a focus in certain aspects, leading to the elicitation of a more enumerative or complex linguistic behaviours. The first question made by SLP focus present events and the global scene triggering strategies of literal comprehension and inducing the production of simple and enumerative utterances. The subsequent questions focus other aspects triggering more strategies of comprehension and inducing the production of complex utterances.

**Conclusions:** The results show that images are a very important tool in clinical practice of SLP and also show the importance of establish an instrument which allows professionals to follow a set of parameters and deliberately choose the properties of the images used in the elicitation of certain linguistic behaviours.

**Descriptors:** Language production. Images. Speech and Language Therapy.

<sup>a</sup>paulamonteiro.evora@gmail.com

197

## THE WEB ON THE DECISION-MAKING PROCESS OF PREGNANT/POSTPARTUM WOMEN: A PORTUGUESE SURVEY

Marta Ferraz<sup>1,a</sup>, Ana Margarida Almeida<sup>11,b</sup>, Alexandra Matias<sup>111,c</sup>

*<sup>1</sup>Universidade de Aveiro. Universidade do Porto. Portugal*

*<sup>11</sup>Departamento de comunicação e arte. Universidade de Aveiro. Aveiro, Portugal*

*<sup>111</sup>Faculdade de Medicina. Universidade do Porto. Porto, Portugal*

**Introduction:** This paper explores the influence that the web may have on the decision-making processes of women during the pregnancy-puerperal cycle, aiming to understand how search practices, peer influence and opinion sharing are carried out on the web.

**Objective:** The main objective is to describe whether the decision-making process of pregnant and postpartum is influenced by the search for information provided by institutional and/or commercial websites, and if the nature, quantity and quality of information are taken into account when choosing a source of information. We also want to understand whether their participation in social networks improves their decision-making ability and if the views and stories shared by other pregnant women can influence decisions. Finally, we are trying to understand whether the decision-making process of these women is supported by the opinion expressed by health professionals or by autonomous web searches.

**Methods:** The results presented in this paper are based on data collected through an exploratory survey conducted with a questionnaire applied to Portuguese pregnant and postpartum women.

**Results and Conclusions:** The review of recent literature and research on pregnant women's use of the internet points to the biggest influence of the doctor's opinion over the internet as far as the decision making process is concerned. In that context, there is the need to further explore the influence that the web may have on the decision-making processes of women during the pregnancy-puerperal cycle. The results of our survey should be useful for pressuring policy makers to find prompter and better quality answers.

**Descriptors:** Decision-making process. Web. Pregnant. Autonomy. Mediation.

<sup>a</sup>mferraz@ers.pt

<sup>b</sup>marga@ua.pt

<sup>c</sup>almatias@mail.up.pt

198

### PATIENTS' PREFERENCES AND NEEDS: CENTRALITY OF NURSING CARE

Maria Ferreira<sup>I,II,a</sup>, José Amendoeira<sup>I,II,b</sup>

<sup>I</sup>*Escola Superior de Saúde. Instituto politécnico de Santarém. Santarém, Portugal*

<sup>II</sup>*Centro de Investigação Interdisciplinar em Saúde. Universidade Católica Portuguesa. Portugal*

**Introduction:** The care is the basis of the health system. Currently it is recommended that the paradigm of providing patient-centered care, is considered a rule of the quality care.

**Objective:** The purposes of this study were to determine the extent to which acute care nurse provide patient-centered care.

**Methods:** A descriptive correlational design was used. We adopted the Patient-Centered Care questionnaire. Data were collected from 288 patients' from acute care services in two hospitals: a central, urban, and another indoors in a more rural setting.

**Results:** Through principal components factor analysis we identified 5 dimensions consistent ( $\alpha$ .60 to .84): attendance to patients' needs, resolution of patients' health problems, provision of care according to patients' preferences, health education and information about health condition and treatment. On average, patients' expression a very favorable response in attendance to their needs ( $m=4.3$ ,  $sd=.76$ ), and less favorable response for the dimension health education ( $m=3.2$ ,  $sd=1.74$ ).

**Conclusions:** Overall, patients' given a positive assessment to the centrality of care ( $m=3.6$ ,  $sd=1.2$ ), however, we consider important to continue to invest in this holistic paradigm that is the centrality of care, for excellence of care.

**Descriptors:** Patient-centered care. Nursing care. Quality of care. Individualized care.

<sup>a</sup> nregina.ferreira@essaude.ipsantarem.pt

<sup>b</sup> jose.amendoeira@essaude.ipsantarm.pt

199

### DEVELOPMENT OF A GERIATRIC FUNCTIONALITY SCALE TO SCREEN FOR FUNCTIONAL ABILITY

Helena Espírito-Santo<sup>I,II,a</sup>, Laura Lemos<sup>I,II,b</sup>, Inês Torres-Pena<sup>II,c</sup>, Sónia Guadalupe<sup>I,II,d</sup>, Sara Gordo<sup>III,e</sup>, Fernanda Daniel<sup>III,IV,f</sup>, Henrique Testa-Vicente<sup>I,II,g</sup>

<sup>I</sup>*Centro de Estudos da População, Economia e Sociedade. Porto, Portugal*

<sup>II</sup>*Instituto Superior Miguel Torga. Coimbra, Portugal*

<sup>III</sup>*Instituto Superior de Línguas e Administração de Leiria. Leiria, Portugal*

<sup>IV</sup>*Centro de Estudos e Investigação em Saúde. Universidade de Coimbra. Coimbra, Portugal*

**Introduction:** functionality is a diagnostic criterion for dementia, mild cognitive impairment, and caregiver burden. Brevity, and easiness are required for elders assessment.

**Objective:** Develop and validate a new 20-item-7-minute Geriatric Functionality Scale/GFS for elderly.

**Methods:** We classified 383 elders (general community and institutionalized) as normal, mildly, moderately, or severely functionally impaired based on functional symptoms related with the number of medical symptoms, and cognitive level.

**Results:** GFS was internally consistent ( $\alpha=0.91$ ) and all of the corrected item-total correlations were above 0.3. The PCA, Monte Carlo analysis, and scree plot revealed a meaningful one-factor solution, explaining 57.1% of the total variance (Bartlett's  $p<0.001$ ;  $KMO=0.94$ ). Items loaded quite strongly ( $>0.46$ ), with the exception of two items ( $>0.33$ ). GFS correlated with the number of medical symptoms ( $r=-0.39$ ;  $p<0.001$ ), and the cognitive level ( $r=0.52$  to  $0.57$ ). GFS significantly ( $p<0.001$ ) distinguished between community ( $M\pm SD = 19.50\pm 2.26$ ) and institutionalized elders ( $M\pm SD = 12.12\pm 5.83$ ). Using a cutoff score of 13, the GFS had a sensitivity of 80% and a specificity of 40.2% to detect mildly impairment ( $AUC=0.61$ ). In the moderately group, sensitivity was 74.4% and specificity 58.1% with a cutoff of 15 ( $AUC=0.68$ ). In the severely functionally impaired group, the sensitivity was 80.0% and specificity 87.8% with a cutoff of 12 ( $AUC=0.87$ ).

**Conclusions:** The GFS represents a reliable and valid functional ability screening scale for elderly populations.

**Descriptors:** Aging. Functionality. Psychometric properties. Validation..

<sup>a</sup> helenium@gmail.com

<sup>b</sup> laurastlemos@gmail.com

<sup>c</sup> ines.t.pena@hotmail.com

<sup>d</sup> soniaguadalupe@gmail.com

<sup>e</sup> smog\_sara@hotmail.com

<sup>f</sup> fernanda-daniel@ismt.pt

<sup>g</sup> henrique.t.vicente@gmail.com

200

### MUSCLE CO-CONTRACTION ASSESSMENT DURING WALKING IN CLINICAL PRACTICE-A PRELIMINARY ACCURACY AND REPRODUCIBILITY STUDY

Marlene Rosa<sup>1,a</sup>, Alda Marques<sup>1,b</sup>, Sara Demain<sup>1,c</sup>, João Rodrigues<sup>1,d</sup>

<sup>1</sup>*Departamento de Ciências da Saúde. Universidade de Aveiro. Aveiro, Portugal*

<sup>11</sup>*Faculty of Health Sciences. University of Southampton. Southampton, UK*

<sup>111</sup>*Departamento de Eletrónica, Telecomunicações e Informática. Universidade de Aveiro. Aveiro, Portugal*

**Introduction:** Muscle co-contraction (Co) has been shown to be important for motor control. Its assessment during walking has generally been performed under laboratory conditions, using high-tech equipment (H-Tech), which limits its applicability in clinical practice.

**Objective:** To test the error in the assessment of Co using a low-tech ambulatory system (L-Tech).

**Methods:** Thirty-five gait cycles were recorded whilst healthy participants walked along a 5 meter corridor at their comfortable speed. Electromyographic muscle activity of rectus femoris (RF) and biceps femoris (BF) of one randomly assigned lower limb was recorded (Procomp Infiniti Encoder, 2000 fps.). Complete gait cycles (first double support-DS1; single stance-SS; second double support-DS2; swing phase-SW) were identified using L-Tech (USB-webcam; 15fps, at sagittal plane) and a H-Tech (12-cameras, Vicon system; 200fps.), both synchronized with electromyography. Co was quantified for each walking phase, using the formula: common area of the linear envelopes of antagonist muscles/the average of the areas of those muscles. The percentage (%) of error (Co differences between systems/L-Tech\*100) was calculated. One-way ANOVA was performed for a variance analysis of Co between gait phases within each system and coefficients of variation (C.V.) were presented.

**Results:** The mean % of error was of 7.5%. Non-significant Co differences were detected between gait phases (C.V. 7.9-16.2% versus 7.8-12%) in both L-Tech and H-Tech systems (p>0.05).

**Conclusions:** Co detected by a L-Tech, inexpensive and ambulatory system showed acceptable reproducibility and accuracy generating the potential for cost-effective data collection in clinical settings.

**Descriptors:** Muscle co-contraction. Walking. Reproducibility. Accuracy.

<sup>a</sup> marlenerosa@ua.pt

<sup>b</sup> amarques@ua.pt

<sup>c</sup> s.h.demain@soton.ac.uk

<sup>d</sup> jmr@ua.pt

201

### COMPARATIVE ANALYSIS OF THE MANAGEMENT OF DIABETES MELLITUS IN UCSP AND USF IN THE ALTO MINHO REGION

Filipe Leal<sup>1,a</sup>, Carminda Morais<sup>1,b</sup>, Rui Pimenta<sup>11,c</sup>

<sup>1</sup>*Unidade de Saúde Familiar. Terra da Nóbrega, Alto Minho, Portugal*

<sup>11</sup>*Centro de Estudos e Investigação em Saúde. Universidade de Coimbra; Escola Superior de Saúde. de Viana do Castelo, Portugal*

<sup>111</sup>*Centro de Estudos e Investigação em Saúde. Universidade de Coimbra; Escola Superior de Tecnologia da Saúde. Porto, Portugal*

**Introduction:** The reform of primary health care in Portugal led to the coexistence, among others, of the family health units (USF) and units of personalized healthcare (UCSP). The matrix of care that is inherent in each of the units influences the management of chronic diseases such as diabetes mellitus.

**Objective:** This study aims to compare the costs of treatment in ambulatory, health gains inherent values of glycosylated hemoglobin (HbA1c), as well as the level of assistance to the chronically ill in the units under study (UCSP and USF).

**Methods:** The study used the questionnaire Assessment of Chronic Illness Care (ACIC). Through this, they settled, among others, overall scores for each type of unit, which reflect the level of integrated care for diabetic patients. The information on average costs and percentages of HbA1c were removed from the Information System of the ARS. It was considered a significance level of 5%.

**Results:** There were no significant differences between the mean scores of the ACIC, made in USF and the UCSP. On the other hand, the direct costs of treatment as an outpatient, the UCSP showed a higher average cost to USF (p<0.05). Also the results of HbA1c ≥8% there were significant differences (p<0.05) between the two types of units, with USF proving more effective.

**Conclusions:** The results show that both types of units only ensure basic support to diabetic patients, and the USF have a lower value with probability of diabetic complications and reduced the cost in their treatment.

**Descriptors:** Primary health care. USF. UCSP. ACIC. Diabetes mellitus.

<sup>a</sup> lealfil@gmail.com

<sup>b</sup> carmindamorais2@gmail.com

<sup>c</sup> rep@estsp.ipp.pt

202

### CULTURAL ADAPTATION AND VALIDATION OF THE PORTUGUESE VERSION OF THE ASSESSMENT OF CHRONIC ILLNESS CARE (ACIC) VERSION 3.5

Filipe Leal<sup>I,a</sup>, Carminda Morais<sup>II,b</sup>, Rui Pimenta<sup>III,c</sup><sup>I</sup>*Unidade de Saúde Familiar. Terra da Nóbrega, Alto Minho, Portugal*<sup>II</sup>*Centro de Estudos e Investigação em Saúde. Universidade de Coimbra; Escola Superior de Saúde. Viana do Castelo, Portugal*<sup>III</sup>*Centro de Estudos e Investigação em Saúde. Universidade de Coimbra; Escola Superior de Tecnologia da Saúde. Porto, Portugal*

**Introduction:** The ACIC Version 3.5 was developed by The MacColl Center for Health Care Innovation, resulting from the chronic care model (CCM). This model has influenced many international health systems leveraging improvements in the process of chronic disease management. The ACIC provides scores, which reflect the level of support provided by the organizations of the chronically ill.

**Objective:** This paper aims at translation and validation of the Portuguese version ACIC (Assessment of Chronic Illness Care) version 3.5.

**Methods:** The procedure used for the translation and cultural adaptation included six phases: translation, synthesis of translation, back translation, review by an expert panel, pre-test and submission for consideration. Were collected 175 valid questionnaires, filled by health care professionals, in a group of health centers (ACES). The reliability was assessed by analysis of internal consistency (Cronbach's  $\alpha$ ). Construct validity was tested by factor analysis of principal components.

**Results:** The Cronbach's  $\alpha$  value amounted to 0.958, indicating a high reliability. The coefficient of Kaiser-Meyer-Olkin amounted to 0.918, demonstrating excellent suitability of the data for factor analysis. After varimax rotation of the factors, it was found that they are grouped in a slightly different form from the original construct, but not compromising the original theoretical model.

**Conclusions:** The Portuguese version of the ACIC can thus be considered valid and has high reliability. We have an instrument in the Portuguese language that allows us to evaluate care to chronic disease, according to the chronic care model.

**Descriptors:** ACIC. Validation. Chronic disease. Chronic care model. Diabetes mellitus.

<sup>a</sup> lealfil@gmail.com<sup>b</sup> carmindamorais2@gmail.com<sup>c</sup> rep@estsp.ipp.pt

203

### KNOWLEDGE MANAGEMENT IN PUBLIC HEALTH INSTITUTIONS WITH DIFFERENT MANAGEMENT MODELS

Sofia Cruz<sup>I,a</sup>, Maria Manuela Ferreira<sup>II,b</sup><sup>I</sup>*Centro Hospitalar Universitário de Coimbra. Coimbra, Portugal*<sup>II</sup>*Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal*

**Introduction:** The knowledge management has been raising an increased interest within business world, because knowledge is recognized as the most important resource to organizational performance. It is believed that is only due to it that organizations can innovate and remain active in a highly competitive market (Brito, 2003; Cardoso, 2003).

**Objective:** Evaluate the occurrence of knowledge management in public health institutions, and analyze if there are differences in the perception of knowledge management occurrence due to institution management model.

**Methods:** This is a quantitative study, which used a survey as an instrument of data collection. This survey was built and validated by us ( $\alpha=0.962$ ). This study was done in a sample of 671 employees of ten health public institutions, with different management models: Public Administrative Sector Model, Public Corporate Entity Model and Family Health Unit Model.

**Results:** In health institutions knowledge management has average value of  $3,37 \pm 0,62$  (scale range from 1 to 5). As for the average value of knowledge management it is  $4,28 \pm 0,36$  in the family health units,  $3,42 \pm 0,53$  in the public corporate entity institutions and  $3,25 \pm 0,63$  in the public administrative sector institutions. These differences are statistically significant.

**Conclusions:** Knowledge management occurs in the Portuguese health institutions and the institution's management model shows to be crucial to this occurrence.

**Descriptors:** Knowledge. Employees. Knowledge management. Health institutions. Health management

<sup>a</sup> sofyacruz@gmail.com<sup>b</sup> mfrederico@esenfc.pt

204

### CHILD DEVELOPMENT SCREENING SYSTEM IN PORTUGAL - WHAT OPPORTUNITIES?

Patrícia Graça<sup>I,II,a</sup>, Saele Teixeira<sup>III,b</sup>, Sónia Lopes<sup>II,IV,c</sup>, Ana M<sup>a</sup> Serrano<sup>II,d</sup>

<sup>I</sup>Instituto Superior de Saúde do Alto Ave. Póvoa de Lanhoso, Portugal

<sup>II</sup>Universidade do Minho. Braga, Portugal

<sup>III</sup>Centro Integrado de Saúde, Desenvolvimento, Educação e Cultura. Universidade do Minho. Braga, Portugal

<sup>IV</sup>Instituto Piaget. Portugal

**Introduction:** The early childhood is a particular responsive period to the environmental experiences. The screening procedures by using standardized tools maximize the identification of children who may need early intervention services. The American Pediatrics Association recommends that developmental screening should be performed at 9, 18 and 24 months. In 2009, was approved in Portugal the Public-Law 281, which created the National System of Early Childhood Intervention being one of its objectives the early detection and referral of children with developmental problems.

**Objective:** The purpose of this study was providing to the Portuguese population of a standardized tool of developmental screening. Several statistical studies were carried out in order to study the validity and reliability of the Portuguese version of the Ages & Stages Questionnaires (ASQ-PT).

**Methods:** This instrument is composed by 21 questionnaires from 2 to 60 months of age composed by 30 questions divided by five development dimensions: communication, gross motor, fine motor, problem solving and personal-social. The questions were designed to be answered by parents or caregivers.

**Results:** With the Portuguese normative cutoff points were identified 10,1% children in one dimension and 4,7% in two or more development dimensions. The reference of WHO is 11,2% children with development disabilities.

**Conclusions:** This led us to the conclusion that the Portuguese version of the ASQ is capable to be used as a standardized tool so that the screening is performed in every child.

**Descriptors:** Early Childhood Intervention. Screening. ASQ-PT.

<sup>a</sup>topatriciameireles@gmail.com

<sup>b</sup>l\_saele\_t@hotmail.com

<sup>c</sup>lopes.scg@gmail.com

<sup>d</sup>serrano@ie.uminho.pt

205

### ELIMINATING MEASLES IN PORTUGAL: THE CONTRIBUTION OF NURSES

João Frade<sup>I,a</sup>, Carla Nunes<sup>I,b</sup>, Guilherme Gonçalves<sup>I,c</sup>

<sup>I</sup>Unidade de Investigação em Saúde. Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal

<sup>II</sup>Escola Nacional de Saúde Pública. Universidade Nova de Lisboa. Lisboa, Portugal

<sup>III</sup>Instituto de Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto, Portugal

**Introduction:** Vaccination coverage rates greater than 95% are guarantee of control of the diseases included in the National Vaccination Plan (PNV).

**Objective:** The present study aims to assess the evolution of the measles vaccination strategy towards eliminating measles in Portugal, as imposed by the DGS and the WHO.

**Methods:** Cohort study performed through the inspection of individual vaccination-records (FIV) and health-bulletins (BIS) of 206 individuals, born between 1970 and 1995, resident at the ACES Pinhal Litoral.

**Results:** According to the records of the 206 individuals, 54 failed to take any dose of the anti-measles vaccine (VAS), of which 66.7% were born before 1977. Additionally, a single dose of VAS was administrated to 62 subjects, among which a percentage of 75.0% was born between 1977 and 1984. The remaining 90 individuals took two doses of VAS, being 50.0% born after 1984. Therefore, the vaccination status and schedule followed is strongly correlated with the birth cohort to which the individuals belong ( $p=0.038$ ;  $r=0.684$ ). The vaccination coverage rate increased from 38.9% in the first cohort, to 76.0% in the second, and to more than 90.0% in the third ( $p=0.001$ ). Consequently, the recommended ages for administration of the VAS doses have also increased over time ( $p=0.001$ ,  $r=0.239$ ).

**Conclusions:** In two decades, the VAS vaccination coverage rate increased from 30.0% to 95%. The number of doses increased, along with the compliance of the inoculations at the recommended ages, working as guarantee of disease elimination, in which nurses play a key role.

**Descriptors:** Eliminating measles. Vaccination coverage. Nurses.

<sup>a</sup>joao.frade@ipleiria.pt

<sup>b</sup>cnunes@ensp.unl.pt

<sup>c</sup>aggoncalves@icabs.up.pt



206

## COMPARATIVE STUDY OF BIRTH AND MATERNITY INDICATORS

João Frade<sup>1,a</sup>, Carla Nunes<sup>1,b</sup>, Guilherme Gonçalves<sup>1,c</sup>

<sup>1</sup>*Unidade de Investigação em Saúde. Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

<sup>2</sup>*Escola Nacional de Saúde Pública. Universidade Nova de Lisboa. Lisboa, Portugal*

<sup>3</sup>*Instituto de Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto, Portugal*

**Introduction:** In Portugal, birth and maternity indicators vary substantially from region to region, with littoral areas always presenting higher numbers.

**Objective:** This study aims to compare the birth and maternity indicators among individuals in a sample from ACES Pinhal Litoral, with those from the region itself and from continental Portugal.

**Methodos:** Birth and maternity indicators were studied on a sample of 218 women, which during 2012 went to the hospital centre of Leiria-Pombal (CHLP), to have their children.

**Results:** The gross birth rate per thousand of inhabitants was of 8.1%, 7.5% in the region and 8.5% in the continental Portugal. The age of the mother at birth of the first son was 28.9 years, which is below the average of the region (29.8) and of the national average (31.0). The percentage of first children was 54.4%, second 34.0% and over three sons of 11.6%, whereas in the country was of 56.0% (1<sup>st</sup>), 33.0% (2<sup>nd</sup>) and 11.0% (>3). Among the Pinhal Litoral sample, 50.0% of the babies were males, (with 51.4% in the country). The percentage of infants with low birth weight was lower (4.9%) to that registered at national level (8.50%), as well as, the twin pregnancy percentages that were 0.45% and 3.10%, respectively. Nevertheless, the prematurity was higher (16.95%) than for the rest of country (7.80%).

**Conclusions:** The indicators of the sample studied are very similar to those occurring in the region and in the rest of continental Portugal.

**Descriptors:** Birth. Maternity. Indicators.

207

## MEASURING PATIENT SATISFACTION WITH DENTAL CARE IN A UNIVERSITY DENTAL CLINIC BACKGROUND

Patrícia Manarte-Monteiro<sup>1,a</sup>, Natália Frade<sup>1,b</sup>, Sandra Gavinha<sup>1,c</sup>, Maria Conceição Manso<sup>1,d</sup>

<sup>1</sup>*Departamento de Ciências Médicas. Faculdade de Ciências da Saúde. Universidade Fernando Pessoa. Porto, Portugal*

<sup>2</sup>*Rede de Química e Tecnologia. Universidade do Porto. Porto, Portugal*

**Introduction:** Patient satisfaction is a multidimensional concept and is becoming an increasingly important quality of dental care indicator. Effective management of patient perceptions can assist both individuals and institutions towards providing the highest quality of care achievable in the demanding dental education environment.

**Objective:** To assess dental outpatients' satisfaction with oral health care delivery in an University dental school clinic.

**Methods:** Cross-sectional survey conducted between April and July 2012 among adult patients attending an University dental clinic at Oporto, Portugal. The satisfaction survey contained 26 questions on a five-point Likert-pattern scale. The sample was composed of 268 outpatients, 53.7% female gender, all adults, mean age 46.1 ( $\pm 16.3$ ) years. Descriptive/inferential analysis was performed with SPSS<sup>®</sup> vs21 ( $\alpha=0.05$ ).

**Results:** The scores obtained for overall satisfaction with dental services ranged from 84 to 130 with a mean of 109.5 $\pm$ 8.2 point. The overall satisfaction did not differ significantly with gender (Mann-Whitney test,  $p=0.469$ ), age ( $r_s=0.090$ ;  $p=0.140$ ), appointment regularity attendance (ANOVA,  $p=0.147$ ) or motive (ANOVA,  $p=0.120$ ). The same trend was obtained for each of the 5 components of the satisfaction scale, although a significant and positive association was obtained in the component "patient assistance assess and receptionist help" for female outpatients and their age ( $r_s=0.306$ ,  $p<0.001$ ). The components generating the highest mean satisfaction score were the "perception of solved (dental) problem", followed by "professionals quality and dental treatment" and "patient assistance assess and receptionist help".

**Conclusions:** Overall high level of patient satisfaction reflected the dental team's approach of responsibility and accountability towards the target population.

**Descriptors:** Patient Satisfaction. Dental Care. Dental School Clinic. Survey. Cross-sectional Study.

<sup>a</sup> joao.frade@ipleiria.pt

<sup>b</sup> cnunes@ensp.unl.pt

<sup>c</sup> aggoncalves@icabs.up.pt

<sup>a</sup> patmon@ufp.edu.pt

<sup>b</sup> 18190@ufp.edu.pt

<sup>c</sup> sgavinha@ufp.edu.pt

<sup>d</sup> cmanso@ufp.edu.pt

208

### DEVELOPMENT OF AN INSTRUMENT FOR MEASURING PATIENT SATISFACTION WITH DENTAL CARE

Maria Conceição Manso<sup>I,II,a</sup>, Natália Frade<sup>III,b</sup>, Sandra Gavinha<sup>III,c</sup>, Patrícia Manarte-Monteiro<sup>III,d</sup>

<sup>I</sup>Faculdade de Ciências da Saúde. Universidade Fernando Pessoa. Portugal

<sup>II</sup>Rede de Química e Tecnologia. Universidade do Porto. Portugal

<sup>III</sup>Departamento de Ciências Médicas. Faculdade de Ciências da Saúde. Universidade Fernando Pessoa. Porto, Portugal

**Introduction:** Dental health care satisfaction is an integral component of the dental healthcare professional's obligation to society.

**Objective:** To develop an instrument for measuring patient satisfaction with dental care at an University dental school clinic.

**Methods:** The sample was composed of 268 outpatients of both sexes with mean age of 46.1 ( $\pm 16.3$ ) years who were attending an University dental school clinic at Oporto, Portugal who answered a questionnaire with 31 questions, measuring patient satisfaction level over a five-point Likert scale. This study covered the process of developing the instrument. Psychometric analysis (evaluation of the test that was developed) was performed by means of studying the reliability and validity of the measures obtained with the instrument.

**Results:** The results achieved in relation to reliability, by means of Cronbach's alpha coefficient ( $\alpha=0.616$ ), and content, and construct validities showed intermediate internal consistency and satisfactory validity according to psychometric standards for patient satisfaction with dental therapy. Factorial analysis showed the pertinence of this model (KMO=0.655; Bartlett sphericity test,  $p<0.001$ ), by means of principal component analysis, indicated the existence of five components: "patient assistance assess and receptionist help", "quality of the Dentist and dental treatment", "Clinical physical conditions, treatment safety and procedure transparency", "Patient-Dentist interaction interpersonal aspects" and "perception of solved (dental) problem". The present scale of satisfaction may be further improved.

**Conclusions:** This study makes available a tool that still may be improved, to contribute to management and to the planning process necessary for improving the quality of dental care services.

**Descriptors:** Scale development. Patient satisfaction. Reliability. Validity. Dental care..

<sup>a</sup> cmanso@ufp.edu.pt

<sup>b</sup> 18190@ufp.edu.pt

<sup>c</sup> sgavinha@ufp.edu.pt

<sup>d</sup> patmon@ufp.edu.pt

209

### ROOT CARIES: A PROBLEM IN INSTITUTIONALIZED ELDERLY

Sandra Gavinha<sup>I,a</sup>, Patrícia Manarte-Monteiro<sup>I,b</sup>, Maria Conceição Manso<sup>II,III,c</sup>

<sup>I</sup>Departamento de Ciências Médicas. Faculdade de Ciências da Saúde. Universidade Fernando Pessoa. Porto, Portugal

<sup>II</sup>Faculdade de Ciências da Saúde. Universidade Fernando Pessoa. Portugal

<sup>III</sup>Rede de Química e Tecnologia. Universidade do Porto. Portugal

**Introduction:** High prevalence of root caries (RC) in elderly populations has a strong impact on their general health, being a risk factor for quality of life deterioration.

**Objective:** The aim of this study was to evaluate the prevalence/presence of root caries in an elderly population and factors determining oral health status related with RC.

**Methods:** An observational and cross-sectional study approved by the Ethical Commission of the University Fernando Pessoa evaluated 372 persons aged 60+ were examined. The root caries index (RCI) was used to assess caries. Several socio-behavioral factors that may influence RCI were observed. Descriptive/inferential analysis ( $\alpha=0.05$ ) and multivariable logistic regression (backward stepwise method,  $p=0.05/0.10$  for factors' inclusion/exclusion) was carried out using SPSS<sup>®</sup> vs.17.0.

**Results:** The mean age was 78.8 ( $\pm 9.1$ ) years (range 60-101 years). A RCI of 43.8% [95%CI:37.5%-50.0%] was obtained, and 77.0% [95%CI:71.9%-82.2%] experienced untreated RC. The RCI was significantly associated with gender and age. The last visit to the dentist was independent from RCI. The RC prevalence was 78.6% [95%CI:74.4%-82.8%] and the mean RC was 3.4( $\pm 3.6$ )/elderly. Age group, gender, use of removable prostheses and brushing habits were included in a multivariate logistic model, where brushing $\geq 1$ /day [ $p=0.002$ ;OR(95%CI)=2.8(1.4-5.4)] and use of removable metal prostheses [ $p=0.030$ ;OR(95%CI)=5.3(1.2-24.3)] remained independently associated with RCI $\geq 20\%$ .

**Conclusions:** As populations age and retains more natural teeth there is a greater likelihood of occurrence of root caries. As observed in this population, RC is a problem that affects their quality of life, but it can be controlled with suitable prevention strategies and group management.

**Descriptors:** Root caries. Root caries index. Prevalence. Elderly. Institutionalized.

<sup>a</sup> sgavinha@ufp.edu.pt

<sup>b</sup> patmon@ufp.edu.pt

<sup>c</sup> manso@ufp.edu.pt

210

### INTRARATER RELIABILITY AND AGREEMENT OF CHEST WALL MOBILITY IN PATIENTS WITH COPD

Nuno Morais<sup>1,a</sup>, Joana Cruz<sup>1,b</sup>, Alda Marques<sup>11,c</sup>

<sup>1</sup>*Departamento de Ciências e Tecnologias da Saúde. Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

<sup>11</sup>*Secção Autónoma de Ciências da Saúde da Universidade de Aveiro. Aveiro, Portugal*

<sup>111</sup>*Escola Superior de Saúde. Universidade de Aveiro. Aveiro, Portugal. Unidade de Investigação e Formação sobre Adultos e Idosos. Porto, Portugal*

**Introduction:** One simple method to assess chest wall mobility consists of measuring thoracic excursion at maximal inspiration and expiration with a measuring tape. Although this method has been used as an outcome measure in chronic obstructive pulmonary disease (COPD) interventions, its reliability has been poorly studied, limiting its clinical use.

**Objective:** To assess the intrarater reliability of thoracic excursion in patients with COPD.

**Methods:** Fifteen patients (GOLD grade: 1 n=2, 2 n=11, 3 n=1, 4 n=1; 13 males; mean age ( $\pm$ SD)=67.9 $\pm$ 9.7 years; BMI=28.0 $\pm$ 5.9 Kg/m<sup>2</sup>) were recruited. The thoracic excursion was measured by the thoracic circumference at upper (UTE; 3<sup>rd</sup> intercostal space at the midclavicular line and 5<sup>th</sup> thoracic spinous process) and lower (LTE; at the xiphoid process and 10<sup>th</sup> thoracic spinous process) levels with a measuring tape. Each measurement was performed twice in a random order at maximal inspiration (MI) and expiration (ME). Intraclass correlation coefficient (ICC<sub>1,1</sub>) and Bland-Altman [95% limits of agreement (LA), standard error of the measurement (SEM) and repeatability coefficient (RC)] were used to calculate intrarater reliability.

**Results:** UTE: ICC (95%CI)=.631 (.208-.857); 95%LA=-1.99-2.96cm; SEM=0.89cm; RC=2.47cm. LTE: ICC (95%CI)=.753 (.420-.909); 95%LA=-1.75-2.00cm; SEM=0.68cm; RC=1.88cm. Considering MI and ME separately, ICCs were similar (.968<ICC 95%CI<.999). Upper thorax agreement parameters were: at MI 95%LA=-2.74-3.39cm, SEM=1.11cm, RC=3.06cm; at ME 95%LA=-3.24-3.56cm; SEM=1.23cm; RC=3.40cm. Lower thorax parameters were: at MI 95%LA=-1.46-2.46cm, SEM=0.71cm, RC=1.96cm; at ME 95%LA=-1.83-2.58cm; SEM=0.79cm; RC=2.20cm. Conclusions: High variability in repeated measures performed by the same rater raises questions about the clinical usefulness of this method for assessing chest wall mobility.

**Descriptors:** agreement; chronic obstructive pulmonary disease; measurement; reliability; thoracic excursion.o.

<sup>a</sup> rpgnunosmorais@gmail.com

<sup>b</sup> joana.cruz@ua.pt

<sup>c</sup> amarques@ua.pt

211

### THE USE OF TRADEMARKS IN THE BRAZILIAN MARKET BY PHARMACEUTICAL COMPANIES

Iolanda M. Fierro<sup>a</sup>, Elizabeth F. Silva<sup>b</sup>, Dirceu Y. Teruya<sup>c</sup>, Patrícia P. Peralta<sup>d</sup>

*Instituto Nacional da Propriedade. Rio de Janeiro, Brasil*

**Introduction:** The trademark is one of the most valuable assets for the companies, being protected by industrial property rights. In the pharmaceutical sector, the literature points to the relevance of the trademark use in the strategies for customer loyalty in face of the introduction of new drugs in the market and the expiration of patent protection. The databases of patent documents are widely used as a tool to generate scientific and technological indicators. However, there are still few studies on the performance of trademarks, in the pharmaceutical or other sectors, particularly as generators of legal and socioeconomic information.

**Objective:** This work aims to understand the likelihood of using the Brazilian National Institute of Industrial Property's (INPI) trademark database to map the trademark use in the Brazilian market by pharmaceutical companies.

**Methods:** The methodology employed was a multi-case study using the trademark portfolio of several companies obtained from the Brazilian National Institute of Industrial Property's trademark database. The sample was based on the sales volume of pharmaceutical companies in the international market.

**Results and Conclusion:** The brands portfolio of nine selected companies was raised and analyzed using criteria related to national and international rankings of products or services, such as their size in each segment, the sectors of activity of each trademark holder, the required types of brands, among others. The results show little use of the data set relative to trademark deposit and emphasize the importance of this database to generate information, a tool that can be used by the companies to increase their competitiveness.

**Descriptors:** Pharmaceutical Industry; Industrial Property; Trademarks.

<sup>a</sup> ifierro@inpi.gov.br

<sup>b</sup> silvaef@inpi.gov.br

<sup>c</sup> teruya@inpi.gov.br

<sup>d</sup> ppereira@inpi.gov.br

212

### CONFIRMATORY FACTOR ANALYSIS OF THE PORTUGUESE VERSION OF THE PERITRAUMATIC DISSOCIATIVE EXPERIENCES QUESTIONNAIRE

Teresa Carvalho<sup>1,II,a</sup>, Marina Cunha<sup>1,II,b</sup>, José Pinto-Gouveia<sup>1,c</sup>

<sup>1</sup>*Centro de Investigação do Núcleo de Estudos e Intervenção Cognitivo Comportamental. Faculdade de Psicologia e de Ciências da Educação. Universidade de Coimbra. Coimbra, Portugal*

<sup>II</sup>*Instituto Superior Miguel Torga. Coimbra, Portugal*

**Introduction:** The dissociative subtype of PTSD was added to DSM-V. The Peritraumatic Dissociative Experiences Questionnaire (PDEQ) is a self-report instrument widely used to assess peritraumatic dissociation.

**Objective:** This study aimed to test the two-factorial latent structure (Lack of Awareness and Depersonalization/Derealization) of the Portuguese version of the PDEQ, previously found in the original version. The internal consistency, test-retest reliability, convergent-divergent and discriminant validity of this scale were also analysed.

**Methods:** In this study, 300 males from the general population of Colonial Portuguese War veterans (snowball sampling) completed the PDEQ, the PTSD Checklist-Military Version, the Beck Depression Inventory and the Anxiety and Stress Scales of the DASS-21. Test-retest reliability was assessed in a subset of 110 participants. Two independent convenience samples with and without a PTSD diagnosis (N=40 and N=44, respectively) were used to explore the discriminant ability, both composed by Portuguese Colonial War Veterans.

**Results:** Confirmatory Factor Analysis showed that the first-order, two-factor model had a good fit to the data and factorial validity. Adequate values were obtained for internal consistency (Lack of Awareness and Depersonalization/Derealization), test-retest reliability, and discriminant ability. Depersonalization/derealization showed moderate correlations with PTSD symptoms and low correlations with depression, anxiety and stress symptoms while Lack of Awareness had moderate correlations with all types of symptoms evaluated.

**Conclusions:** The results corroborated the structure of the PDEQ found in the original version. The scale is internally consistent and has a good temporal stability and discriminant capacity. Convergent validity with PTSD symptoms was more visible for Depersonalization/derealization construct.

**Descriptors:** Assessment; peritraumatic dissociation; PDEQ; Confirmatory factor Analysis; Portuguese Colonial War Veterans.

<sup>a</sup>teresacarvalho.psi@gmail.com

<sup>b</sup>marina\_cunha@ismt.pt

<sup>c</sup>jpgouveia@fpce.uc.pt

213

### ACCURACY OF NURSES IN RISK CLASSIFICATION OF AN ADULT EMERGENCY IN SOUTH OF BRAZIL

Sabrina Guterres da Silva<sup>a</sup>, Luciana Bihain Hagemann<sup>b</sup>, Kátia Cilene Godinho Bertonecello<sup>c</sup>, Eliane Regina Pereira do Nascimento<sup>d</sup>

*Grupo de Estudo no Cuidado de Pessoas nas Situações Agudas de Saúde. Universidade Federal de Santa Catarina. Florianópolis, Brazil*

**Introduction:** It is known the relevance of studies that identify the accuracy of the professionals involved in the care and classification of risk, these studies are used to indicate the quality of a quantity observed.

**Objective:** To verify the agreement degree of the risk classification conducted by nurses in an emergency department in south of Brazil.

**Methods:** Quantitative study, in which 380 medical records were evaluated and reclassified. Kappa indices were calculated to determine the agreement degree between the first risk classification and the reevaluation.

**Results:** The results had shown that, when evaluating the accuracy of the classification and posterior reclassification, it was found a value of Cohen's Kappa of 0.786, with reliable interval of 95% between 0.732 and 0.840. The value of the hypothesis test was statistically significant [ $Z=9.19$ ,  $p<0.01$ ] and with standard error associated with the null hypothesis of 0.042. In these conditions, it is accept the null hypothesis (*i.e.*, evaluations are equal), as well as the value of Cohen's Kappa suggests excellent agreement between evaluation and the reevaluation, therefore not differing.

**Conclusion:** It can be concluded that the agreement between risk classification performed by nurses using the protocol is excellent when is considers the errors of classification occurred. In general, the protocol used by emergency department takes care of the patient's priority level, when reclassified, proving to be an inclusive protocol.

**Descriptors:** Nursing; Emergency Medical Services; Triage; Dimensional Measurement Accuracy.

<sup>a</sup>sabrinaguterres@gmail.com

<sup>b</sup>lucianahagemann@gmail.com

<sup>c</sup>kbertoncello@yahoo.com.br

<sup>d</sup>pongopam@terra.com.br

214

## NURSES AND ASSESSMENT CARDIOVASCULAR RISK IN PEOPLE HOSPITALIZED BY NON-CARDIAC CAUSES

Luana Lopes Neves Esteves<sup>1,a</sup>, Cristina Arreguy-Sena<sup>1,b</sup>, Luciene Muniz Braga<sup>1,c</sup>, Pedro Miguel Santos Diniz Parreira<sup>11,d</sup>

<sup>1</sup>Faculdade de Enfermagem. Universidade Federal de Juiz de Fora. Juiz de Fora, Brasil

<sup>11</sup>Universidade Federal de Viçosa. Viçosa, Brasil

<sup>111</sup>Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal

**Introduction:** Cardiovascular diseases are the leading cause of morbidity and mortality in developed and developing countries that need to be monitored.

**Objective:** We analyzed the presence of cardiovascular vulnerability factors in people admitted for noncardiac causes.

**Methods:** Survey. Participated patients hospitalized for reasons of noncardiac allocated to the female/male of the clinical/surgical Brazilian hospital (December/2012). Anthropometric measurements were taken and used (inter national scales for mapping the comorbidities and cardiovascular risk factors. Attended ethical requirements.

**Results:** Participants 53 people: 67,9% men; 49±14.6 years (21-76 years), admitted for surgical causes (62,2%) or clinic (37,8%) and report any comorbidity (54,7%) (hypertension 22,6%, AVE 3,8%, varicose veins 13,2% and DM 11,3%) treated 41,5%. Detected: 1) hormonal changes in menopause (18,9%) and endocrine therapy (1,9%); 2) irregular eating habits (18,9%) with daily consumption of fried foods (83%), often adding salt after preparation (43,4%); often added sugar (56,5%); 3) non-adherence to regular physical practices (67,9%); 4) tobacco use (18,9%) with high to very high dependence (18,9% Faggeström), type the physical, behavioral, and behavior associated with smoking (Laranjeiras), ranked stage: contemplation and pre-contemplation (17% DiClemente/Prochaska); 5) stress causing moderate risk (17%) and light (83%) for illness; 6) regular consumption of alcoholic beverages (32,1%); 7) excessive sleepiness (Epworth 43,4%) (58,5% Quetelet); 9) Framingham risk score calculated (3,77%) and known as medium to high (54,7%); 10) increased Mean arterial pressure (MAP) (20,4%) and decreased (2,3%) and 11) high waist circumference in men (13,9%) and women (70,6%).

**Conclusions:** There is evidence capable of exploiting the nurses in planning educational care.

**Descriptors:** Vulnerability; Risk Factors; Cardiovascular Diseases; Nursing.

<sup>a</sup> luana.lne@hotmail.com

<sup>b</sup> cristina.arreguy@ufff.edu.br

<sup>c</sup> lucienemunizbraga@yahoo.com.br

<sup>d</sup> pedromiguel.parreira@gmail.com

215

## PHYSICAL ACTIVITY PREDICTS SELF-REPORTED DISABILITY AND PERFORMANCE IN ADULTS AGED ≥60

Bruno Portelada<sup>1,a</sup>, Tiago Valente<sup>1,b</sup>, Anabela G. Silva<sup>11,c</sup>, Alexandra Queirós<sup>11,d</sup>

<sup>1</sup>Secção Autónoma de Ciências da Saúde. Universidade de Aveiro. Aveiro, Portugal

<sup>11</sup>Escola Superior de Saúde. Universidade de Aveiro. Universidade de Aveiro. Aveiro, Portugal

**Introduction:** Inactivity is a common problem in today's society which tends to aggravate with age.

**Objective:** The objective of this study is to investigate the relationship between physical activity, self-reported disability and performance in adults aged ≥60 who use primary health care services.

**Methods:** The following indicators were assessed: self-reported function, using World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0), performance, using Short Physical Performance Battery (SPPB), depression using the Geriatric Depression Scale (GDS), pain intensity using a 10 cm Vertical Numeric Scale (VNS) and the level of physical activity, using Rapid Assessment of Physical Activity (RAPA). A regression analysis was performed with disability and performance as the dependent variables.

**Results:** A total of 147 participants were assessed. The total mean score of WHODAS was 19.16±7.15, which indicates a low level of disability. The total mean score of SPPB was 8.15±2.48, which indicates a good performance. Only 10.2% (n=15) of the sample had a level of physical activity that could be considered active; 62.6% (n=92) had a physical activity level that varied between sedentary to regular light activities. The regression analysis showed that RAPA, GDS and VNS scores explained 48% of the variance of self-reported disability. RAPA scores were the main predictor for performance, explaining 29% of the SPPB variance.

**Conclusions:** Physical activity seems to be an important predictor for both self-reported disability and performance in adults aged ≥60, suggesting the need to encourage the practice of physical activity as a means of reducing or delaying disability.

**Descriptors:** Functionality, Older adults, Physical activity.

<sup>a</sup> na17415@ua.pt

<sup>b</sup> tiagovalente@ua.pt

<sup>c</sup> asilva@ua.pt

<sup>d</sup> alexandra@ua.pt

216

**DISABILITY AND HEALTHCARE CONSUMPTION AMONG OLDER ADULTS**Tiago Valente<sup>1,a</sup>, Bruno Portelada<sup>1,b</sup>, Anabela G. Silva<sup>1,c</sup>, Alexandra Queirós<sup>1,d</sup><sup>1</sup>*Secção Autónoma de Ciências da Saúde. Universidade de Aveiro. Aveiro, Portugal*<sup>11</sup>*Escola Superior de Saúde. Universidade de Aveiro. Universidade de Aveiro. Aveiro, Portugal*

**Introduction:** The continuous expansion of the elderly population and the high prevalence of chronic diseases and disability in this age group are associated with greater healthcare consumption. Signaling groups at risk of greater disability might be a strategy to promote the effectiveness of preventive interventions and decrease healthcare consumption.

**Objective:** The aim of this study is to explore the association between disability and healthcare consumption.

**Methods:** Self-reported healthcare consumption was characterized for the period of one year after the assessment of participants' disability profile (self-reported disability, performance, physical activity, pain and chronic conditions). Healthcare consumption was assessed using a telephone administered questionnaire. A binary logistic regression analysis was performed with healthcare consumption as the dependent variable and self-reported disability, performance, physical activity, pain and chronic conditions as independent variables.

**Results:** A total of 65 participants were included. There was a significant association between healthcare consumption and pain frequency, physical activity and chronic diseases, consistent with a higher healthcare consumption for those participants that reported pain more often, more chronic diseases and a lower level of physical activity.

**Conclusions:** Aspects of the disability profile appear to be associated with healthcare consumption, suggesting that individuals' disability profile might be used to identify groups at risk. However further research is needed to clarify the relationship between these predictors and healthcare consumption.

**Descriptors:** Functionality, healthcare use, older people.

<sup>a</sup> tiagovalente@ua.pt<sup>b</sup> a17415@ua.pt<sup>c</sup> asilva@ua.pt<sup>d</sup> alexandra@ua.pt

217

**RESULTS FROM A 9-MONTH PHYSICAL ACTIVITY INTERVENTION IN PHYSICAL FITNESS OF OLDER WOMEN**Teresa Bento<sup>1,11,a</sup>, Joana Azul<sup>1</sup>, Rita Santos-Rocha<sup>1,111,b</sup><sup>1</sup>*Escola Superior de Desporto de Rio Maior. Instituto politécnico de Santarém. Rio Maior, Portugal*<sup>11</sup>*Research Center in Sports Sciences. Health and Human Development. Universidade Trás-os-Montes e Alto Douro. Vila Real, Portugal*<sup>111</sup>*Neuromechanics of Human Movement group. Interdisciplinary Centre for the Study of Human Performance. Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal*

**Introduction:** Benefits from participation in regular physical activity in health are well established, especially in the older age. However, more data from long-term community-based interventions are needed since slowing the physical decline is one goal in this population.

**Objective:** The main purpose of our study was to analyze the effects of a 9-month, physical activity intervention program in physical fitness in older women.

**Methods:** Older women were recruited and randomly assigned to a supervised physical activity group or to a control group. Combined exercise sessions were performed three times a week, for 45 minutes and controlled for intensity. Sociodemographic data, health and daily habits, and physical function was assessed at baseline and after nine months.

**Results:** However the intervention group showed better results at the end of the program, comparison between groups revealed no statistically meaning differences, for all studied variables. Baseline results from both groups revealed to be higher than the reference standards for their age and gender, meaning that participants were already very active at the beginning of the intervention. Not controlling for physical activity in the control group may have limited the analysis.

**Conclusions:** Although not statistically significant, our results indicate that participants of the intervention group achieved better results, meaning that this supervised, community based physical activity intervention program was beneficial. It should also be acknowledge that participants, at least, maintained their initial high level, meaning that there was no decline in their physical function.

**Descriptors:** elderly; women; physical activity; intervention.

<sup>a</sup> nteresabento@esdrm.ipsantarem.pt<sup>b</sup> ritasantosrocha@esdrm.ipsantarem.pt

218

### MEASURES TO ASSESS THE SUITABILITY OF QUANTITATIVE COMPOUND TESTS WITH THE DILUTION EFFECT

Rui Santos<sup>l,II,a</sup>, Miguel Felgueiras<sup>l,II,b</sup>, João Paulo Martins<sup>l,II,c</sup><sup>I</sup>*Escola Superior de Tecnologia e Gestão. Instituto Politécnico de Leiria. Leiria, Portugal*<sup>II</sup>*Centro de Estatística e Aplicações. Universidade de Lisboa. Lisboa, Portugal*

**Introduction:** Quantitative compound tests use the group mean to decide if the group maximum is greater than a prefixed threshold which distinguishes one healthy individual from an infected one. The main drawback is its higher probability of misclassification, mainly due to the dilution effect. Nevertheless, under certain conditions, it can be applied to save resources maintaining a high-quality accuracy.

**Objective:** The main goal of this investigation is to examine measures that allow assessing the appropriateness of the use of quantitative compound analysis without worsening the problem of misclassification.

**Methods:** Let the amount of the substance which allows the identification of some disease be characterized by some known continuous distribution. Moreover, blood samples from  $n$  individuals are pooled in order to perform the compound analysis. Thus, if we consider a perfect mixed procedure, the sample mean of the group is observed. The performed simulations apply two different methodologies (one to ensure a high sensitivity for epidemic scenarios and other to guarantee a high specificity in screening cases). The goal is to define the cutoff points of the combined clinical trials, evaluate several continuous distributions, group sizes, and prevalence rates of the disease.

**Results and Conclusions:** It is shown that (under certain conditions) the mean is adequate to classify each group as infected (at least one infected individual within the group) or healthy (no infected individuals) with low probability of misclassification. Hence, quantitative compound clinical analysis can be applied with a quite high accuracy for low prevalence rates and unilateral heavy-tailed continuous distributions.

**Descriptors:** Quantitative compound tests, misclassification, rarefaction, continuous distributions, simulation.

<sup>a</sup> nrui.santos@ipleiria.pt<sup>b</sup> mfelg@ipleiria.pt<sup>c</sup> jpmartins@ipleiria.pt

219

### TEENAGERS AND DRUGS: SUBSIDY FOR DECISION MAKING IN EDUCATIONAL INTERVENTION IN HEALTH

Talyta Carmo Vilela<sup>l,a</sup>, Cristina Arreguy-Sena<sup>l,b</sup>, Luciene Muniz Braga<sup>l,c</sup>, Pedro Miguel Santos Diniz Parreira<sup>III,d</sup>, Paula Krempser<sup>l,e</sup><sup>I</sup>*Faculdade de Enfermagem. Universidade Federal de Juiz de Fora. Juiz de Fora, Brazil*<sup>II</sup>*Universidade Federal de Viçosa. Viçosa, Brazil*<sup>III</sup>*Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal*

**Introduction:** The teenage protagonist of the self/identity and social articulation encouraging changes of behavior that stimulate experimentation of drugs.

**Objectives:** We analyzed the proximity adolescent drug use from the social representation and sociocultural/demographic profile.

**Methods:** Research outlined in the Structural Theory of Social Representation. Participated elementary students: 11-17 years in a city whose average is adolescents (17,3%) higher than the Brazilian. Data collected: sociodemographic, social-family, positioning on drugs, call-up (free/hierarchical). Inducing expression: "drug use in adolescence". Analysis using Evoc program and technical "box four houses". Attended ethical requirements.

**Results:** Sample with 24.5% of adolescents of the city, 50,9% male, 45,6% mulatto and a mean age of 13.7 years (11-17). Profile of coexistence: shared housing with parents (62%) or one (25.7%); parents are idols (37%); consume alcohol (50.3%), smoking (29.2%), at least one family uses alcohol (91.8%), smoking (77.8%) or uses illegal drugs (17%). Captured evaluative, cognitive, behavioral dimensions in social representations (lexical: death, bad habit, bullshit and marijuana) allocated in the core. The core of the representations was maintained when used the techniques of hierarchical and free call-up, demonstrating consistency of representations. Allocation of crack (2<sup>nd</sup> periphery) portrayed their presence in everyday life of the participants.

**Conclusions:** We conclude that social representations had negative character. Marijuana was centrally allocated, corroborated by the number of colleagues who use it. The crack was allocated in the periphery of the representations, showing proximity and vulnerability. Confronted with evidence of sociocultural/household vulnerability is a recommended preventive health intervention to reduce damage to users, their families and participants.

**Descriptors:** Nursing; Teenagers; Vulnerability; Drugs; Public Health.

<sup>a</sup> talytavilela@yahoo.com.br<sup>b</sup> cristina.arreguy@ufjf.edu.br<sup>c</sup> lucienemunizbraga@yahoo.com.br<sup>d</sup> pedromiguel.parreira@gmail.com<sup>e</sup> paulakrempser.enf@gmail.com

220

**CRYOTHERAPY IMPAIRS PROPRIOCEPTION FUNCTION?**Sara Henriques<sup>a</sup>, Nuno Cordeiro<sup>b</sup>*Escola Superior de Saúde Dr. Lopes Dias. Instituto Politécnico de Castelo Branco. Castelo Branco, Portugal***Introduction:** Cryotherapy application over a joint causes a nerve conduction velocity decrease and proprioceptive changes.**Objective:** This study aims to determine if cryotherapy impairs proprioception acuity.**Methods:** Proprioception was assessed by joint position sense (JPS), measured with an isokinetic dynamometer Biodex System 3, in twenty one females on experimental group, before 15 minutes cryotherapy (T0) and immediately after (T1). A control group (n=20) performed also the JPS, but without cryotherapy influence. In both tested instance, two angular positions were evaluated (15° and 45° of knee flexion).**Results:** The error average was always greater in the experimental group at both angular positions, exception T0 at 15°. Between T0 and T1 and for both angular knee positions the error mean diminished for both groups, however the error reduction only was statistically significant (p=0.00) in the control group at 15°.**Conclusions:** No reduction of proprioception was found after 15 min. ice application.**Descriptors:** Joint Position Sense; Proprioception; Cryotherapy.

221

**MUSCULAR STRENGTH AND ENDURANCE: EFFECTS OF ICE APPLICATION**Andreia Gameiro<sup>a</sup>, Nuno Cordeiro<sup>b</sup>*Escola Superior de Saúde Dr. Lopes Dias. Instituto Politécnico de Castelo Branco. Castelo Branco, Portugal***Introduction:** Cryotherapy has the objective of lowering the temperature of the tissues. One of its methodologies is the ice application over the surface. This application will affect the physiology of human skeletal muscle because the decrease of temperature contributes to the muscle to keep longer actin-miosin connection and over a great range of contraction.**Objective:** The objective of the study is to evaluate if peak torque and endurance of the quadriceps femoris are affected by the application of ice during eccentric movement.**Methods:** A sample of 20 students was selected for convenience, forming two groups. One group made a protocol of ice in the first place and after one week the same protocol performed while replacing the ice by rest. The other group started with the protocol of rest and the next week made the protocol of ice. Were measured the results of eccentric peak torque and fatigue of the right quadriceps muscle with the Isokinetic Dynamometer Biodex System 3. The values of the skin temperature and the room were measured with an infrared thermometer leisure 3M thermometer.**Results:** Comparing the torque peak after application of ice and after rest, there was a increase of 0.079 N/m. For the endurance, the deceleration of the movement increased 37.89 m/sec and acceleration was lower after application of ice -139.47 m/sec with application of ice.**Conclusions:** It was concluded that the application of ice causes a decrease in the peak torque production and also a slowing of movement during installation of fatigue. These results were not statistically significant.**Descriptors:** Ice; Cryotherapy; Muscular Strength; Fatigue.<sup>a</sup> henriques.sara@hotmail.com<sup>b</sup> ncordeiro@ipcb.pt<sup>a</sup> andreia.gameiro12@gmail.com<sup>b</sup> ncordeiro@ipcb.pt



222

### NATIONAL HEALTH SERVICE: QUALITATIVE AND FINANCIAL ASSESSMENT OF A DECADE OF CO-PAYMENTS

Raquel Mendes<sup>1</sup>, Bruno Mendes<sup>1,a</sup>

<sup>1</sup>*Escola de Ciências e Tecnologias da Saúde. Universidade Lusófona de Humanidades e Tecnologias. Lisboa, Portugal*

<sup>11</sup>*Grupo de Gestão de Qualidade e Estratégia em Saúde. Escola de Ciências e Tecnologias da Saúde. Universidade Lusófona de Humanidades e Tecnologias. Lisboa, Portugal*

**Introduction:** The National Health Service (NHS) public expenditure grew at an average annual rate of 6% between 2002-2010. The NHS funding comes from the State budget, but healthcare units can subscribe other incomes, such as co-payments (CP), which are in place to moderate, rationalize and regulate the healthcare access, and reinforce the social justice principle of the NHS.

**Objective:** In a time of decreasing the State dimension and increasing the citizen dimension, and, after a decade of CP, our objective is to evaluate its cost-return (finance) and cost-accessibility (quality).

**Methods:** Comparative analysis between 2003-2013 of the implemented CP versus the reference CP calculated by the regulatory method established by law. Evaluation of the financial return to the State by type of service, expressing the results as a high/low valuation. European mapping for the identification of the presence/absence of CP or of other payments with or without associated CP.

**Results:** The group discovered irregularities in 67.8% of the CP annual revisions, in 40% the State had losses and in 27.8% charged above the reference. The discrepancies in number are higher in the emergency-associated cases, but the disparities in value are higher in medical appointments. The tendency for irregular revisions (79.6%, 2004-2009) follows now the normalization, despite the inaccuracies still observed (50%, 2010-2013). The decade average increase is €10.64 (emergency) and €3.16 (appointments).

**Conclusions:** The CP are currently active in 12 European countries, being an important contribution for healthcare quality assurance and balance of health economy.

**Descriptors:** Health; Regulation; Quality; Finance; Co-Payments.

<sup>a</sup>bruno.mendes@ulusofona.pt

223

### HEALTH PROFESSIONALS' COMMITMENT: A MANAGEMENT TOOL

Elma Pereira de Moura<sup>1,a</sup>, Maria da Conceição Alves Rainho Soares Pereira<sup>1,b</sup>, Maria João Filomena Santos Pinto Monteiro<sup>1,c</sup>

<sup>1</sup>*Universidade Estadual do Sudoeste da Bahia. Jequié, Brasil*

<sup>11</sup>*Escola Superior de Enfermagem de Vila Real. Universidade de Trás-os-Montes e Alto Douro. Vila Real, Portugal*

**Introduction:** The organizational context necessarily brings us to reflections on phenomena from different perspectives of field administration and management interface in healthcare area.

**Objective:** Describe dimensions of commitment of health professionals, working in units of Unified Health System (SUS).

**Methods:** It is descriptive cross-sectional study, whose collection took place between December 2012 and January 2013 in Family Health Units (USF), inserted in the Unified Health System (SUS) – Vitória da Conquista, Bahia, Brazil. The instrument included the Organizational Commitment Scale Basis (EBACO), includes 7 bases with 4 items each assessed by Likert scale with six points. Affective and obligation to remain are two of the bases evaluated by the scale. The definition Affective - belief and identification with the philosophy, values and organizational goals; Obligation to remain, belief in the company, or even a moral obligation to the people of the organization.

**Results:** Sample consists of 160, mostly women 78.5% (125) with high school 60.0% (96), profession of participants has following distribution: 48.1% community health workers (77), nursing technicians 20.6% (33) and nurses 12.5% (20), majority 75.6% (121) have up to 9 years of work. The analysis showed that professionals had high commitment in obligation bases to remain 98.8% (158); concerning affective bases, 55.6% (89) of professionals had high commitment.

**Conclusions:** This study contributes to new studies of health professionals' commitment, in sense to understand the relations between professionals in organizations, may contribute to a humanized management, resulting in better quality in healthcare.

**Descriptors:** Organizational commitment. Professionals. Healthcare.

<sup>a</sup>elmapmoura@yahoo.com.br

<sup>b</sup>crainho@utad.pt

<sup>c</sup>mjmonteiro@utad.pt

224

### FORMULATION OF A NURSE'S CLINICAL JUDGMENT ABOUT THE POTENTIAL OF AUTONOMY RECONSTRUCTION

Eloísa Maciel<sup>I,II,a</sup>, Filipe Pereira<sup>I,III,b</sup>, Inês Cruz<sup>I,III,c</sup><sup>I</sup>Porto Nursing School. Porto, Portugal<sup>II</sup>Póvoa do Varzim. Vila do Conde Hospital. Vila do Conde, Portugal<sup>III</sup>Institute of Biomedical Sciences Abel Salazar. Porto, Portugal

**Introduction:** The self-care dependency translates into a change that leads people to initiate transition processes aiming the autonomy reconstruction. This change can be influenced by a series of factors defined by Meleis et al (2000) as transition conditions.

**Objective:** Evaluating the self-care dependency evolution three months after discharge; comparing the dependency evolution with the nurse's clinical judgment (formulated at discharge) about the potential of autonomy reconstruction; and exploring the key factors involved in the formulation of this judgment.

**Methods:** Exploratory, descriptive, quantitative and longitudinal study, developed at a Medicine service, with a convenience sample comprising 60 people with self-care dependency and their respective caregivers. In order to evaluate dependency, we used the "Self-care Dependency Evaluation Instrument" (Duque, 2009). Based on the theory of transitions of Meleis, we built "scales" to evaluate the different transition conditions.

**Results:** Three months after discharge, people improved their self-care (in)dependence. According to the nurse's clinical judgment, 58,3% of the patients had "low" and 36,7% had "moderate" potential of autonomy reconstruction. We found statistically significant differences between groups concerning supported and autonomous decision-making, accessibility to services, positive attitude towards the therapeutic plan, confidence about the future, providing profile promoter of autonomy, awareness of the caregiver, and education of the caregiver.

**Conclusions:** After three months, most of the cases improved their dependency level, exceeding the nurse's clinical judgment about their potential of autonomy reconstruction.

**Descriptors:** Self-care. Nurse's clinical judgment. Transition. Autonomy reconstruction.

<sup>a</sup> eloisa107@hotmail.com<sup>b</sup> filipereira@esenf.pt<sup>c</sup> inescruz@esenf.pt

225

### PHYSICAL ACTIVITY ESTIMATES IN COPD REHABILITATION: SELF-REPORT VS. OBJECTIVE MEASURES

Joana Cruz<sup>I,II,a</sup>, Dina Brooks<sup>III,b</sup>, Alda Marques<sup>II,IV,c</sup><sup>I</sup>Department of Health Sciences. University of Aveiro. Aveiro, Portugal<sup>II</sup>School of Health Sciences. University of Aveiro. Aveiro, Portugal<sup>III</sup>Graduate Department of Rehabilitation Science. Department of Physical Therapy. University of Toronto. Toronto, Canada<sup>IV</sup>Unidade de Investigação e Formação sobre Adultos e Idosos. Porto, Portugal

**Introduction:** Self-report physical activity (PA) measures are often used to assess changes before/after chronic obstructive pulmonary disease (COPD) rehabilitation, as they are easy to employ and more feasible than objective measures. However, the ability of self-report measures to detect intervention-related changes in PA should be determined.

**Objective:** To examine the sensitivity of the International Physical Activity Questionnaire short-form (IPAQ-sf) to detect intervention-related changes in PA compared to accelerometry in patients with COPD.

**Methods:** Eleven patients with COPD (67.5±9.2yrs) participated in a 12-week pulmonary rehabilitation program. Participants wore an accelerometer (Actigraph GT3X+) for 7 consecutive days on the 1<sup>st</sup> and 12<sup>th</sup> weeks of the program and completed the IPAQ-sf. Spearman's correlation coefficients ( $\rho$ ) were used to assess relationships between the results of the IPAQ-sf and the accelerometer.

**Results:** Both the IPAQ-sf and the accelerometer showed non-significant differences in time spent in sedentary activities [median(IQR): IPAQ=60.0(240.0) min/day; accelerometer=1.1(128.0) min/day], moderate-to-vigorous physical activities (MVPA: IPAQ=-150.0(1080.0) min/week; accelerometer=12.0(60.0)min/week) and total PA (IPAQ=-495.0(1060.0) min/week; accelerometer=-9.0(559.0) min/week) as a result of the intervention ( $p>0.05$ ). Changes in sedentary activities obtained by self-report were significantly correlated to those obtained by accelerometry ( $\rho=0.714$ ,  $p=0.014$ ). Changes in self-reported and accelerometer-based MVPA were moderately yet non-significantly correlated ( $\rho=0.588$ ,  $p=0.057$ ). No significant correlations were found for total PA measured by self-report and accelerometry.

**Conclusions:** The IPAQ-sf showed limited correlations with accelerometer-based PA. Patients with COPD tend to under-report their PA levels. Thus, objective measures should be preferred when assessing the impact of rehabilitation interventions in patients with COPD, as these have greater potential to detect PA changes.

**Descriptors:** accelerometer. COPD. Physical activity. Pulmonary rehabilitation. Self-report measures.

<sup>a</sup> joana.cruz@ua.pt<sup>b</sup> Dina.Brooks@utoronto.ca<sup>c</sup> amarques@ua.pt


226

### COMPOUND CLINICAL TRIALS: A COMPARATIVE SIMULATION STUDY OF ITS ACCURACY AND COST\*

Ana Cristina Granado<sup>1,a</sup>, Rui Santos<sup>1,II,b</sup><sup>1</sup>*School of Technology and Management. Polytechnic Institute of Leiria. Leiria, Portugal*<sup>II</sup>*Center of Statistics and Applications. University of Lisbon. Lisboa, Portugal*

**Introduction:** Compound clinical trials can be applied in order to save resources for classification purposes (identification of all infected individuals in a population) whenever low prevalence rates exist, although it decreases accuracy.

**Objective:** Our goal is to compare the performance of several classification methodologies (individual trials, hierarchical algorithms, and array-based group testing), mainly their relative cost (expected number of tests for the classification of each individual) and their probability of misclassification (measured by the specificity and sensitivity of each methodology).

**Methods:** Simulation techniques (performed using  Statistical Software) were employed under different potential population scenarios, using multiple prevalence rates, several group dimensions, diverse significance levels, sensitivities and specificities. Through this framework it was assumed that pooling does not affect misclassification probability (absence of the dilution effect), as it is corroborated by many qualitative analyses (presence or absence of the infection).

**Results and Conclusions:** The performed simulations show that compound tests can only be advised in cases with low prevalence rates and low probabilities of misclassification. Furthermore, it is impossible to easily identify the most suitable methodology to each case, due its dependence on the prevalence rate, on the sensitivity, and on the specificity. Nevertheless, compound tests allow saving resources (by reducing the number of required tests) and increase the probability of misclassification (mainly decreasing the sensitivity). Moreover, whenever the prevalence rate, the sensitivity, and the specificity are known (or at least reasonable estimates are available), simulations can be performed in order to identify the most appropriate methodology, and thereby to balance the cost with the accuracy.

**Descriptors:** Qualitative compound tests. Prevalence rate. Misclassification. Relative cost. Simulation.

\*Research partially funded by FCT, Portugal, through the project Pest-OE/MAT/UI0006/2014.

<sup>a</sup> acmgranado@gmail.com<sup>b</sup> rui.santos@ipleiria.pt

227

### DECISION MAKING IN INTENSIVE CARE AT THE END OF LIFE

Tamara Raquel Velasco Sanz<sup>1,a</sup>, Esperanza Rayón Valpuesta<sup>II,b</sup><sup>1</sup>*Complutense University of Madrid. Madrid, Spain*<sup>II</sup>*Clínico San Carlos Hospital. Madrid, Spain*

**Introduction:** In intensive care units, it is essential to analyze how decision making takes place at the end of life, because the risk of violating the patient's wishes is higher, since most of them entrant incapacitated.

**Objective:** Identify the knowledge, skills and attitudes of intensive care health professionals on decision making in the end of life.

**Methods:** Observational, descriptive Study to 649 intensive care professionals (physicians and nurses) in nine hospitals in Madrid (Spain), using a multiple choice questionnaire from October 2010 to December 2010. Descriptive statistics with percentages and Chi-square test, taking  $p < 0.05$  as significant values.

**Results:** 331 surveys were collected. In addition to socio-demographic results, was obtained: only 29% of respondents know the criteria for making the do-not resuscitate orders if incompetent patient. The 71.5% of respondents said that the decision of the legal representative is not respected. The 57.7% of professionals said that advance directives documents is the most effective way to express wills. The 50% of nurses considered that Autonomy should be the first principle to be assessed, compared to 46% of physicians who consider the Charity  $p < 0,001$ .

**Conclusions:** Health professionals consider very useful the advance directives for taking decisions in the end of life. However, the figure of the legal representative is not respected. There is great ignorance about do-not resuscitate orders, specific training needing should be considered. The first principle to be assessed on decision making is different between nurses (Autonomy) and physicians (Charity).

**Descriptors:** End of life care. Advance directives. Intensive care. Do-not resuscitate orders.

<sup>a</sup> erayon@enf.ucm.es<sup>b</sup> tayrailf\_3@yahoo.es

228

### RESISTANCE BACTERIAL PROFILE IN POSITIVE URINE CULTURES: NOSOCOMIAL INFECTION VS COMMUNITY ACQUIRED INFECTION

Renato Abreu<sup>a</sup>, Ana Almeida Céu Leitão<sup>b</sup>, Fernando Bellém<sup>c</sup>, Ana Brandão<sup>d</sup>, Ângela Lopes<sup>e</sup>; Nadine Rodrigues<sup>f</sup>

*Escola Superior de Tecnologia da Saúde de Lisboa. Lisboa, Portugal*

**Introduction:** Urinary tract infections are a serious public health problem, being considered as the second most common bacterial infection in humans, where most therapies are implemented empirically. This allows the development of bacterial resistance, in hospital or in the community.

**Objective:** We compared the profile of bacterial resistance between the two media studied, contributing to the choice of the best empirical treatment.

**Methods:** Data collection, characterized as descriptive observational, was made through the database of a Hospital Unit of the Central Lisbon Region. Between February 2012 and January 2013 were collected 3,837 data for urine cultures among which only 819 showed positivity. These data were statistically analyzed by SPSS version 13.0 for Windows with a significance level of 5%.

**Results:** urinary infections affect mainly females and *Escherichia coli*, among all isolates, was the leading cause, regardless of the source of infection. It was found that there are significant differences in the resistance patterns compared to some antibiotics for *E. coli* and *K. pneumoniae*.

**Conclusions:** The significant differences found suggest a higher resistance in isolates from inpatients which can mean improper use and overuse of antibiotics in hospitals. It was found through the sensitivities obtained, the Imipenem as the best empirical treatment in both local acquisition of infection, and Gentamicin for community acquired urinary tract infections.

**Descriptors:** Urinary tract infections; Nosocomial infection; Community-acquired infection; bacterial resistance; Empirical treatment.

<sup>a</sup> renato.abreu@estesl.ipl.pt

<sup>b</sup> ana.almeida@estesl.ipl.pt

<sup>c</sup> mcleitao@estesl.ipl.pt

<sup>d</sup> brandao\_27@msn.com

<sup>e</sup> fernando.bellem@estesl.ipl.pt

<sup>f</sup> angelaavolopes@gmail.com

<sup>g</sup> 2009277@alunos.estesl.ipl.pt

229

### FALLS IN ELDERLY COMMUNITY RESIDENTS. AN UNDERDIAGNOSED PROBLEM

Bruno Ferreira<sup>1,a</sup>, Armando Almeida<sup>1,b</sup>, Tânia Costa<sup>1,c</sup>, Rosa Silva<sup>1,d</sup>, Patrícia Coelho<sup>1,e</sup>, Paulo Alves<sup>1,f</sup>, Catarina Pinto<sup>1,g</sup>

*<sup>1</sup>Agrupamento de Centros de Saúde. Póvoa do Varzim/ Vila do Conde, Portugal*

*<sup>11</sup>Institute of Health Sciences. Catholic University of Portugal. Porto, Portugal*

**Introduction:** The main cause of injury in the elderly, in Portugal, is the occurrence of falls. Nevertheless, the phenomenon remains underdiagnosed and underappreciated by health professionals working in a community context.

**Objective:** Performing an accurate diagnosis about the fall risk, in very elderly community clients of a family health unit to improve decision making.

**Methods:** Cross-sectional study.

**Results:** Of the 45 individuals who agreed to participate in the study, 36 have fallen over the last year, totaling 82 falls, 8,3% with more than 4 falls and 42,8% between 2 and 4, occurred predominantly at home (71%). The Tinetti test revealed that 19.4%, 44.4% and 36.1% of the elderly had respectively, low, moderate and high risk of falling, contrasting with the fear of falling that took low expressivity. Inferential analysis revealed the existence of negative correlations among balance, number of falls at home and number of falls when performing vital activities. In 64.3% of falls was necessary help the elderly rise, resulting in 4 situations of bone fracture, one of which led to a situation of total dependence. Of the 27 environmental risk factors tracked in the house, were present on average 14. There is a positive correlation (Spearman Rho: 0.308,  $p = 0.039$ ) between number of falls occurred in carrying out household activities and the number of environmental factors for fall risk at home.

**Conclusions:** The phenomenon is a real problem underdiagnosed, with serious repercussions, and is crucial improve its diagnosis to prescribe effective therapies.

**Descriptors:** Falls; Aged, 80 and over; Community.

<sup>a</sup> brunoferreira.enf@gmail.com

<sup>b</sup> aalmeida@porto.ucp.pt

<sup>c</sup> tcosta@porto.ucp.pt

<sup>d</sup> rgsilva@porto.ucp.pt

<sup>e</sup> sfcoelho@porto.ucp.pt

<sup>f</sup> pjalves@porto.ucp.pt

<sup>g</sup> catarina\_p\_pinto@sapo.pt

230

### EVALUATION OF THE USE OF BUNDLE OF PREVENTION OF VENTILATOR-ASSOCIATED PNEUMONIA

Luciana Leite Pineli Simões<sup>1,III,a</sup>, Thais Yoshida<sup>1,II,b</sup>, Milton Junio Cândido Bernardes<sup>1,II,b</sup>, Cássia Silva Miranda Godoy<sup>1,c</sup>, Ana Elisa Bauer Camargo Silva<sup>II,d</sup>

<sup>1</sup>*Service Infection Control. Hospital for Tropical Diseases Dr. Anwar Auad. State Health Department of Goiás. Goiás, Brasil*

<sup>II</sup>*Federal University of Goiás. Goiás, Brasil*

<sup>III</sup>*Department of Medicine. Pontifícia Universidade Católica de Goiás. Goiás, Brasil*

**Introduction:** The high mortality of Ventilator-Associated Pneumonia (VAP) is concern among health agencies and internationally recognized centers as Centers for Disease Control and Prevention, which promotes the release of bundles for prevention.

**Objective:** To evaluate the adhesion and impact of bundles in a hospital of Infectious Diseases.

**Methods:** Epidemiological analytical study conducted in a unit of intensive treatment to adults from a Brazilian Hospital. Were evaluated existing data in evaluation record fulfilled by nurses, during the months of May and September, 2013, about: (1) high headboard bed - 30 to 45°, (2) sedation protocol, (3) prophylaxes gastric mucosa injury, (4) thrombosis prophylaxes, (5) oral hygiene with aqueous chlorhexidine (0.2%), (6) care with ventilation circuits, (7) daily physiotherapy care. Were also compared densities incidences of VAP in 2012 and 2013. The study was approved by the Research Ethics Committee and the data statistically analyzed.

**Results:** Of the 108 evaluated records, 20 showed all items accordingly (18.5%). Item 3 was the one with the highest adhesion (84.2%), followed by 1 (83.3%). The VAP rate decreased from 25.9 in 2012 to 10.3 per 1,000 fans/day in 2013, a statistical significant decrease in the analysis of the confidence interval of 95%.

**Conclusions:** Despite the low adhesion to the bundle (18.5%) the density of VAP was reduced with its application. The bundle of prevention can promote safety and reduce the incidence of VAP.

**Descriptors:** bundles; prevention; pneumonia; security; patient.

<sup>a</sup> lucianapineli@me.com

<sup>b</sup> yoshida.thais@gmail.com

<sup>c</sup> milton.bernardes@gmail.com

<sup>d</sup> csmgodoy@gmail.com

<sup>e</sup> anaelisa@terra.com.br

231

### BUNDLE OF INFECTION PRIMARY PREVENTION OF BLOODSTREAM AS A MANAGEMENT TOOL IN BRAZILIAN HOSPITAL

Luciana Leite Pineli Simões<sup>1,III,a</sup>, Thais Yoshida<sup>1,II,b</sup>, Milton Junio Cândido Bernardes<sup>1,II,c</sup>, Cássia Silva Miranda Godoy<sup>1,d</sup>, Ana Elisa Bauer Camargo Silva<sup>II,e</sup>

<sup>1</sup>*Service Infection Control. Hospital for Tropical Diseases Dr. Anwar Auad. State Health Department of Goiás. Goiás, Brasil*

<sup>II</sup>*Federal University of Goiás. Goiás, Brasil*

<sup>III</sup>*Department of Medicine. Pontifícia Universidade Católica de Goiás. Goiás, Brasil*

**Introduction:** The role of central catheter in primary bloodstream infections (PBI) has been proven. To prevent PBI international agencies suggest the use of bundles as tools for the management of care processes.

**Objective:** To evaluate the adhesion of bundle prevention of laboratory PBI related to central venous catheter (PBI/C).

**Methods:** Epidemiological study conducted in an Infectious Contagious Diseases Hospital in Brazil. Data were collected by means of an instrument applied to all patients with Central Venous Catheter in the period of May to October 2013, comprising the following steps: (1) catheter insertion, (2) medication administration, (3) maintenance and (4) removal of the catheter. For analysis were compared the incidence densities of I PBI/C of 2012 and 2013 and evaluated the proportion of adhesion to the bundle. The study was approved by the Research Ethics Committee and the data were statistically analyzed.

**Results:** 62 evaluations were performed. Step 2 showed higher adhesion (93.5%), followed by 3 (37.0%). Regarding the incidence density of PBI/C there was an decreased from 4.7 in 2012 to 3.2 PBI/C per 1,000 catheter-days in 2013, apparent downward trend, although not statistically significant ( $p > 0.5$ ).

**Conclusions:** There is a trend of decreasing PBI/C. Investing in prevention bundle may enable reduction PBI/C, minimizing risk to the patient and be an important tool for managing the processes involved in insertion, maintenance and removal of the catheter as it directs to preventive and corrective actions that lead to security the patient.

**Descriptors:** security; patient; bundle; central catheter; infections.

<sup>a</sup> lucianapineli@me.com

<sup>b</sup> yoshida.thais@gmail.com

<sup>c</sup> milton.bernardes@gmail.com

<sup>d</sup> csmgodoy@gmail.com

<sup>e</sup> anaelisa@terra.com.br

232

### TECHNIQUES FOR COUNTING BACTERIA IN A POOLED SAMPLE

Miguel Felgueiras<sup>I,II,a</sup>, Rui Santos<sup>I,II,b</sup>, João Paulo Martins<sup>I,II,c</sup><sup>I</sup>*School of Technology and Management, Polytechnic Institute of Leiria. Leiria, Portugal*<sup>II</sup>*Center of Statistics and Applications. University of Lisbon. Lisboa, Portugal*

**Introduction:** The number of bacteria in a milliliter of blood is characterized by different statistical distributions according to the patient's status (infected or not infected). For instance, Duchenne Muscular Dystrophy can be detected by measuring the activity of several serum enzymes, which differs between affected and unaffected children. Since in several situations individual tests are expensive or not advisable for confidentiality reasons, compound tests are a consistent alternative. In this type of tests some fluid (e.g. blood or urine) from several individuals is mixed (pooled sample) and analyzed, sparing a great number of tests (a negative result implies that no one is infected).

**Objective:** In this work we propose a new statistical method to distinguish infected groups from non-infected groups, using the number of bacteria in the composite sample.

**Methods:** Simulations were performed in order to evaluate the performance of the proposed method whenever the bacteria counting distribution belongs to the well-known Panjer's statistical family of distributions (which includes the most frequently applied counting distributions, such as the Poisson, the binomial, and the negative binomial).

**Results and Conclusions:** The obtained results suggest that the proposed methodology can accommodate the dilution problem (whenever blood from infected and non-infected individuals are mixed, a large number of bacteria from an individual might be cloaked by a small number of bacteria from other individuals), and therefore can be used as a reliable alternative to individual tests, allowing to save time and money.

**Descriptors:** Count distributions, misclassification, Panjer's family of distributions, quantitative compound tests.

<sup>a</sup> mfelg@ipleiria.pt<sup>b</sup> rui.santos@ipleiria.pt<sup>c</sup> jpmartins@ipleiria.pt

233

### SHORT FORM 6D: CAN MEASURE HEALTH IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS?

Cláudia Ribeiro<sup>I,II,a</sup>, Isabel Santos<sup>III,IV,b</sup>, Nélcio Veiga<sup>II,c</sup>, Augusta Marques<sup>V,d</sup>, Carlos Vasconcelos<sup>II,IV,e</sup><sup>I</sup>*Universidade Católica Portuguesa. Porto, Portugal*<sup>II</sup>*Unidade de Imunologia. Hospital Geral Santo António. Centro Hospitalar do Porto. Porto, Portugal*<sup>III</sup>*Universidade Fernando Pessoa. Porto, Portugal*<sup>IV</sup>*Instituto Ciências Biomédicas Abel Salazar. Porto, Portugal*<sup>V</sup>*Universidade de Santiago de Compostela. Santiago de Compostela, Spain*

**Introduction:** Systemic lupus erythematosus (SLE) is a pervasive disease with wide-ranging effects on physical, psychological and social well-being. Health economics researchers are concerned with the measurement of the health related quality of life (HRQL), especially eliciting individuals' preferences regarding specific health outcomes. This type of measurement can be integrated in clinical decision in patients with SLE.

**Objective:** Assess health utilities for patients with SLE.

**Methods:** 71 patients with SLE, from Unidade de Imunologia Clinica (Hospital Santo António – Porto) who responded to the Short Form-36 version 2 (SF-36v2) were assigned to an SF-6D score, provided the 11 items used in the SF-36, to obtain the self-assessment of their health status and quality of life. We used the Portuguese version of the measurement instrument SF-6D and the econometric algorithm created by Brazier to generate utility values for different health state.

**Results:** The SF-6D and preferences derived from the SF-36v2 showed significant correlations with each other, with Pearson coefficients varying from .70 to .85 ( $p < .01$ ). The mean utility value obtained by the SF-6D to the whole patients with SLE was .76, ranging from .47 to 1.00 and associated to a standard deviation of .079. Larger deficit levels were found in "role", "pain", "mental health" and "vitality dimensions". Lower utility values were assigned by women and elderly. Less educated individuals, living in rural areas, divorced and separated also showed, in general, lower utility values.

**Conclusions:** The measurement instrument SF-6D is useful and effective in measuring the HRQL in patients with SLE.

**Descriptors:** Short Form 6D; Short Form-36 version 2; Health Related Quality of Life; health utilities; Systemic lupus erythematosus.

<sup>a</sup> claudiaribeiro.usc@gmail.com<sup>b</sup> isantos850@gmail.com<sup>c</sup> nelioveiga@gmail.com<sup>d</sup> maugustamarques@gmail.com<sup>e</sup> cvasconcelos@gmail.com

234

### NATIONAL HUMANIZATION POLICY: CONCEPTIONS OF HEALTH PROFESSIONALS

Marionescu Purcaru<sup>a</sup>, Cíntia Freitas Casimiro<sup>b</sup>, Mirna Albuquerque Frota<sup>c</sup>; Camila Santos do Couto<sup>d</sup>, Fátima Luna Pinheiro Landim<sup>e</sup>, Kamila Ferreira Lima<sup>f</sup>, Maria Goretti Alves de Oliveira da Silveira<sup>g</sup>

*Universidade de Fortaleza. Fortaleza, CE, Brasil*

**Introduction:** In the context of health services, this theme has been emphasized enough in health care, but little has been seen in practice, since the act of humanizing be confused with common sense conceptions.

**Objective:** Identify the knowledge of health professionals about the National Humanization Policy (NHP); perceive actions undertaken by health professionals in the Neonatal Intensive Care Unit (NICU) PNH proposals.

**Methods:** Qualitative study, whose setting was the neonatal unit of a public hospital in the state network, specializing in child health care, located in Fortaleza, CE, Brazil. The participants were 20 health professionals. Data collection was conducted from April to July 2012, by application of semi-structured interview. For data analysis, we used the method of interpretation of meanings.

**Results:** Knowledge of the PNH is conceptualized with difficulty and uncertainty. As a professional practice, noted that the PNH is present during the actions developed in the acts. Relevant policy issues were not cited as recovery worker and transdisciplinary networking with multi-disciplinary teams. Scientific knowledge and responsibility were identified as basic tools for professionals in the practice of humanization. There are situations that hinder the insertion of humanization in the unit, such as problems related to workplace and to worker. Regarding the suggested strategies, a minority believes that the practices developed are enough, while others punctuate the need for continuing education.

**Conclusions:** Thus, regular meetings are required between professionals working in the unit for the manager identify weaknesses and seek changing attitudes.

**Descriptors:** Health Policy; Humanization of Assistance; Intensive Care Units Neonatal.

<sup>a</sup> marion.p@bol.com.br

<sup>b</sup> cintiafc86@yahoo.com.br

<sup>c</sup> mirnafrota@unifor.br

<sup>d</sup> cmlcouto@gmail.com

<sup>e</sup> lunalandim@yahoo.com.br

<sup>f</sup> limakamila@yahoo.com.br

<sup>g</sup> mgao\_s@yahoo.com.br

235

### FINDING AN INSTRUMENT TO ASSESS FALL RISK IN ACUTE PATIENTS IN HOSPITAL SETTING

Ana Sabrina Sousa<sup>h,h,a</sup>

*<sup>h</sup>Instituto de Ciências da Saúde da Universidade Católica Portuguesa. Porto, Portugal*

*<sup>h</sup>Hospital S. João. Porto, Portugal*

**Introduction:** With the growing use of technological platforms, it's imperial to rethink its content after discussing data treatment. Falls are nowadays a common problem in every hospital. Considered the most significative cause of incidents and adverse events in hospitals, they have high costs in morbidity, mortality and economy. Most authors find crucial to identify those at risk of falling, so adequate measures can be implemented. Many risk tools are proposed by investigators, but their results are not consistent.

**Objective:** The aim of our research is to identify fall risk tools and suggest an implementation in a technological platform.

**Methods:** Integrative review. Research was made using B-on, PubMed, and RCAAP between November 2013 and January 2014 including original articles only from the last ten years. We found 365 articles, and after analyzing their abstract, methodological quality was accessed. Data were compiled and analyzed using SPSS program.

**Results:** Eighteen studies were selected. We found Morse, STRATIFY and Hendrich II Fall Risk Model the scales with better effectiveness, despite the inconsistency of the results. Greater diagnostic validity was verified in STRATIFY scale.

**Conclusions:** We considered STRATIFY the best scale to assess fall risk in acute patients in hospital settings. Because the behavior of the results varies depending on the population, we recommend testing the scale in setting prior its implementation. Investigators also recommend that adequate fall preventive measures should be assured to guarantee the success of the fall risk tool.

**Descriptors:** Falls; prevention; risk; assessment; hospital.

<sup>a</sup> sabrinasousa72@hotmail.com

236

### INTEGRATING EVIDENCE-BASED PRACTICE IN THE TRAINING PROGRAMME BACHELOR'S DEGREE IN NURSING. UNIVERSITY JAUME I

Salas-Medina P<sup>a</sup>, Mena-Tudela D, Cervera-Gasch A, González-Chordá VM, Folch-Ayora A, Lapeña Moñux, Y, Orts-Cortés M, Maciá-Soler ML

*Departamento de Enfermería. Universitat Jaume I De Castellón. España*

**Introduction:** The Evidence-Based Practice (EBP) aims to combine a form methodological process of professional experience in health with the most current information on the clinical situation. The professional novice can make better decisions despite lacking sufficient years in clinical practice. We then train the student in correct habits within the methodological process by which you can strengthen both their knowledge and their attitude and ability, allowing secure customs, where all of your work is based on PBE.

**Objective:** The main objective of the study is to establish a cross and gradual learning method that allows the acquisition skills related to EBP in undergraduate nursing students. Incorporate nursing interventions on scientific evidence from the learning and training of students.

**Methods:** To achieve the objectives of this study an integrative review of the literature is performed. The articles were selected from Medline/PubMed, Cochrane and EEP Database. The time limit was 10 years. The languages used, English and Spanish; Search descriptors employees immunity: Nursing, evidence-based practice, evidence-based nursing, Research competencies and education.

**Results and Conclusions:** The nursing department creates the program Integration of EBP in Formative Degree Program in Nursing at the University Jaume I, which works transversely during the four academic years, allowing to acquire generalist nurse training, knowledge, skills and attitudes that will allow through the academic year, students of nursing are competent. It should be noted that the student reaches the required nursing clinical expertise with which to achieve decision-making according to the PBE, through the figure of the teaching assistants.

**Descriptors:** Nursing; evidence-based practice; evidence-based nursing; Research competencies: education.

<sup>a</sup> psalas@uji.es

237

### ASSESSMENT OF PRENATAL UNDER THE PERSPECTIVE OF MANAGEMENT AND FAMILY HEALTH TEAMS

Zélia Maria de Sousa Araújo Santos<sup>1,a</sup>, Roberta Grangeiro de Oliveira<sup>1,b</sup>, Maria Tereza Sá Leitão Ramos Borges<sup>1,c</sup>, Laurineide de Fátima Diniz Cavalcante<sup>1,d</sup>, Rithianne Frota Carneiro<sup>1,e</sup>, Sara Arcanjo Lino Karbage<sup>1,f</sup>, Aline Barbosa Teixeira Martins<sup>1,g</sup>

<sup>1</sup>Universidade de Fortaleza. Fortaleza, CE, Brasil

<sup>2</sup>Faculdades do Nordeste. Fortaleza, CE, Brasil

**Introduction:** The quality and management practices of Family Health Teams (FHT) has assumed greater relevance to managers of the Unified Health System (UHS). In this context, the Prenatal emerges as an instrument that aims to extend assistance beyond question of healing, empowering pregnant women for self-care.

**Objective:** To evaluate the prenatal the perspective of FHT and Coordinators of Units Primary Health Care (UAPS).

**Methods:** Research evaluative kind, held from March to October 2013. Structure, process and outcome: Donabedian 's model based on systems theory was used. The survey was conducted in 20 UAPS, the Regional Executive Secretary VI (SER - VI), in Fortaleza-Ceará-Brasil. The BE - VI has UAPS 20 and 59 EqSF. Thus, the target population consisted of 20 coordinators UAPS, 59 doctors and 59 nurses. However, the sample was 14 engineers, 36 nurses and 35 physicians who answered the questionnaires and allowed the observation of prenatal consultation.

**Results:** UAPS presented with an unsatisfactory framework for prenatal quality. Physical systematic plan of care, material resources, and the lines expressed the need for a more careful look by the unit management. As for the process, it was observed that nurses and physicians had similar attitudes on the approach and the inherent physical examination ducts.

**Conclusions:** It was found that the physical structure UAPS had unsatisfactory for prenatal care quality.

**Descriptors:** assessment, prenatal, family health.

<sup>a</sup> zeliasantos@unifor.br

<sup>b</sup> roberta\_grangeiro@hotmail.com

<sup>c</sup> mariatborges@uol.com.br

<sup>d</sup> lauridiniz@yahoo.com.br

<sup>e</sup> rithiannefrota01@hotmail.com

<sup>f</sup> sara\_arcanjo@hotmail.com

<sup>g</sup> alinebate@yahoo.com.br



238

### ANALYSIS OF THE WORKING PROCESS OF NURSES AND DOCTORS IN THE PREVENTION OF RISK FACTORS OF GESTATIONAL HYPERTENSION

Zélia Maria de Sousa Araújo Santos<sup>1,a</sup>, Roberta Grangeiro de Oliveira<sup>1,b</sup>, Maria Tereza Sá Leitão Ramos Borges<sup>1,c</sup>, Laurineide de Fátima Diniz Cavalcante<sup>1,d</sup>, Rithianne Frota Carneiro<sup>1,e</sup>, Sara Arcanjo Lino Karbage<sup>1,f</sup>, Aline Barbosa Teixeira Martins<sup>1,g</sup>

<sup>1</sup>Universidade de Fortaleza. Fortaleza, CE, Brasil

<sup>2</sup>Faculdades do Nordeste. Fortaleza. CE, Brasil

**Introduction:** One qualified prenatal care is by incorporating warm ducts and without unnecessary interventions; easy access to quality health services, which integrates all levels of care: promotion, prevention and health care of pregnant women.

**Objective:** To describe the work of nurses and physicians in prenatal care, and prevention of risk factors of hypertension in pregnancy.

**Methods:** A descriptive study with a quantitative approach, performed in twenty units of Primary Health Care (UAPS) of the Regional Executive Secretary VI (RES VI), in Fortaleza-Ceará-BR. The RES VI has 59 EqSF. Thus, the population was 59 doctors and nurses 59. However, the sample was 36 nurses and 35 doctors who allowed the observation of prenatal consultation. Organized the data in Statistic Program Package for Social Sciences (version 19.0).

**Results:** Nurses stood out in the guidelines on breastfeeding (52.8%) and puerperal care (38.9%). Inherent in the physical examination of the pregnant woman conducts no difference between nurses and physicians. The more targeted the conduct EqSF was weight control. However, nurses have excelled in educational guidance on preventive measures of hypertension in pregnancy, such as: adequate intake of salt (44.4%), sleep and adequate rest (47.2%), adequate fluid intake (38.9%) and systematic attendance consultations (36.1%).

**Conclusions:** The nurses and doctors had similar attitudes when we approach and conduct inherent in attendance. However, the nurses stood out as health educators.

**Descriptors:** Working process, health teams, gestational hypertension.

<sup>a</sup>zeliasantos@unifor.br

<sup>b</sup>roberta\_grangeiro@hotmail.com

<sup>c</sup>mariatborges@uol.com.br

<sup>d</sup>lauridiniz@yahoo.com.br

<sup>e</sup>rithiannefrota01@hotmail.com

<sup>f</sup>sara\_arcanjo@hotmail.com

<sup>g</sup>alinebate@yahoo.com.br

239

### IS INFANT MORTALITY AN EVIDENCE OF ECONOMIC DEVELOPMENT?

Sónia Maria Aniceto Morgado<sup>a</sup>

*Centro de Investigação do Instituto Superior de Ciências Policiais e Segurança Interna. Lisboa, Portugal*

**Introduction:** The paper aims to define the interaction between to health development, measured by infant mortality rate, and economic development, focusing on Portugal country, measured by Gross Domestic Product (GDP).

**Objective:** The aim of this paper is to test if causality between growth and health measured by infant mortality, is possible, attesting the adequacy of health policies, concerning the reduction of infant mortality rates.

**Methods:** To perform the test is used a Vector Autoregressive Model Analysis – VAR model, and Granjer (1988) causality test, applied to Portugal time-series data, for 5 decades. Along with it a univariate and bivariate analysis is applied.

**Results:** The positive evolution of GDP, along the years till 2005, before the beginning of economic crisis, at a positive rate of 14%, as been followed by a positive evolution of infant mortality rate decreasing by 8%. Even though the linear regression evidences a significant inverse relation between variables (p-value=0,000), the causality is not sustained.

**Conclusions:** The results seem to show no interdependence of the aforementioned variables, meaning that there's is no support that infant mortality is an evidence of economic development. However, growth is the core of sustainable health conditions (Egger, 2009), as health positively contributes to develop economic conditions (Ashraf, Lester, & Weil, 2012; Bloom, Canning, & Sevilla, 2004; Deaton & Paxson, 2005 & Morgado, 2013), so should be considered in health policies.

**Descriptors:** infant mortality; economic growth; VAR model; Gross Domestic Product; Portugal.

<sup>a</sup>soniamamorgado@gmail.com

240

### PEER FEEDBACK: ONLINE MODEL FOR DEVELOPING METACOGNITIVE SKILLS IN STUDENTS

António Ferreira<sup>1,a</sup>, Beatriz Araújo<sup>1,b</sup>, José Alves<sup>1,c</sup>, Diogo Pereira, Fernanda Príncipe<sup>1</sup>

*<sup>1</sup>Escola Superior de Enfermagem da Cruz Vermelha Portuguesa de Oliveira de Azeméis. Oliveira de Azeméis, Portugal*

*<sup>11</sup>Universidade Católica Portuguesa. Porto, Portugal*

**Introduction:** The Higher Education Institutions face a substantial change in a context in rapid and constant evolution. The challenges to answer to the new expectations in higher education arise for an investigation into the influence of the complex contexts in academic practices, and the assessment of students. Areas that will have to be rethought and renewed (Boud D et al, 2010). The involvement of students in assessment processes means that they do not identify evaluation only as a method of measuring learning, but also to provide learning (Cartney, 2010).

**Objective:** Based on a new paradigm of teaching, student-centered learning and assessment, our objective is to develop metacognitive competencies in higher education students by using peer feedback as a collaborative learning and assessment strategy.

**Methods:** The methodology used is based in the participatory action research, combining qualitative and quantitative approach. Through the use of an online platform (AC3Enf), using the peer feedback strategy, we develop higher education students, metacognitive competencies, such as: self-directed learning, critical and reflective spirit, ability to analyze situations and solve problems, communication skills, leadership, innovation, integration/interaction in a team, adapt to change and decision making.

**Results:** The results of using peer feedback in a online platform, show us, that students are more critical and reflective thinkers, self awareness, with collaborative behavior, decision making and self-development with innovation and creativity.

**Descriptors:** Peer feedback; higher education; metacognitive competencies; decision making.

<sup>a</sup> ferreira.esecvpoa@gmail.com

<sup>b</sup> baraujo@porto.ucp.pt

<sup>c</sup> josematiasalves@gmail.com

<sup>d</sup> dioogo.pereira@gmail.com

<sup>e</sup> fernandaprincipe@esencvpoa.eu

241

### CONSTRUCTION AND VALIDATION OF A REFERENCE MATRIX FOR LARGE SCALE COGNITIVE ASSESSMENT OF THE BIOLOGICAL-FUNCTIONAL DIMENSION IN SCHOOL PHYSICAL EDUCATION

José Airton de Freitas Pontes Junior<sup>1,a</sup>, Leandro Silva Almeida<sup>11,b</sup>, Edson Silva Soares<sup>111,c</sup>, Maria Suely Alves Costa<sup>111,d</sup>, Nicolino Trompieri Filho<sup>111,e</sup>

*<sup>1</sup>Universidade Federal do Ceará. Ceará, Brasil*

*<sup>11</sup>Instituto de Educação. Universidade do Minho. Braga, Portugal*

*<sup>111</sup>Instituto de Educação Física e Esporte. Universidade Federal do Ceará. Fortaleza, Brasil*

*<sup>111</sup>Departamento de Psicologia. Universidade Federal do Ceará. Fortaleza, Brasil*

*<sup>111</sup>Faculdade de Educação. Universidade Federal do Ceará. Fortaleza, Brasil*

**Introduction:** The school as a health proponent encounters through Physical Education a possibility of integration of knowledge related to physical activity and health in the education field. There are learning objectives in the content section of Knowledge about the Body; however, no reference matrix exists to cognitively evaluate them on a large scale at the end of elementary school.

**Objective:** The study focuses on the development and validation of a reference matrix for large scale cognitive assessment of the biological-functional dimension in Physical Education.

**Methods:** The matrix was created based on cognitive learning objectives of the National Curriculum Parameters for Physical Education in Elementary Education. Through a questionnaire with closed questions and 12 items on scale, 210 teachers and researchers in Physical Education in Primary School (6<sup>th</sup> to 9<sup>th</sup> grade) from 5 regions of Brazil participated in the study, with 58.4% of them having masters and doctorates and 41.5% being graduates and specialists. We conducted exploratory factor analysis using SPSS v.22.0.

**Results:** The results indicate the following: 1) the sample was adequate to the study (KMO=0.932; BST≤0.01,  $\chi^2=1596.349$ , df=66), 2) the items have satisfactory explanation (commonalities ≥0.5), 3) satisfactory total variance explained (57.35% for eigenvalue =6.882), 4) one-dimensional (factor loadings from.662 to.850), 5) high internal consistency ( $\alpha=0.932$ ; Hotelling Test  $p\leq 0.001$  to 241.808, RITC.603 to.802).

**Conclusions:** We consider the reference matrix suitable for use by teachers and researchers to help them develop cognitive assessment tools for large scale evaluation in relation to the contents of the biological-functional dimension of Physical Education in Elementary Education.

**Descriptors:** Large scale cognitive assessment; Biological-functional dimension; School physical education.

<sup>a</sup> joseairton.junior@yahoo.com.br

<sup>b</sup> leandro@ie.uminho.pt

<sup>c</sup> edsonfisix@yahoo.com.br

<sup>d</sup> suelypsic@yahoo.com.br

<sup>e</sup> trompieri@hotmail.com

242

### THE ATTENTION TO ELDERLY HEALTH: INDICATORS OF PERFORMANCE EVALUATION AND DECISION MAKING IN LOCAL MANAGEMENT

Keila Cristina Rausch Pereira<sup>a</sup>, Josimari Telino de Lacerda<sup>b</sup>, Maria Cristina Calvo<sup>c</sup>

*Universidade Federal de Santa Catarina. Santa Catarina, Brasil*

**Introduction:** The elderly population increase presents to government and society the challenge to challenge to face ageing-specific and to ensure services that encompass the complex process of ageing. Thus, management requires appropriate indicators for decision making in this area.

**Objective:** To develop and test monitoring and evaluation for local management in elderly health care.

**Methods:** An evaluative study in two phases: the identification of a theoretical-logical model and the definition of an indicators set. The theoretical-logical model presents the actions that the local manager in elderly care is responsible for in the context of the Brazilian system and the relationship between theory and practice. The exploratory research of scientific and legal literature has based the choice of indicators which were grouped in two dimensions and eight sub-dimensions. This set of indicators was validated by area experts in workshops of consensus through the traditional comity technique and tested in a local area in the southern region of Brazil.

**Result:** Indicators of easy application, reproduction and understanding, allow the classification of local management and guide decision making in the search for quality care in elderly health.

**Conclusions:** The indicators are important instruments for local management. Their periodic use for monitoring and evaluating actions guide planning, facilitate agreements and allow social actors to recognize them easily.

**Descriptors:** Evaluation. Performance Evaluation of services. Indicators of quality of care. Care to the elderly.

<sup>a</sup> keilarausch@gmail.com

<sup>b</sup> jtelino@gmail.com

<sup>c</sup> critsina.clv@gmail.com

243

### ASSOCIATION OF OBSTETRIC VARIABLES WITH ROUTE OF CHILDBIRTH

Elizian Braga Rodrigues Bernardo<sup>1,a</sup>, Hellen Livia Oliveira Catunda<sup>1,b</sup>, Lara Leite de Oliveira<sup>1,c</sup>, Tiago de Sousa Barros<sup>1,d</sup>, Mirna Fontenele de Oliveira<sup>1,e</sup>, Ana Karina Bezerra Pinheiro<sup>1,f</sup>, Priscila de Souza Aquino<sup>1,g</sup>

<sup>1</sup>Universidade Federal do Ceará. Brazil

<sup>2</sup>Universidade do Porto. Portugal

<sup>3</sup>Universidade Federal de Pernambuco. Brazil

**Introduction:** The responsible determinants for the type of delivery are not well understood but are likely to be multiple. The choice should be driven by the women through a conscious decision.

**Objective:** The objective of this paper is associate the amount number of pregnancies and births of women with who had performed a natural childbirth.

**Methods:** This is a correlational study with a quantitative approaches conducted on 210 postpartum women taken in the period from January to July 2012 at a public school maternity referenced. Ethical issues aspects were observed.

**Results:** The association of the number of pregnancies and births with the mode of childbirth variables showed no statistical correlation according to the chi-square test. The number of natural childbirth in primiparous were higher, although in with subtle percentages. The primiparity constitutes in a risk factor for cesarean section under the assumption by the hypothesis that these women are less able to cope hand with the difficulties of labor. In the case of multiparous, the prevalence was caesarean section, which can be linked to the desire to perform tubal ligation and previous reproductive experiences. In primigravidae, the number of natural childbirth was slightly higher. Already, on the other hand in multigestas the cesarean section prevailed.

**Conclusions:** The fear of pain of on natural childbirth, especially in primigravidae, can influence the decision of cesarean sections. It is important that health professionals seek to empower women to choose the best way of parturition through exchange of adequate knowledge about the appropriate options.

**Descriptors:** Nursing; Women's Health; Obstetrical Nursing; Natural Childbirth; Cesarean Section.

<sup>a</sup> elizbernardo@hotmail.com

<sup>b</sup> hellen\_enfermagem@yahoo.com.br

<sup>c</sup> lara.leite@hotmail.com

<sup>d</sup> tiago\_sousajn@yahoo.com.br

<sup>e</sup> anakarinaufc@hotmail.com

<sup>f</sup> priscilapetenf@yahoo.com.br

244

### THE ANXIETY DISORDERS INTERVIEW SCHEDULE FOR DSM-IV:CHILD VERSION(ADIS-C) IN ADOLESCENTS

Maria do Céu Salvador<sup>a</sup>, Cátia Martins<sup>b</sup>

*Faculdade de Psicologia e Ciências da Educação. Universidade de Coimbra. Portugal*

**Introduction:** An extensive evaluation of psychopathology is critical in the psychotherapeutic and research processes. Usually, researchers and clinicians are dependent on the accuracy of tools used to determine diagnosis, and this process can affect both assessment reliability and treatment efficacy. As such, it is essential to use validated tools concerning reliability, sensitivity and specificity.

**Objective:** The Anxiety Disorders Interview Schedule for Children (ADIS-C; Silverman & Albano, 1996) has shown its efficacy and reliability in several international investigations. In Portugal its psychometric properties have not yet been studied, thus being the aim of our study.

**Methods:** The final sample consisted of 240 adolescents (172 in the clinical group and 68 in the non-clinical group, all assessed by the ADIS-C), aged between 14 and 18 years old. ADIS-C and several Self Report (MASC, SAS-A, RT, YSR, CDI; acceptability of the ADIS-C), Parent (CBCL) and Teachers (TRF) Report Questionnaires were used. Person correlations, Student's t-test, Mann-Whiney U, and Cohen's Kappa were used to explore validity, discriminant ability and inter-rater reliability.

**Results:** Concurrent validity, discriminant ability to distinguish between clinical and nonclinical groups, inter-rater agreement and acceptability of the interview obtained good results.

**Conclusions:** ADIS-C showed good ability to generate valid and reliable diagnoses. The use of this instrument may confer advantages to the clinical practice and research, particularly in the reduction of variability in the assessment process, providing accuracy in the diagnosis of comorbidities (Ulloa et al, 2006) and delimitating symptoms and clinical populations through a clear and objective evaluation.

**Descriptors:** Anxiety assessment; adolescents; diagnosis; ADIS-C; psychometric properties.

<sup>a</sup> ceusalvador@gmail.com

<sup>b</sup> catia.casanova@gmail.com

245

### COMPARING THE PSYCHOMETRIC PROPERTIES OF THE INSTRUMENTS USED IN THE ECONOMIC EVALUATION OF PARKINSON'S DISEASE

Miguel Ángel García-Gordillo<sup>1</sup>, José María Abellán-Perpiñán<sup>II</sup>, Borja del Pozo-Cruz<sup>III</sup>, José Carmelo Adsuar<sup>IV</sup>, José Alberto Parraça<sup>V</sup>

*<sup>1</sup>Facultad de Ciencias Económicas y Empresariales. Universidad de Extremadura. Badajoz, Spain*

*<sup>II</sup>Facultad de Economía y Empresa. Universidad de Murcia. Murcia, Spain*

*<sup>III</sup>University of Auckland. Auckland, New Zealand*

*<sup>IV</sup>Facultad de Ciencias del Deporte. Cáceres, Spain*

*<sup>V</sup>Universidade de Évora. Évora, Portugal*

**Introduction:** Quality-adjusted life years (QALYs) are a crucial input in cost-utility analysis, the preferred method for the economic evaluation of healthcare interventions. Preference-based measures of health-related quality of life (HRQoL), like the SF-6D and the EQ-5D are alternative ways of generating utility scores for their use in QALY estimations. These instruments have been previously used for assessing HRQoL in patients with different diseases such as Parkinson disease (PD). However, to our knowledge, there are no previous studies about the use of the SF-6D and the EQ-5D for the generation of QALYs in PD patients within the Spanish context.

**Objective:** To assess the psychometric properties of the SF-6D and EQ-5D questionnaires and to compare such measures in this population sample.

**Methods:** 133 participants, 64.33 (±9.74) years old on average, were included in the study. The relative efficiency statistic was used to test the ability of the EQ-5D and SF-6D instruments to detect both clinical changes in HRQoL and clinical changes in PD severity (as assessed by the Hoehn & Yahr scale).

**Results:** The SF-6D appears to have better efficiency and greater sensitivity to detect clinical changes in PD severity of the symptoms. On the other hand, the EQ-5D performs better in detecting clinical HRQoL changes.

**Conclusions:** The psychometric properties of the SF-6D and EQ-5D questionnaires make them appropriate for their use in this population sample. These results suggest that both SF-6D and EQ-5D questionnaires can be used for QALY estimations in patients with PD in the Spanish context.

**Descriptors:** Psychometric properties; QALYs; SF-6D; EQ-5D; Parkinson's disease.

<sup>a</sup> miguelgarciaordillo@gmail.com

<sup>b</sup> dionisos@um.es

<sup>c</sup> b.delpozocruz@auckland.ac.nz

<sup>d</sup> jadssal@unex.es

<sup>e</sup> jparraca@hotmail.com

246

### ASSESSING CEILING EFFECTS IN THE EQ-5D AND THE SF-6D INSTRUMENTS IN PATIENTS WITH PARKINSON'S DISEASE

Miguel Ángel García-Gordillo<sup>1,a</sup>, Fernando Ignacio Sánchez-Martínez<sup>1,b</sup>, José María Abellán-Perpiñán<sup>1,c</sup>, José Carmelo Adsuar<sup>1,d</sup>, Borja del Pozo-Cruz<sup>1,e</sup>, José Alberto Parraça<sup>1,f</sup>

<sup>1</sup>Facultad de Ciencias Económicas y Empresariales. Universidad de Extremadura. Badajoz, Spain

<sup>2</sup>Facultad de Economía y Empresa. Universidad de Murcia. Murcia, Spain

<sup>3</sup>Facultad de Ciencias del Deporte. Cáceres, Spain

<sup>4</sup>University of Auckland. Auckland, New Zealand

<sup>5</sup>Universidade de Évora. Évora, Portugal

**Introduction:** The Parkinson's disease (PD) is a degenerative disorder of the nervous system that may seriously affect patients' health related quality of life (HRQoL). In this regard, it is important to have valid and reliable HRQoL measures for their use in these patients. The EQ-5D and the SF-6D are two of the most widely used preference-based HRQoL instruments. Nevertheless, a problem that may occur is that the instrument cannot discriminate when patients' HRQoL is near 'full health' ('ceiling effect') or, alternatively, when the instrument is not capable of describe the worst health conditions ('floor effect').

**Objective:** To assess the existence and scope of ceiling and floor effects in the EQ-5D and SF-6D instruments in patients with PD.

**Method:** 133 participants were included in the study. The distribution of EQ-5D and SF-6D levels within each domain, in percentages, as well as the utilities derived from their respective algorithms, were used to assess the floor/ceiling effects in both instruments.

**Results:** The dimensions of EQ-5D showing highest ceiling effects are self-care (SC) and usual activities (UA). Conversely, no floor effect emerges in any of the five dimensions. Regarding utility values, only 1 patient had a 0 (the worst score), whereas 18 patients had a 1 (the best score) in the EQ-5D-3L. With respect to the SF-6D, nor ceiling neither floor effects have been observed.

**Conclusions:** EQ-5D and SF-6D are both appropriate instruments for HRQoL assessment in patients with PD. Notwithstanding, while ceiling effects are observed when EQ-5D is used, those effects do not appear within the SF-6D.

**Descriptors:** Parkinson's disease; cost-utility; EQ-5D; SF-6D; HRQoL.

<sup>a</sup> miguelgarcia@um.es

<sup>b</sup> fernando@um.es

<sup>c</sup> dionisos@um.es

<sup>d</sup> jadssal@unex.es

<sup>e</sup> b.delpozocruz@auckland.ac.nz

<sup>f</sup> jparraca@hotmail.com

247

### ORGANIZATIONAL STRESS: DEVELOPMENT OF A MULTIDIMENSIONAL MEASURE

Lisete dos Santos Mendes Mónico<sup>1,a</sup>, Hugo Manuel Oliveira Lucas<sup>1,b</sup>, Luíza Nobre Lima<sup>1,c</sup>, Maria Susana Nogueira Fernandes<sup>1,d</sup>

<sup>1</sup>Faculdade de Psicologia e Ciências da Educação. Universidade de Coimbra. Coimbra, Portugal

<sup>2</sup>Department of Psychology and Anthropology. Universidad de Extremadura. Spain

<sup>3</sup>Agrupamento de Escolas de Portela e Moscavide. Portugal

**Introduction:** Nowadays people spend a great part of their lives at work, being work sometimes responsible for a significant fraction of daily stress.

**Objective:** This paper describes the development of the Organizational Stress Questionnaire (OSQ). The OSQ is made of a set of items from measures proposed by Spence and Robins (1992), and Rego et al (2007a, 2007b), adapted to the Portuguese work context.

**Methods:** The sample is composed by 132 men and 169 women, with an average age of 40.08 years old (DP=10.78), having different professional occupations, literary qualifications, and earned salaries. The study of the dimensionality was done through a Principal Components Analysis (with VARIMAX rotation), that allowed us to analyze the validity of the constituent variables of each factor of the OSQ.

**Results:** Adopting the criteria of the eigenvalue greater than one, and in conformity with the results of the Scree plot, a four dimension solution raised, accounted for 62.37% of total variability: F1 – Work as a source of stress and displeasure (22.2%); F2 – Work as a source of emotional distress (16.05%); F3 – Work as a source of compulsion (13.58%); and F4 – Work as a source of dysfunctional commitment (11.23%). All the items presented high factorial loadings in its factor, being the lowest of .742 and the highest of .819. The analysis of Internal Consistency, evaluated by Cronbach's alpha, showed good reliability indexes.

**Conclusions:** Considering the Principal Components and the Internal Consistency analysis, we conclude that the psychometric properties of OSQ are satisfactory.

**Descriptors:** Organizational stress; Organizational stress measurement; Factorial analysis; Questionnaire; Measurement instrument.

<sup>a</sup> lisete\_monico@fpce.uc.pt

<sup>b</sup> hhlucas@sapo.pt

<sup>c</sup> luizabelima@fpce.uc.pt

<sup>d</sup> sumaltieira@gmail.com.

248

## PERCEIVED HEALTH STATUS IN PEOPLE OVER 65 YEARS

Eugénia Maria Garcia Jorge Anes<sup>a</sup>, Adília Maria Pires da Silva Fernandes<sup>b</sup>, Carlos Pires Magalhães<sup>c</sup>, Maria Helena Pimentel<sup>d</sup>, Maria Augusta Pereira da Mata<sup>e</sup>, Maria Filomena Grelo de Sousa<sup>f</sup>, Manuel Alberto Morais Brás<sup>g</sup>

*Núcleo de Investigação e Intervenção do Idoso. Escola Superior de Saúde. Instituto Politécnico de Bragança. Portugal*

**Introduction:** The assessment of the health status perception is increasingly used in monitoring the health of populations. This assessment is useful to the planning of a comprehensive, multidimensional and dynamic intervention in the elderly, envisaging a successful aging. The area of residence is one of the determining factors to the perception of health status and may also condition its relationship with other factors which affect health (Araujo & Ramos Lopes, 2011).

**Objective:** The aim of this study was to determine the relationship between the health status perception and sociodemographic and clinical variables in elderly living in rural areas.

**Methods:** A quantitative, non-experimental, descriptive and cross-sectional study was designed applying a questionnaire consisting of a generic health instrument SF - 36v2 and sociodemographic and clinical questions to a sample of 270 old people (82% of a rural community in the north of Portugal). Data were collected in 2013.

**Results and Conclusions:** Results are lower than the average values of reference to the Portuguese population (Ferreira & Santana, 2003). Significant differences were found in relation to sociodemographic and clinical variables. We also concluded that the youngest, men, married ones, those who live in their households, the ones who have the help of the family and friends when they need and those who didn't report any disease have a better perception of their health status. Among those who reported suffering from cardiovascular and osteoarticular diseases, the first ones showed a better perception of their health status.

**Descriptors:** Health status perception, Elderly, Rural living, Health determinants, SF-36v2, Quality of life.

<sup>a</sup> eugenia@ipb.pt

<sup>b</sup> adilia@ipb.pt

<sup>c</sup> cmagalhaes@ipb.pt

<sup>d</sup> hpimentel@ipb.pt

<sup>e</sup> augustamata@ipb.pt

<sup>f</sup> Filomena@ipb.pt

<sup>g</sup> Manuel-bras@ipb.pt

## MEDICAL EDUCATION – SIMULATED PRACTICE

249

### MENTORS' IMPLICATION IN CLINICAL LEARNING AND ASSESSMENT OF NURSING STUDENTS

Víctor Chordá<sup>a</sup>, Desirée Tudela<sup>b</sup>, Agueda Gasch<sup>c</sup>, Pablo Medina<sup>d</sup>, Ana Ayora<sup>e</sup>, María Isabel Cortés<sup>f</sup>, María Loreto Soler<sup>g</sup>

*Jaume I of Castellón de la Plana. Castellón, España*

**Introduction:** Nursing Education in Europe is regulated by law from 2005. Clinical learning comprises at least 50% of the total degree program in nursing. It is necessary rely on professionals nurses involved in the learning process and skills development assessment. The level of implication in learning processes of these professional nurses is very important to ensure good results.

**Objective:** The main objective of this work is to know the implication level of professional nurses accredited as mentors that they assess skills development in second-year nursing students using a “Guide of Clinical Learning Assessment” at Jaume I University.

**Methods:** An analytical, observational, prospective, with inferential component, study takes in 5 hospitals, 16 clinical units and 200 mentors. Mentors' implication level is studied with quality criteria record of “Guide of Clinical learning Assessment” (Record rate > 80%, mentor's signature and final grade in the right place). A descriptive and inferential analysis is carried out on the learning activities recorded.

**Results:** The quality standards set for the whole sample is not reached (80%). Lack of mentor's signature is the main cause of incorrect record (21.4%). Nine learning activities are statistically significant ( $p < 0.05$ ). There are significant differences by clinical units ( $p < 0.05$ ).

**Conclusions:** Mentors' implication level can be considered adequate, although strategies based on collaboration and training should be developed to encourage their involvement and improve the learning process in the clinical setting.

**Descriptors:** Nursing education. Mentor. Mentorship. Implication. Clinical learning.

<sup>a</sup> vchorda@uji.es

<sup>b</sup> dmena@uji.es

<sup>c</sup> cerveraa@uji.es

<sup>d</sup> psalas@uji.es

<sup>e</sup> afolch@uji.es

<sup>f</sup> isable.orts@enf.uji.es

<sup>g</sup> macia@uji.es

250

### PREVENTION OF DRUG ABUSE: PRACTICES DEVELOPED BY COUNSELORS AND COMMUNITY LEADERS IN BRAZIL

Fatima Buchele<sup>1,a</sup>, Fernanda Rodrigues<sup>1,II,b</sup>

<sup>1</sup>Universidade Federal de Santa Catarina. Florianópolis, Brasil

<sup>II</sup>Programa Família da Prefeitura Municipal da Palhoça. Palhoça, Brasil

**Introduction:** The phenomenon of drug use is a subject of constant discussion, be it by the impact on the lives of individuals as also by the actions related to traffic and violence. Preventive actions reach an increasing visibility. The philosophy of shared responsibility seeks for the effective prevention through the reconstruction of social networks that aim for the improvement of living conditions and general health promotion.

**Objective:** To do an online analysis of the preventive actions of the Bank of Practical Experiences (BPE) of the 4th edition of the Course “Prevention of drug abuse – Training for Councilors and Community Leaders”.

**Methods:** The research is descriptive exploratory in nature, with a qualitative approach and was divided into two stages: organization and classification of the data into tables containing general information of the Bank of Practical Experiences followed by the categorization of preventive practices described in BPE.

**Results:** The information contained in the Bank of Practical Experiences of the training course for councilors and community leaders allowed an analysis of the experiences related to drugs use that are being developed in Brazil. It is observed that most of the published practices deal with preventive actions in progress, followed by the therapeutic activities and projects not yet developed.

**Conclusions:** The modality of distance learning of this course was accessible for 15.000 students from various regions of Brazil. The BPE encouraged students to share their actions, applied in the most diverse ways, with great diversity of public and local. This allowed to visualize nationwide the preventive practices that have been held in different social contexts.

**Descriptors:** Prevention. Drug use. Community leaderships.

<sup>a</sup> fatima.buchele@ufsc.br

<sup>b</sup> ferdrigues.enf@gmail.com

251

### ATTENTION GIVEN TO USERS OF SUBSTANCES PSYCHOACTIVE IN UNITS OF SERVICE READY FOR NURSES AND DOCTORS

Fatima Buchele<sup>1,a</sup>, Marcelo Barreto<sup>1,11,b</sup>

<sup>1</sup>Universidade Federal de Santa Catarina. Florianópolis, Brasil

<sup>11</sup>Programa de Emergências da Prefeitura Municipal de Florianópolis. Florianópolis, Brasil

**Introduction:** The approach emergency in mental health has great importance and is capable of determining the acceptance and adhesion of people to the treatment. The actions of care must be articulated with existing services in the system, allowing referral to other services collaborating on the establishment of a relationship of trust with the service and with the staff.

**Objective:** To analyze the attention given to users of psychoactive substances by physicians and nurses of the Emergency Care Units of a city of southern Brazil.

**Methods:** Descriptive study with a qualitative approach. The participants were: eight doctors and eight nurses of Emergency Care Units. The data analysis was performed from the interview's transcription with the assistance of the software IRAMUTEC – Interface R pour les Analyses de Multidimensionnelles Textes et de Questionnaires.

**Results:** The lexical analysis of the 16 interviews was divided in two corpus: the care and referral to drug users on the PSUs and the feelings and prejudices of the nurses and physicians of PSUs. The team that provides care seems not to be prepared to attend this demand, in addition to the reference services not being totally articulated among each other.

**Conclusions:** The professionals that provide care to the alcohol users and other substances should be part of a set of actions of the integrated health services, aiming a higher quality on the care to individuals who make abuse use of these substances. The comprehension of addiction from professionals can bring changes in user's care in Emergency Care Units.

**Descriptors:** Illicit Drugs. Substance Related Disorders. Emergency Medical.

252

### WHAT DOES THE BODY HAVE TO DO WITH IT? MOTION EXTRAPOLATION IN INDIVIDUALS WITH CEREBRAL PALSY\*

Isabel Catarina Martins<sup>1,11,a</sup>, Armando Mónica de Oliveira<sup>1,b</sup>

<sup>1</sup>Instituto de Psicologia Cognitiva. Faculdade de Psicologia e de Ciências da Educação. Universidade de Coimbra. Coimbra, Portugal

<sup>11</sup>Associação Portuguesa de Paralisia Cerebral de Viseu. Viseu, Portugal

**Introduction:** Previous studies showed that people with cerebral palsy (CP) are impaired in motor planning abilities as well as in motor imagery – the inner reproduction of action while motor output is inhibited. Performance on tasks involving dynamic mental representations, such as Motion Extrapolation (the estimated time at which a moving target will reach a point) has, on the other hand, been suggested to rely on motor imagery.

**Objective:** We compared CP and control participants using a Time-To-Contact (TTC) paradigm which requires estimating the moment at which a moving target makes contact with an obstacle.

**Methods:** Participants were 48 individuals with CP (7–56 yrs) and 48 age-matched controls. Stimuli were videos of a blue square moving horizontally at a constant speed towards a stationary obstacle, and disappearing at a given point. Two kinds of obstacles were used, block-wise: a human silhouette; a vertical rectangle. Direction, speed and vanishing target point varied, along with the obstacle position.

**Results:** Anticipation (TTC underestimation) was larger in silhouette than in rectangle condition. CP Participants anticipated more than controls but more so in the silhouette condition. Anticipation increased with the degree of functional impairment, from ataxic, to diplegic, to quadriplegic participants. Anticipation magnitude correlated significantly with gross motor function impairment scale (GMFCS). No relation was found between degree of anticipation and questionnaire measures of visual and motor imagery.

**Conclusions:** Our results appear consistent with the use by participants of an embodied threshold of anticipation, more strongly activated in silhouette condition and, in CP group, lawfully dependent on overall motor constraints.

**Descriptors:** cerebral palsy, motion extrapolation, time to contact, motor imagery.

\*This work was supported by FCT - DFRH - SFRH/BD/64960/2009.

<sup>a</sup> fatima.buchele@ufsc.br

<sup>b</sup> mstuart645@hotmail.com

<sup>a</sup> catarinamartins@fpce.uc.pt

<sup>b</sup> l.dinis@fpce.uc.pt



253

### SIMULATED LABORATORY PRACTICE: IMPACT ON THE STUDENT IN PREPARATION FOR THE REAL CONTEXT OF CLINICAL PRACTICE

Leila Sales<sup>a</sup>, Ana Sofia Jesus<sup>b</sup>, Cláudia Morgado<sup>c</sup>, Isabel Lucas<sup>d</sup>, Teresa Silveira<sup>e</sup>

*Escola Superior de Saúde da Cruz Vermelha Portuguesa. Lisboa, Portugal*

**Introduction:** Problem Based Learning (PBL) is an active pedagogical methodology that allows development of autonomous learning using critical analysis of problem situations. It enhances critical thinking, decision making, responsibility and autonomy in the development of instrumental, interpersonal and systemic competences.

**Objective:** Analyze the contribution of PBL methodology in simulated practice, to develop skills of students in clinical practice on the Bachelor's degree in nursing (BDN). Know the opinion about the contributions of the PBL methodology.

**Methods:** An exploratory, retrospective, qualitative study using SWOT analysis applied to classes of 3rd and 4th year of BDN.

**Results:** Of the sample of 98 students were obtained 42 responses (3rd year students). Students who have had contact with the clinical practice (13) point out strengths as practicing nursing procedures and contact with various materials; as weaknesses pressure and knowledge on pharmacology; as opportunities the exploitation of real cases and stimulation of clinical judgment. Those who had no contact with the hospital environment (29) reported that the PBL/simulated practice enhances the holistic view of the person, facilitates learning and prepares for the real context. The opportunities identified refer to the preparation to deal with different situations and resilience. Pressure is a term identified as weakness, opportunity and threat.

**Conclusions:** The opinion of the students shows the recognition of this pedagogical strategy as a booster of the development of the various skills on the transposition into clinical context.

**Descriptors:** Problem Based Learning (PBL), Simulated laboratory practice, Clinical practice, Nursing students.

<sup>a</sup> leila.sals@gmail.com

<sup>b</sup> anagarciajesus@gmail.com

<sup>c</sup> claudiasebastiaomorgado@gmail.com

<sup>d</sup> ilucas@esscvp.eu

<sup>e</sup> tsilveira@esscvp.eu

254

### THE USE OF CLINICAL SIMULATION WITH ACTORS: AN ACTION RESEARCH IN NURSING

Saionara Nunes de Oliveira<sup>a</sup>, Marta Lenise do Prado<sup>b</sup>, Silvana Silveira Kempfer<sup>c</sup>

*Universidade Federal de Santa Catarina. Brazil*

**Introduction:** The teaching activity is stimulated by reflections and challenges. The pedagogical activity among nurses requires a social commitment to the population that will be cared by the future nurses. The current research for more efficient and effective methods of instruction anchored in new technologies, reflects the commitment of the nursing faculties and this contributes to the development of a more critical and reflective pedagogy.

**Objective:** To propose and to implement an experiential learning through clinical simulation with the participation of actors in a nursing consultation.

**Methods:** we followed the 4 steps of Action Research: planning, action, observation and reflection. We had the collaboration of students of dramatic arts and 3 nursing students. Data collection occurred in May and July 2013, through participant interviews and was analyzed according to the proposed operative to analyze qualitative data observation.

**Results:** the planning stage included: the construction and validation of clinical guides, the selection and training of actors, the organization and preparation of the scenario and the invitation of the participants. The action was operationalized according to the 4 stages of the learning cycle of Kolb (1984).

**Conclusions:** The clinical simulation involves the participation of different subjects at all stages and Action Research is a method that allows its implementation. This process must be guided by specific learning objectives and a critical pedagogy that encourages critical thinking in students. Using actors and a real scenario allow the fidelity. The psychological debriefing is the key moment of the reflective process that facilitates the integral formation of the student.

**Descriptors:** Simulation; Patient Simulation; Educational Research in Nursing; Nursing; Education.

<sup>a</sup> saionaranunes@gmail.com

<sup>b</sup> marta.lenise@ufsc.br

<sup>c</sup> silvanakempfer@yahoo.com.br

255

## HEALTH PROMOTION: CONCEPTS AND ACTIONS OF NURSES TEACHERS

Jeisiane da Silva Oliveira<sup>1,a</sup>, Cristina Arreguy-Sena<sup>1,b</sup>, Nathália Alvarenga-Martins<sup>1,c</sup>, Mariléia Leone<sup>1,d</sup>, Paula Krempser<sup>1,e</sup>

<sup>1</sup>Programa de pós-graduação em enfermagem. Escola de Enfermagem. Universidade Federal de Juiz de Fora. Juiz de Fora, MG, Brasil

<sup>1</sup>Escola de Enfermagem. Universidade Federal de Juiz de Fora. Juiz de Fora, MG, Brasil

**Introduction:** Actions of health promotion are able to ensure the development of human potential and resources/infrastructure with a view to the formation of habits, customs, behaviors and attitudes of healthy collective impact.

**Objective:** This study aimed to analyze the teachers' conceptions of nursing education at a public institution of health promotion.

**Methods:** Structured research on Social Representations according to the collective subject discourse. Held in Brazilian higher education institution with professors who worked in practical, theoretical and/or internship from individuals, families or communities served in health institutions, at home or in the community at various levels of education assistance. Data collection conducted by interview with cursive registry interviewed on characterization and conceptions about health promotion itself. Processed data in NVivo with categories using the similarity of expressions and consolidated by the technique of collective subject discourse.

**Results:** 29 teachers in the areas of child health, adolescent, adult and elderly patients at various levels of health care with titration of master and doctor with 2-30 years of professional practice in education participated. The elements of the social representation of health promotion included: actions, focus, goals and subjects involved.

**Conclusions:** The representation made corroborated the fact that health promotion be processing the determinants of life and able to be used in teaching undergraduate nursing (education, healthcare and research dimensions) tool, although its effectiveness has not been investigated. It is suggested that the same question is made to students to find out if these concepts were assimilated during the process of teaching learning.

**Descriptors:** Nursing; Health Promotion; Health; Education, Nursing.

<sup>a</sup> jeisilva@gmail.com

<sup>b</sup> cristina.arreguy@ufjf.edu.br

<sup>c</sup> nath.alvarenga.martins@gmail.com

<sup>d</sup> marileon@terra.com.br

<sup>e</sup> paulakrempser.enf@gmail.com

256

## CLINICAL TRAINING IN SURGERY: DEVELOPING NURSING STUDENTS SKILLS

Palmira C. M. Oliveira<sup>1,1,a</sup>, Regina M. F. Pires<sup>1,11,b</sup>

<sup>1</sup>Escola Superior de Enfermagem do Porto. Porto, Portugal

<sup>11</sup>Instituto de Ciências Biomédicas Abel Salazar. Porto, Portugal

<sup>111</sup>Instituto de Ciências Saúde. Universidade Católicas. Porto, Portugal

**Introduction:** Clinical training in surgery provides the integration of knowledge and development of skills for providing care to surgical client. In this context it is crucial understand the factors involved in developing of these skills.

**Objective:** To analyze the perceptions of nursing students about factors facilitating and inhibiting the development of skills in clinical training of surgery.

**Methods:** Case study of qualitative nature, exploratory and descriptive. Data were collected through a questionnaire with open questions to a sample of 11 students of 3rd year of nursing degree from a Portuguese nursing school, after consent. Data were analyzed using the technique of content analysis according to Bardin.

**Results:** Participants are mostly women. Emerged extrinsic and intrinsic factors that are perceived by students as facilitators and/or inhibitors of the development of their skills. They identify as facilitating factors: the supervision provided by teachers and tutors, the diversity of clinical experiences, positive customers feedback, intrinsic motivation, mechanisms of self-regulation of learning and the ability to manage stress. They consider as inhibiting factors: low self-confidence, difficulty coping with stress, difficulty reconciling clinical learning with extracurricular activities and short time of clinical teaching.

**Conclusions:** The identification of factors facilitators and/or inhibitors of skills development of students during clinical learning is an important aspect for research, teaching and nursing practice, allowing planning clinical teaching and supervision in order to optimize facilitator's factors and minimize the inhibitors, intrinsic or extrinsic. In this sense this study contributes to the promotion of learning and know-how to act in the context of surgery.

**Descriptors:** Clinical Practice, Nursing, Skills, Surgery.

<sup>a</sup> palmiraoliveira@esenf.pt

<sup>b</sup> regina@esenf.pt

257

### CARE FOR THE PERSON IN CRITICAL CONDITION IN THE CONTEXT OF SIMULATED PRACTICE

Noélia Cristina Rodrigues Pimenta Gomes<sup>a</sup>, Maria da Luz Fernandes Figueira Chaves Teixeira<sup>b</sup>

*Escola Superior de Enfermagem São José de Cluny, Funchal, Portugal*

**Introduction:** The practice of nursing in the lab with simulation have been used by the School of Nursing S. Jose of Cluny from the beginning of its activity in order to prepare the student for clinical teaching, raising their knowledge, satisfaction, safety, psychomotor, interpersonal and critical. The Simulated Practice - Care the patient in the Emergency Department in order to develop the student's skills, scientific and technical competencies, in the nursing interventions related to adult and elderly in critical condition.

**Objective:** To analyze and reflect on the results of the assessment of students regarding the activities in several simulation scenarios in the area of emergency/urgency within the academic years 2011/2012 and 2012/2013. Question: What is the opinion of students on the practice of emergency/urgency lab?

**Methods:** Retrospective study with statistical analysis of the assessment made by students about the practices in emergency/urgent laboratory.

**Results:** The global average of the assessment of students regarding the activities undertaken in 2011/2012 was 1.9 (range 0-3) and in the year 2012/2013 was 2.6.

**Conclusions:** The opinion of the students improved significantly in the year 2012/2013, a result of changes made based on the results obtained in 2011/2012. Students are of the opinion that the simulated practices increase skills in the various aspects of caring for the patient in emergent/urgent situation, being an important educational strategy for its increasing safety training and skills development.

**Descriptors:** Simulated Practice; Emergency; Critical Illness, students' skills.

258

### ACADEMIC OPINION ABOUT THE ABOUT THE NATIONAL CURRICULUM GUIDELINES IN HEALTH

Liliane da Consolação Campos Ribeiro<sup>a</sup>, Mirtes Ribeiro<sup>b</sup>, Viviane Antunes Rodrigues Soares<sup>c</sup>

*Universidade Federal dos Vales do Jequitinhonha e Mucuri, Teófilo Otoni, MG, Brasil*

**Introduction:** Given the significant changes in the national achievement for the Unique Health System, the National Curriculum Guidelines in health are conceived as a strategy for the educational institutions subsidize vocational training consistent with reality and the health needs of the population.

**Objective:** This study aimed to identify academic opinion about the general skills and competencies defined by Guidelines of undergraduate courses in the health care area on Universidade Federal dos Vales do Jequitinhonha e Mucuri.

**Methods:** The design chosen was transversal, with a population of 135 students from the last period of undergraduate courses in the health area of University (Nursing, Pharmacy, Physical Therapy, Nutrition and Odontology) during the second half of 2012.

**Results:** 62 responses were received, resulting in a return rate of the questionnaires of 45.92%. Empathy was the variable that presented, unanimously, considerable degree of importance in the learning process. Was identified significant statistical differences between the courses only on variables Leadership in multidisciplinary teamwork and Leadership, as  $p < 0.004$  and  $p < 0.034$ , respectively. In all courses, Health Care and Decision Making had higher rates both for what was expected to be taught as what was taught.

**Conclusions:** It is highlighted that the general skills and abilities Administration and Management and Communication showed the worst rates in the perspective of the teaching in undergraduate courses in health area of University, ratifying the need of reflection on the profile of the training of health professionals, in view of the actual demands and health needs of the population.

**Descriptors:** Curriculum Guidelines; Curriculum; Health Education.

<sup>a</sup> noeliapimenta@gmail.com

<sup>b</sup> mariadaluzchaves@gmail.com

<sup>a</sup> lilianeribeiro@hotmail.com

<sup>b</sup> mirtesribeiro.ufvjm@edu.br

<sup>c</sup> vivienf@yahoo.com

259

### AUGMENTED REALITY FOR IMPROVING CLINICAL DECISION SKILLS

Nelson Jorge<sup>1,a</sup>, Pedro Gaspar<sup>1,b</sup>, Lina Morgado<sup>1,c</sup>

<sup>1</sup>Unidade de Ensino à Distância. Instituto Politécnico de Leiria. Leiria, Portugal

<sup>2</sup>Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal

<sup>3</sup>Universidade Aberta. Portugal

**Introduction:** Augmented reality (AR) is a technology that allows a computerized virtual object to be overlaid directly or indirectly in a real environment and in real-time (Azuma, 1997; Zhou, Duh, & Billinghurst, 2008) and differs from virtual reality (VR) since it combines the real world with virtual objects, supplementing the reality instead of substituting it, making the bridge between real and virtual worlds in a perfect way (Chang, Morreale, & Medicherla, 2010). AR allows the creation of environments and virtual patients to simulate practices that can help health students develop skills and knowledge (Hogan et al, 2007; Lewis et al, 2005).

**Objective:** To study the effects of AR on decision-making skills, concerning to clinical diagnosis and treatment of chronic wounds.

**Methods:** Quasi-experimental study (nonequivalent control group design) with a sample of 54 nursing students. Comparative analysis of the performance of the experimental group (which first used the traditional virtual learning environment e-fer, and later with AR) and control group (which used only the traditional e-fer), based on the extracted data from the e-fer virtual simulator (Gaspar, 2010).

**Results and Conclusions:** The results indicate that the virtual learning environment with AR increases decision-making skills in the clinical diagnosis and treatment of chronic wounds, when compared with the virtual learning environment without AR, particularly on items related to wound characterization, with statistically significant differences ( $p < 0,001$ ) in Mann-Whitney U and Wilcoxon tests.

**Descriptors:** evaluation; competencies; virtual simulator; augmented reality; clinical decision.

260

### DEBRIEFING IN THE SIMULATION CONTEXTS

Catarina Lobão<sup>1,a</sup>, Verónica Coutinho<sup>1,b</sup>, José Carlos Martins<sup>1,c</sup>, Rui Gonçalves<sup>1</sup>

<sup>1</sup>Escola Superior de Saúde. Instituto Politécnico de Leiria. Portugal

<sup>2</sup>Escola Superior de Enfermagem de Coimbra. Portugal

**Introduction:** The debriefing has accompanied the development of the simulated training contexts of health and has been identified as an important clarification and consolidation step of learning experiences. The debriefing is identified as a strategy that allows the reviewing of a simulated experiment in which participants explore, analyze and synthesize their action, thought and other information that can enhance their performance in real contexts.

**Objective and Methods:** We aim to present the results of a literature review based in the Cochrane Center guidelines realizing the need for further study on the development of debriefing as teaching, learning and assessment strategy in the simulation context.

**Results:** The corpus of this review is consistent and indicates that all simulated experiences should include a debriefing session planned and targeted to promote reflective thinking to: improve learning, self-confidence, understanding, promotes knowledge transfer, identifies best practices and promotes safety and care for the sick person and also promoting the lifelong learning. However, to achieve the desired results, the process of clarification should follow the recommended debriefing guidelines.

**Conclusions:** In the end, this literature review shows the lack of evidence about the use of debriefing in the national context and there is an urgent need to carry out research studies that allows building a clairvoyant image of implementation of debriefing in the simulated training contexts of nursing in Portugal.

**Descriptors:** Debriefing, Simulation, Nursing.

<sup>a</sup> nelson.jorge@ipleiria.pt

<sup>b</sup> pedro.gaspar@ipleiria.pt

<sup>c</sup> lmorgado@univ-ab.pt

<sup>a</sup> catarina.lobao@ipleiria.pt

<sup>b</sup> vcoutinho@esenfc.pt

<sup>c</sup> jmartins@esenfc.pt

<sup>d</sup> rgoncalves@esenfc.pt

## OTHER RELATED TO THE THEMATIC TABLES AND CONGRESS

261

### IMPLEMENTATION OF BRAZILIAN NATIONAL POLICY ON ORAL HEALTH IN A REGIONAL HEALTH DEPARTMENT

Aline Guerra Aquilante<sup>a</sup>, Geovani da Silva<sup>b</sup>*Universidade Federal de São Paulo. São Paulo, Brasil*

**Introduction:** In 2004, the Brazilian National Oral Health Policy (PNSB) was launched, with the following premises: qualify the Primary Health Care, ensure the comprehensive health care, act on the basis of health surveillance, plan actions according to the epidemiology and information available on the territory, finance and set the research agenda so that the work can be performed based on scientific evidence.

**Objective:** Investigate the PNSB implementation process in the cities of the Regional Health Department of Araraquara (DRS III), Brazil.

**Methods:** A structured questionnaire was given to the oral health municipal coordinators, an oral interview was conducted with health care professionals and managers, and the official statistics provided by the Ministry of Health were codified in a way to evaluate the scope of the PNSB: I) Expansion and qualification of actions; II) Work conditions; III) Care; IV) Access; V) Planning and Management. The articulation of quantitative and qualitative analysis was conducted based upon triangulation methods.

**Results:** Most (52.6%) of the cities was classified as “good” and 42.1% classified the PNSB implementation as “bad”. Even though the access, the care, and the oral health actions have been amplified and qualified, the remuneration of the oral health professionals is low, there is no career or wages plan, and the management and planning activities are still very bureaucratic and with low number of participants.

**Conclusions:** Almost ten years after launching the PNSB, even though advancements have been observed, the cities still find it difficult to implement their premises.

**Descriptors:** Oral Health. Health Policy. Health Services Research. Program Evaluation.

262

### PSYCHOLOGICAL CONSULTATION-LIASION: METHODOLOGICAL AND TECHNICAL ASPECTS

Helena Prebianchi<sup>a</sup>, Thaís de Castro Gazotti<sup>b</sup>*Pontifícia Universidade Católica de Campinas. Campinas, Brasil*

**Introduction:** The psychological consultation-liaison is one of the most frequent activities as a hospital psychologist. Its importance in supporting the hospitalization of the patient, the relation between the healthcare team and the patient and their family and among the professionals of the health team, has been recognized in several studies.

**Objective:** The aim of this study was to identify methodological and technical aspects of the psychological consultation-liaison service of a University Hospital, from the experience of professional psychologists that fulfill it. **Method:** Interviews were conducted with four psychologists who perform the consultation-liaison service, which were audio-recorded and, after transcribed, were analyzed according to the method of content analysis of Bardin.

**Results:** The results indicated the importance of psychological consultation-liaison as interdisciplinary activity and also that, at the Hospital in question, the same occurs without any systematization, complicating the evaluation of the effects and their replication.

**Conclusions:** It concluded the need for standardized procedures, attention to protocols of intervention and new studies on the subject.

**Descriptors:** Consultation-liaison. Hospital. Psychology. Interdisciplinary activity. Intervention.

<sup>a</sup>aline.aquilante@gmail.com giovanni<sup>b</sup>acirole@gmail.com<sup>a</sup>helenabp@puc-campinas.edu.br<sup>b</sup>thaïsgazotti@yahoo.com

263

**COMMUNICATION IN HEALTH**Helena Prebianchi<sup>a</sup>, José Camargo<sup>b</sup>*Pontifícia Universidade Católica de Campinas. Campinas, Brasil*

**Introduction:** For all patients that search for health treatment, the relation established with the professional is crucial to relieve the psychological suffering caused by the problem that. The patient presents and to accept the treatment and/or act in an effective way in the adverse situation established in their live. Thus, the capacity of the health care student, for a sensitive and efficient communication, in the care relation, is consonant with the aims of a graduation that doesn't conceives the professionalization without its humanitarian aspect.

**Objective:** This study aimed to enable students to identify the basic elements of the communication present in the care relation and their influence in the process and to deal in an effective way with specific aspects present in the communication of some prognostics, diagnostics or adverse situations arising there from.

**Methods:** short time studies as extracurricular activities for students from the fifth semester forth, of the courses: Medicine, Psychology, Nursing, Dentistry, Physiotherapy, Occupational therapy, Speech therapy, Nutrition and Pharmacy, with 17 hours duration, including lectures, dramatization relating to the themes and group dynamic.

**Results:** The results indicate that the students developed the capacity to establish relations between the perception, the communication and the conduct, from the patient and the health professional.

**Conclusions:** It was concluded that the comprehension of the health communication, such as tool to establish a care relation, can be developed, in health care students, through the study strategies, based, primarily, in dramatization.

**Descriptors:** Communication in health. Care relation. Health care professional. Patient. Dramatization.

<sup>a</sup> helenabp@puc-campinas.edu.br<sup>b</sup> josegonzagatc@yahoo.com.br

264

**THE FINITUDE AND AGING: PERCEPTIONS OF THE CAREGIVERS OF INSTITUTIONALIZED AGED**Francisco Rodrigues<sup>1,a</sup>, Lidiane Monteiro<sup>1,b</sup>, Ana Chaves<sup>1,c</sup>, Maria Freitas<sup>1,d</sup><sup>1</sup>*Instituto de Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto, Portugal*<sup>11</sup>*Universidade Estadual do Ceará. Fortaleza, Brasil*

**Introduction:** The biological decline, change in family composition and the retirement's time are some of the social responses, given the conditions of human life and the concept of the elderly in today's society.

**Objective:** To understand the relationship between aging and finitude, from the perception of caregivers of institutionalized aged.

**Methods:** The study was exploratory. It was held in an institution of long stay in Fortaleza, Brazil. A focus group was conducted with the caregivers. The ethical principles were respected. The speeches were subjected to content's analysis of Bardin.

**Results:** The participants were twenty caregivers. The group was multidisciplinary, they worked around for four years ago in this context, the mean age was 35 years old and the majority (85%) was female. Two dimensions emerged: physical-organic transition and socio-cultural transition. The representations were anchored about life's cycles: natural and social. The aging process had a spiritual enhancement. There's some stereotyping caused by the physical changes and by the realization of social activities throughout life.

**Conclusions:** The social representations were existentialist and they translate a concept of aging as a period marked by helplessness and worthlessness. This thought, limits the development of active aging and the production of care based on the autonomy of aging people.

**Descriptors:** Aged; Finitude. Social Identification. Caregivers. Health of the elderly.

<sup>a</sup> rafaelrodrigues.rfl@gmail.com<sup>b</sup> lidianecolares@yahoo.com.br<sup>c</sup> patriotaclara@gmail.com<sup>d</sup> maria.celia30@terra.com.br

265

### POPULAR EDUCATION, AN INTERDISCIPLINARY PRACTICE IN THE FORMATION OF HEALTH PROFESSIONALS

Marta Luiza Dias<sup>a</sup>, Wellington de Oliveira<sup>b</sup>

*Universidade Federal dos Vales do Jequitinhonha e Mucuri. Minas Gerais, Brasil.*

**Introduction:** Popular Education (PE) has constituted a strategic construction of social participation in the implementation of public politics, especially health. According to the Ministry of Health (MS), PE is essential to participatory management in Brazilian Health System (SUS). Concepts such as, developing autonomy, interaction, shared responsibility are basics for the consolidation of strategies and affirmation of health public politics.

**Objective:** Discuss the importance of the institutionalization of PE in health courses at the Federal University of the Valleys of Jequitinhonha and Mucuri (UFVJM), Brazil. Analyze National Curricula Guidelines for health courses, SUS guidelines, Pedagogical Political Projects of health courses at the UFVJM.

**Methods:** The strategy of institutionalization of PE in health is the implementation of an interdisciplinary University Extension Project at the UFVJM. Literature research and Oral History with coordinators, teachers, students and graduates in health, managers and users of SUS to identify their practice, learning and expectations from their experiences.

**Results:** A study group has been formed to reflect about the necessities of developing methodologies and teaching learning practices considered strategic to formation of health professionals. University Extension Project has been developed with participation of students, teachers and health professionals.

**Conclusions:** University extension is a privileged space to emerge and materialize of interdisciplinary proposals. The inclusion of PE courses on health is relevant because of its ethical dimension; for being recognized by MS as a political strategy and a methodology that facilitates integration of knowledge and practice; strengthening of SUS as well as interaction between professionals, managers and population.

**Descriptors:** Popular Education. Health. Participation. Management. SUS.

<sup>a</sup> martaluizadiaz@yahoo.com.br

<sup>b</sup> welltha@terra.com.br

266

### HUMAN RESOURCES TRAINING FOR HEALTH TEACHING: CHARACTERISTICS AND PERSPECTIVES

Rosana Vilela<sup>1,a</sup>, Adenize Ribeiro<sup>1,b</sup>, Maria Oliveira<sup>1,c</sup>, Nildo Batista<sup>1,d</sup>

*<sup>1</sup>Universidade Federal de Alagoas. Alagoas, Brasil*

*<sup>11</sup>Universidade Federal de São Paulo. São Paulo, Brasil*

**Introduction:** The professional master's program in the area of health teaching (MPES) was born out of an initiative from the FAMED (UFAL) to promote the institutional development by improving its students' teaching capabilities. This initiative constitutes one of the primary goals of this university, focusing to strengthen the relationship between service and teaching, and the formation based in the necessities of the Sistema Unico de Saude (SUS).

**Objective:** The objective of this study was to gather characteristic information of the students attending the program during its 3 years of existence (n=60).

**Methods:** The data was collected through a structured questionnaire, and the results were analyzed based on the frequency answers were given, thus basing the study in a quantitative nature. The study analyzed the students' characteristics, identified evidence of possible modifications made by the students at their work environments, and established the relationship between the program objectives and the students' characteristics.

**Results:** According to the study findings, the MPES is currently meeting its proposed objectives and presents a great potential to depart from current models to construct a new model of teaching and researching, through the formal training of professional focused in the strengthening of the SUS system.

**Conclusions:** The greatest challenge to be undertaken has its base in the production of scientific and technology methods of production, and their impact to strengthen the program by providing a better placement of professionals and assisting them to utilize their acquired-knowledge in the context of the SUS system.

**Descriptors:** Graduate program. Professional Master's. Teaching. Health.

<sup>a</sup> zanavilela@gmail.com

<sup>b</sup> adenizeribeiro@gmail.com

<sup>c</sup> maraiantonieta07@gmail.com

<sup>d</sup> nbatista@unifesp.br

267

### NURSING MANAGEMENT: ACTIVITIES PERFORMED FOR QUALITY CARE

João Silva<sup>1,II,a</sup>, Ana Rikaelle Araújo<sup>1,b</sup>, Ana Borges<sup>1,c</sup>, Andréa Feitosa<sup>1,d</sup>, Sofia Arnaldo<sup>1,II,e</sup>, Marlene Teixeira<sup>III,f</sup>

<sup>I</sup>Faculdade de Ciências Aplicadas Dr. Leão Sampaio. Lagoa Seca, Ceará, Brasil

<sup>II</sup>Università Sapienza di Roma. Roma, Itália

<sup>III</sup>Universidade Federal do Rio Grande do Sul. Rio Grande do Sul, Brasil

**Introduction:** Nowadays in Brazil there is an increasing portion of nursing workers taking not only the responsibility of caring but also the management function. This fact means developing responsibilities to ensure a healthier working environment.

**Objective:** The aim of this study was to understand the perception of nursing workers regarding the management in the primary care and the specific objectives were to know the activities performed inside the management context and identify difficulties, facilities and essential factors for the development of management activities.

**Methods:** It is a qualitative descriptive study that used a semi-structured interviews with a sample consisted for 10 nurses who exercise caring and or management activities in the city of Brejo Santo, Ceará, Brazil. Data collection occurred between March and April 2013. We used the descriptions given by the subjects and we compared them to the found ones in the literature. Data analysis was divided in the following themes: The challenge of continuing education in nursing administration, management and nursing: perceptions and activities, management and nursing care: difficulties and facilities.

**Results:** The participants have demonstrated knowledge about nursing management as well as they indicated the difficulties and facilities of taking this responsibility and the importance of a nurse manager at the Basic Health Unit.

**Conclusions:** We conclude that the professional nursing is essential in the management of health units and has the capacity to act potentially in this work. Given this finding, we can understand the importance of effective management in Basic Health Units, performed by a trained professional, the nurse manager.

**Descriptors:** Primary health care. Health services management. Health assistance. Nursing administration. Nursing management.

<sup>a</sup> jp-master17@hotmail.com

<sup>b</sup> anarikaelle@hotmail.com

<sup>c</sup> anaborges@leaosampaio.edu.br

<sup>d</sup> andreafeitosa@leaosampaio.edu.br

<sup>e</sup> sofia-jua@hotmail.com

<sup>f</sup> marlamteixeira@yahoo.com.br

268

### ADVANCED NURSING EDUCATION AND PROFESSIONAL DEVELOPMENT: MASTER'S COURSE STUDENTS PERCEPTIONS

Carla Nascimento<sup>a</sup>, Sónia Ferrão<sup>b</sup>

*Escola Superior de Enfermagem de Lisboa. Lisboa, Portugal*

**Introduction:** The changes in nursing education in the European Union in recent years resulting from Bologna process, and the recognition of the requirement for continuing professional development by nurses in order to respond to complex problems in healthcare in general, and in nursing care at particular, contributed to a proliferation of master courses offer and demand. It is expected that nurse master graduate become able to perform advanced and specialized nursing competencies, knowing how to apply scientific theory and methods in the daily practice. Despite the growing numbers of Portuguese nurses that completed master level education in the last years, there is still little research and evidence about their perspective of the education experience and its impact on professional development.

**Objective:** The aim of the study was to explore nurse's perceptions about the attendance in the master course and its relationship with their professional development.

**Methods:** Interpretative qualitative study exploring the perceptions of 12 nurses undertaking a master's-level course in nursing at one Portuguese nursing school. Data from semi-structured audio-taped interviews were analyzed using content analysis.

**Results:** Master's level education increased nurse's knowledge and ability to incorporate it in clinical practice, improved clinical assessment skills, increased autonomy, development of an understanding on how to manage complex issues systematically, critical thinking and decision making and enhanced networking.

**Conclusions:** Identified gains related to professional and personal competencies developed through master course attendance which may provide direct benefit to patients care, improving patient outcomes, but also constitute a contribution to personal and professional fulfillment.

**Descriptors:** Nursing education. Master's degree. Professional development.

<sup>a</sup> carla.nascimento@esel.pt

<sup>b</sup> sonia.ferrao@esel.pt



269

### CONSONANT PERCEPTION AND OVERALL AUDITORY PERFORMANCE IN COCHLEAR IMPLANT USERS

Marisa Alves<sup>a</sup>, Daniela Ramos, Helena Alves, Graça Oliveira, Jorge H. Martins, Carlos Ribeiro, António Paiva

*Centro Hospitalar e Universitário de Coimbra. Coimbra, Portugal*

**Introduction:** Cochlear implantation allows individuals with severe to profound sensorineural hearing loss to considerably improve speech perception, and outcomes have improved with advances in technology. Nevertheless, there is a great variability of results between individuals.

**Objective:** To characterize the overall auditory performance and the perception of consonantal phonemes in cochlear implant (CI) adult users, and to investigate if there is a relation between both. To investigate if time of auditory deprivation, time of CI use and implanted ear influence performance.

**Methods:** 200 adult CI users participated in this study. The assessment tools used were: Categories of Auditory Performance (CAP) and consonantal phonemes perception test.

**Results:** In CAP, most participants were in category 7. In the consonantal phonemes perception test, the phoneme with the highest percentage of correct answers was the unvoiced pre-palatal fricative. The average scores in the consonantal phonemes perception test were higher as the CAP category was also higher. Statistically significant differences in performance were found regarding time of auditory deprivation. No statistically significant differences were found regarding time of CI use and the implanted ear.

**Conclusions:** The majority of participants use the telephone. The consonantal phonemes perception test is a challenging task for CI adult users. It is important to minimize time of auditory deprivation before cochlear implantation. Given that the average score on the consonantal phonemes perception test was higher the higher the CAP category, it is considered that perception of consonantal phonemes training is of utmost relevance in auditory rehabilitation after cochlear implantation.

**Descriptors:** Cochlear Implant. Hearing Impairment. Consonantal Phonemes Perception. Auditory Performance.

<sup>a</sup>marisalves2002@yahoo.com

270

### EVALUATION OF BALANCE AND POSTURAL CONTROL IN SENIORS WITH THORACIC HIPERKYPHOSIS

Cintia de Freitas<sup>1,II,a</sup>, Igor Masson<sup>II,b</sup>, Vanessa Pereira<sup>II,c</sup>, Mayara da Silva<sup>II,d</sup>, Mauricio Ventura<sup>III,e</sup>

<sup>I</sup>Universidade de São Paulo. São Paulo, Brasil

<sup>II</sup>Universidade Paulista. São Paulo, Brasil

<sup>III</sup>Instituto de Assistência Médica ao Servidor Público Estadual. São Paulo, Brasil

**Introduction:** There is a relationship between increased thoracic kyphosis and aging. It is considered normal angles up to 56° for seniors. The increased of thoracic kyphosis moves the center of gravity forward, which increases the postural instability and the risk of falls.

**Objective:** Evaluate the correlation between the balance and postural control in seniors with thoracic hyperkyphosis.

**Methods:** Volunteers of geriatric clinic at Hospital do Servidor Público Estadual de São Paulo, not physically active and without deficit of balance. They were evaluated through the Berg Scale, Functional Scope Test and Romberg Test. To detect the thoracic hyperkyphosis was used the flexicurve ruler on the back. For statistical analysis was used the ANOVA, Equality test of two proportions, Pearson correlation and Kolmogorov-Smirnov test. The significance level was 5% ( $p \leq 0,05$ ).

**Results:** 51 volunteers (11 men and 40 women, 75,92±8,08 years old; kyphosis mean 64,83±11,23 degrees). EBB presented mean 45,63±6,93 points, TAF mean 17,41±6,02 cm; Romberg was 92% positive and 7,8% negative ( $p < 0,001$ ). There was a correlation of -52,3% ( $p < 0,001$ ) thoracic hyperkyphosis with Berg Scale. Correlation was also found between hyperkyphosis and historical falls. For those who answered yes to history of falls the average kyphosis was 68,12±11,02 and 61,13±0,47 negative responses ( $p = 0,025$ ).

**Conclusions:** The thoracic hyperkyphosis has a negative influence on postural control, so that the biggest degree of kyphosis the less the result of Berg Scale and the biggest number of falls in the sample evaluated.

**Descriptors:** Postural balance. Seniors. Kyphosis. Posture.

<sup>a</sup>cintiafreitas24@gmail.com

<sup>b</sup>ibmasson@yahoo.com.br

<sup>c</sup>vanessazen@hotmail.com

<sup>d</sup>mayara5ribeiro@yahoo.com.br

<sup>e</sup>mauriciomventura@uol.com.br

271

### LEVODOPA CONTROLLED RELEASE FROM ALGINATE MEMBRANES

Margarida Franco<sup>1</sup>, Tânia Viana<sup>1</sup>, Sara Biscaia<sup>1</sup>, Paulo Bártolo<sup>1,II</sup>

<sup>1</sup>*Polytechnic Institute of Leiria (nome em português). Leiria, Portugal*

<sup>II</sup>*University of Manchester. Manchester, UK*

**Introduction:** Parkinson's disease is the second most common neurodegenerative disorder. Symptoms are related with a loss of dopamine due to dopaminergic neurons degeneration. They include tremor, rigidity, bradykinesia and other nonmotor symptoms. Pharmacological treatment appeals to dopamine replacement with levodopa, a dopamine's precursor, which plays a central role, via decarboxylation into dopamine, because it crosses brain blood barrier while dopamine doesn't.

**Objective:** In this study, we tried a model in which levodopa is entrapped inside an alginate membrane for skin administration with a controlled mechanism of delivery. It was expected that transdermal route would provide a supply of levodopa to the blood stream without fluctuations on therapeutic levels. The reason for choosing Sodium alginate as a support material relies on its ease of gelation with Ca<sup>2+</sup>. Formed gels are nanoporous, leading to promote the diffusion of small molecules.

**Methods:** A solvent casting methodology was employed to produce the membranes, using sodium alginate 3% (w/v), levodopa 0,17% (w/v) and CaCl<sub>2</sub> 20% to induce crosslinking. The membranes were immersed in 250 ml of acetate buffer, pH 4,5. Temperature was kept at 32 ± 0,5 °C, stirring speed was held at 100 rpm and, at predetermined time points, a 3 ml aliquot was withdrawn and the same amount of fresh solvent was replaced. Samples were dosed at 280 nm. Concentrations were estimated using a calibration curve.

**Results:** A cumulative release percentage of 47,78 % was measured in 8 hours time.

**Conclusions:** We conclude that the prodrug undergo a controlled drug release, with a potential role on its bioavailability.

**Descriptors:** Parkinson disease. Levodopa. Sodium alginate. Controlled drug delivery. Transdermal delivery.

272

### IS DISSOCIATION IN PSYCHIATRIC AND NON-PSYCHIATRIC PORTUGUESE SAMPLES EXPLAINED BY INTENSITY OF PSYCHOPATHOLOGY?

Helena Espirito Santo<sup>1,a</sup>, José Luís Pio-Abreu<sup>II,b</sup>, Sónia Simões<sup>1,c</sup>, Lara Martins<sup>1,d</sup>, Paula Rocha Maques<sup>1,e</sup>, Liliane Gonçalves<sup>1,f</sup>, Soraia Cassimo<sup>1,g</sup>

<sup>1</sup>*Instituto Superior Miguel Torga. Coimbra, Portugal*

<sup>II</sup>*Centro Hospitalar e Universitário de Coimbra. Coimbra, Portugal*

**Introduction:** Previous research has shown that dissociation is more associated with dissociative, conversive, and post-stress disorders than with other psychiatric disorders. However, intensity of psychopathology varies across diagnoses, and the degree of dissociation it is not known how it varies accordingly to the degree of psychopathology.

**Objective:** We want to analyze if dissociation severity is associated with intensity of psychopathology in a cohort of the Portuguese psychiatric and non-psychiatric population.

**Methods:** 476 participants, including patients with conversive (n=14), dissociative (n=12), depressive (n=31), obsessive-compulsive (n=34), panic (n=16), post-traumatic stress (n=42), social phobia (n=59), somatization (n=43), simple phobia (n=24) disorders, and non-clinical subjects (n=201) were assessed with the Dissociative Experiences Scale/DES, the Brief Symptom Inventory/BSI, and the M.I.N.I Plus/Mini International Neuropsychiatric Interview for diagnoses confirmation.

**Results:** dissociation varied across diagnosis (F=50.09, p<0.001), with scores ordered by conversive, dissociative, post-traumatic stress, obsessive-compulsive, panic, somatization, social phobia, depression, and non-clinical participants. General Severity Index/GSI of BSI also differed across diagnosis (F=98.00, p<0.001), by order: post-traumatic stress, panic, somatization, conversive, dissociative, depressive, obsessive-compulsive, social phobia, generalized anxiety, and non-clinical participants. DES and GSI significantly and strongly correlated (r=0.63).

**Conclusions:** It is worth investigating the degree of dissociation in psychiatric patients because dissociative disturbance may contribute to level of psychopathology.

**Descriptors:** Psychopathology. Dissociation. Psychiatric patients.

<sup>a</sup> helenium@gmail.com

<sup>b</sup> pioabreu@netcabo.pt

<sup>c</sup> soniasimoes76@gmail.com

<sup>d</sup> sofiamartins@gmail.com

<sup>e</sup> paula.85rocha@gmail.com

<sup>f</sup> lilianepintogoncalves86@gmail.com

<sup>g</sup> soraia\_v@hotmail.com

273

**EVALUATION OF FUNCTIONAL PERFORMANCE OF PATIENTS WITH PATELLOFEMORAL PAIN**Graciette Passarelli<sup>1,a</sup>, Cíntia Freitas<sup>1,II,b</sup>, Renata Firpo<sup>III,c</sup><sup>1</sup>Universidade Paulista. São Paulo, Brasil<sup>II</sup>Universidade de São Paulo. São Paulo, Brasil<sup>III</sup>Universidade Ibirapuera. São Paulo, Brasil

**Introduction:** The patellofemoral joint pain is one of the most frequent complaints among young adult women and it cause functional limitations. Individuals with patellofemoral pain present muscles hip weakness and instability in the lower limbs.

**Objective:** Evaluate the functional performance of patients with patellofemoral pain.

**Methods:** 60 participants between 18 and 50 years old, both sexes, divided into two groups: G1: individuals with patellofemoral pain and G2: Control Group composed by individuals without pain. This study was performed at Universidade Paulista. The evaluation was done by two questionnaires that checked knee pain and the function of lower limbs (Anterior Knee Pain Scale and Lower Extremity Functional Scale), functional tests (Lower Side and Up and Down Stairs tests), Clark, Trendelenburg and Romberg tests.

**Results:** There were 30 individuals in G1 (24 women and 6 men, 25±6,6 years old) and 30 individuals in G2 (13 women and 17 men, 27,7±8,3 years old). There was significant difference ( $p<0,05$ ) between groups evaluated in the questionnaires for pain and functional evaluation and the other performed tests (Clark, Trendelenburg, Lower Side and Up and Down Stairs).

**Conclusions:** Subjects with patellofemoral pain had lower functional performance compared to the control group.

**Descriptors:** Chondromalacia patellar. Knee. Patellofemoral pain.

274

**DIABETES, THERAPEUTIC ADHERENCE AND DEPRESSION**Ilda Cardoso<sup>1,II,a</sup>, Fernanda Daniel<sup>II,III,b</sup>, Manuela Carneiro<sup>1,c</sup>, Vítor Rodrigues<sup>1,d</sup><sup>1</sup>Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal<sup>II</sup>Instituto Superior Miguel Torga. Coimbra, Portugal;<sup>III</sup>Centro de Estudos e Investigação em Saúde. Universidade de Coimbra. Coimbra, Portugal

**Introduction:** Diabetes mellitus (DM) prevalence is about 12.7% in the Portuguese population (20-79 years). The prevalence of depression is estimated to be higher in the DM population when compared to healthy populations. Comorbidity between DM and depression is identified as a risk factor due to its negative impact on metabolic control and treatment adherence.

**Objective:** To evaluate the impact of depression on therapeutic adherence.

**Methods:** Participants were 347 adults with a DM diagnosis for over a year. Participants completed the Beck Depression Inventory (BDI) and HbA1c determination was used as the therapeutic adherence criterion (6.5%).

**Results:** BDI mean scores were twice as high in T1DM group ( $M=7,74$ ;  $SD=\pm 7,62$ ) and three times higher in the T2DM (Diabetes type 2) group ( $M=9,38$ ;  $SD=\pm 8,62$ ). T1DM patients without depressive symptoms presented higher therapeutic adherence when compared to patients showing depressive symptoms ( $OR=5,395$ ;  $CI95\%=1,202-24,210$ ) while T2DM patients with depressive symptoms presented higher therapeutic adherence than T2DM group without symptoms ( $OR=2,514$ ;  $CI95\%=1,251-5,053$ ).

**Conclusions:** Results showed that clinical entities of DM are inversely related to therapeutic adherence when the profile is depression. In T1DM depression absence can be considered a health protective factor. Furthermore depressive symptoms in T2MD may present a physical health protector role.

**Descriptors:** Diabetes mellitus. Therapeutic. Adherence. Depression.

<sup>a</sup> graciette@hotmail.com<sup>b</sup> cintiafreitas24@gmail.com<sup>c</sup> renatafirpo@terra.com.br<sup>a</sup> ildamassano@ismt.pt<sup>b</sup> fernanda-daniel@ismt.pt<sup>c</sup> macarneiro@clicx.pt<sup>d</sup> vrodrigues@netcabo.pt

275

### LIFE EXPECTANCY OF MODERN TIMES: PUBLIC POLICIES OF MODERN HEALTH?

Sofia Arnaldo<sup>I,II,a</sup>, Edige Santos<sup>II,III,b</sup>, João Silva<sup>I,II,c</sup>, Gabriela Silva<sup>II,d</sup>, Pâmela Arnaldo<sup>II,e</sup>

<sup>I</sup>Universidade de Roma "La Sapienza". Roma, Itália

<sup>II</sup>Faculdade Leão Sampaio. Juazeiro, Ceará, Brasil

<sup>III</sup>Faculdade de Medicina do ABC. Santo André, Brasil

**Introduction:** The demographic study unfolds the issue of healthy public policies in whatever objectives, sectors and levels, looking awareness about consequences of decisions for those who accept the responsibilities towards them. Constant analysis of this proposed target should be performed in order to ascertain whether the institutional strategies are actually involving the most vulnerable structures of society.

**Objective:** Identify the public policy actions of current health and any routes to be followed in this context of demographic change.

**Methods:** This is a non-systematic review where data from indexed manuscripts were obtained in the following databases: LILACS, SciELO, PubMed and VHL, published between (2008-2013) in the following languages: (x, y, z). The information was extracted from a full reading of contemporary documents.

**Results:** The observation of the population dynamics of a nation influences the production of health care policies and relying on demand age managers will be able to interpret what are the priority needs to bring a health plan that meets a crucial reason, formulating new plans attendance to enact further advancement.

**Conclusions:** Therefore, the conditions suggested in the demographic dynamics should be considered for the definition of public health policies preparing redefining health priorities that meet the age changes seeking a call for equality and without distinction to all layers of society.

**Descriptors:** Demography. Population dynamics. Demographic developments. Public Policy. Age transition.

<sup>a</sup> sofia-jua@hotmail.com

<sup>b</sup> edige@leaosampaio.edu.br

<sup>c</sup> jp-master17@hotmail.com

<sup>d</sup> bibiherculano@hotmail.com

<sup>e</sup> pamelatiala@gmail.com

276

### SEMANTIC PROCESSING IN SUBJECTS WITH AND WITHOUT AUDITORY PROCESSING DISORDERS: CASE STUDY

Carla Matos Silva<sup>I,IV,a</sup>, Maria Armanda Costa<sup>II,IV,b</sup>, Isabel Barahona Fonseca<sup>III,IV,c</sup>

<sup>I</sup>Escola Superior de Tecnologia da Saúde de Coimbra. Instituto Politécnico de Coimbra. Portugal

<sup>II</sup>Faculdade de Letras. Universidade de Lisboa. Lisboa, Portugal

<sup>III</sup>Faculdade de Psicologia. Universidade de Lisboa. Lisboa, Portugal

<sup>IV</sup>Centro de Linguística. Universidade de Lisboa. Lisboa, Portugal

**Introduction:** It is assumed that language comprehension includes the integration of different types of information linguistic: from phonologic, syntactic and semantic. The auditory processing disorders (APD) boil down to a functional hearing loss that is characterized by the inability to perform one or more of the auditory processing skills.

**Objective:** The purpose of this study is to investigate the effects of the interaction between semantic and syntactic processes in language auditory comprehension in participants with auditory processing without auditory processing disorders.

**Methods:** This study assessed 37 subjects aged between 18 and 27 years whose native language is Portuguese. Of these, 34 did not have APD and 3 have confirmed diagnosis of APD. All subjects had to classify items of series of four words in which three belonged to the same semantic field and the fourth word, belonged to another semantic field (deviant word). The stimuli were presented by auditory pathway in a total of 236 words. Subjects were instructed to press the green button of the response box, whenever the heard stimulus was related or press the red button when the stimulus was unrelated.

**Results:** In subjects with APD, the global reaction times are increased compared with subjects without APD: 658ms and 587ms. The response profile of subjects with APD has been reversed compared to subjects without APD, revealing higher reaction times for related words - 671ms versus unrelated 617ms.

**Conclusions:** Although these results are not to be generalized, we believe that subjects with APD process semantic information differently from normal subjects.

**Descriptors:** Semantic Processing; Auditory Processing Disorders; Reaction Times.

<sup>a</sup> carla@estescoimbra.pt

<sup>b</sup> armandacosta@fl.ul.pt

<sup>c</sup> ibfonseca@fp.ul.pt

277

### HEMODYNAMIC CHANGES IN VACUUM ENDOTRACHEAL IN THE ELDERLY HYPERSECRETION WITH DEMENTIA

Renata Firpo R. Medeiros<sup>1,II,a</sup>, Iracélia Munhoz Moreira<sup>II,b</sup>, Graciette F. R. Passarelli<sup>II,III,c</sup>, Cintia Domingues de Freitas<sup>III,d</sup>, Audrey Andrade Bertolini<sup>II,e</sup>, Gisele Monaco Dias<sup>II,f</sup>, Ana Lúcia Alves<sup>II,g</sup>

<sup>I</sup>Universidade Ibirapuera, Faculdade de Administração e Ciências Contábeis São Roque. Uninove. São Roque, Brasil

<sup>II</sup>Liga Solidária. Recanto Monte Alegre. São Paulo, Brasil

<sup>III</sup>Universidade Paulista. São Paulo, Brasil

**Introduction:** The tracheal aspiration is an invasive action seeking removal of tracheobronchial secretions.

**Objective:** To evaluate changes in blood pressure, heart rate and oxygen saturation before and after tracheal aspiration.

**Methods:** Positioned supine hyperextension of the cervical and lateral inclination of the head. Blood pressure, heart rate and oxygen saturation was measured. All measurements were performed before, immediately and five minutes after the completion of tracheal aspiration. The students t test with  $p < 0.05$  was used as statistical tools.

**Results:** Seven patients, mean age  $87.71 \pm 6.77$  years. Data showed a drop in systolic blood pressure, and immediately after ( $129.7 \pm 14.63$  mmHg) and five minutes after aspiration ( $110.4 \pm 16.39$  mmHg)  $p < 0.05$ . Increase in diastolic blood pressure before ( $69 \pm 8.71$  mmHg) and immediately after ( $80.29 \pm 13.42$  mmHg)  $p < 0.05$ , pre and heart rate ( $73 \pm 16$  bpm) and immediately after ( $91 \pm 20$  bpm)  $p < 0.05$  and decrease in heart rate between the phases immediately after ( $91 \pm 20$  bpm) and five minutes after ( $74 \pm 9.7$  bpm)  $p < 0.05$ , oxygen saturation was significant in all stages.

**Conclusions:** The study showed that patients undergoing tracheal aspiration showed hemodynamic changes remained within physiological limits given parameters returning to baseline after five minutes of the procedure, in relation to oxygen saturation increased significantly showing the improvement of pulmonary ventilation.

**Descriptors:** aspiration, dementia, hemodynamic.

<sup>a</sup> renata.firpo@terra.com.br

<sup>b</sup> iracelia17@gmail.com

<sup>c</sup> graciettef@hotmail.com

<sup>d</sup> cintiadfreitas@ig.com.br

<sup>e</sup> audreyab7@hotmail.com

<sup>f</sup> gimabimonaco@yahoo.com.br

<sup>g</sup> nalu\_alves@yahoo.com.br

278

### OVERLOAD ON PERCEPTION OF INFORMAL CAREGIVERS OF DEPENDENT ELDERLY WITH DEMENTIA

Renata Firpo R. Medeiros<sup>1,II,a</sup>, Iracélia Munhoz Moreira<sup>II,b</sup>, Graciette F. R. Passarelli<sup>II,III,c</sup>, Cintia Domingues de Freitas<sup>III,d</sup>, Audrey Andrade Bertolini<sup>II,e</sup>, Gisele Monaco Dias<sup>II,f</sup>, Ana Lúcia Alves<sup>II,g</sup>

<sup>I</sup>Universidade Ibirapuera, Faculdade de Administração e Ciências Contábeis São Roque. Uninove. São Roque, Brasil

<sup>II</sup>Liga Solidária. Recanto Monte Alegre. São Paulo, Brasil

<sup>III</sup>Universidade Paulista. São Paulo, Brasil

**Introduction:** The caregiver burden is defined as the set of physical, psychological, emotional, social and financial problems experienced by those who care for patients with some type of commitment.

**Objective:** To analyze the perception of burden in carers of dependent elderly with dementia.

**Methods:** Cross-sectional study administered questionnaire containing questions related to how the caregiver feels in relation to elderly care.

**Results:** Sample with 33 caregivers, female. Respondents feel that the elder asks for more help than you need, 39.39% responded sometimes, 21.90% always, if you do not have enough time for yourself seldom 30.30%, 24.24% sometimes; feel stressed 15.15% 18.18% rarely and sometimes if feels embarrassed by the behavior of the elderly, 15.15% rarely; feel irritated with the elderly 93.3% reported ever unable to care for the elderly for much longer 87.77% never responded if someone else would take care of the elderly 36.36% sometimes, feels doubt as caring for the elderly 39.39% sometimes; feel you could do more 24.24% sometimes and 18,18% always, could take better care of the elderly always 24.24%; feels burdened 39.39% often and always; afraid of growing old and rely 45.45% and 18.18% sometimes forever.

**Conclusions:** These results demonstrate the need for caregivers also be maintained, as they are a key component in health care to dependent elderly. Without attention and support necessary and appropriate, the risk ha caregivers also become patients.

**Descriptors:** Caregivers, Dementia, Elderly.

<sup>a</sup> renata.firpo@terra.com.br

<sup>b</sup> iracelia17@gmail.com

<sup>c</sup> graciettef@hotmail.com

<sup>d</sup> cintiadfreitas@ig.com.br

<sup>e</sup> audreyab7@hotmail.com

<sup>f</sup> gimabimonaco@yahoo.com.br

<sup>g</sup> nalu\_alves@yahoo.com.br

279

### POLYPHARMACY IN THE ELDERLY WITH DEMENTIA NURSING HOME RESIDENTS

Renata Firpo R. Medeiros<sup>III,a</sup>, Iracélia Munhoz Moreira<sup>II,b</sup>, Graciette F. R. Passarelli<sup>III,c</sup>, Vania F. de Sá Mayoral<sup>IV,d</sup>, Audrey Andrade Bertolini<sup>II,e</sup>, Gisele Monaco Dias<sup>II,f</sup>, Ana Lúcia Alves<sup>II,g</sup>

<sup>I</sup>Universidade Ibirapuera. Faculdade de Administração e Ciências Contábeis São Roque. Uninove. São Roque, Brasil

<sup>II</sup>Liga Solidária. Recanto Monte Alegre. São Paulo, Brasil

<sup>III</sup>Universidade Paulista. São Paulo, Brasil

<sup>IV</sup>Faculdade de Medicina de Botucatu. Universidade Estadual Paulista Júlio de Mesquita Filho. São Paulo, Brasil

**Introduction:** The prevalence of chronic diseases has contributed to the increased use of drugs by the elderly.

**Objective:** To identify the number of drugs used in elderly nursing home residents with dementia.

**Methods:** Cross-sectional study. Chart review epidemiological data gathering, diagnosis and number of prescription drugs continuously in the last 3 months was performed. Applied: Clinical Dementia Rating Scale (CDR), Functional Assessment Staging (FAST), Charlson comorbidity index (CCI) and Mini Mental State Examination (MMSE).

**Results:** 42 subjects with a mean age of 86.31±8.30 years and 92.68% females were evaluated. CDR 61.90% was characterized with severe dementia and 14.28% with moderate dementia, CDR average of 2.02±1.09. In functional staging (FAST), 66.66% of individuals with severe dementia and 28.57% as moderate-severe dementia. The average ICC was 1.5±0.9. The sample obtained a MMSE of 8.14±9.83. The average number of medications administered daily was 8.19±2.91 days/elderly. Subjects who used 5 or more medications per day were 87.81%. Antihypertensives, antipsychotics, gastric protectors, prokinetic agents and bronchodilators, were the most prescribed medications.

**Conclusion:** The prescription drug is a complex phenomenon and one should prioritize efforts to improve the quality of pharmacological care for patients vulnerable to adverse events. Questioning the benefit of medication are common in advanced dementia especially when death approaches. The use of drugs in advanced dementia should be tailored to the goals of care.

**Descriptors:** Dementia, Elderly, Polypharmacy.

<sup>a</sup> renata.firpo@terra.com.br

<sup>b</sup> iracelia17@gmail.com

<sup>c</sup> gracietef@hotmail.com

<sup>d</sup> vania.maioral@uol.com.br

<sup>e</sup> audreyab7@hotmail.com

<sup>f</sup> gimabimonaco@yahoo.com.br

<sup>g</sup> nalu\_alves@yahoo.com.br

280

### CARING SELF-CARE DEPENDENTS IN HOME ENVIRONMENT

Patrícia Antunes<sup>I,a</sup>, Paulo Marques<sup>II,b</sup>

<sup>I</sup>Serviço de Urgência. Centro Hospitalar do Porto. Portugal

<sup>II</sup>Escola Superior de Enfermagem do Porto. Portugal

**Introduction:** This investigation analyses the transition to the family caregiver (FC) role, which is an area of great interest to nursing science.

**Objective:** The objectives of this study were to understand constraints associated to the FC role; to identify difficulties that FC face; to identify the factors that motivate FC to use the hospital urgent/emergent care service with their relative.

**Methods:** This was an exploratory, cross-sectional descriptive study conducted in two phases, with convenience samples. The first phase (quantitative) involved 43 dependents and respective FC. The data was processed using procedures of descriptive and inferential statistics, with SPSS21, considering a statistic significance of <0,05. The second phase (qualitative) had a sample of 6 FC. There were used two forms and one semi-structured interview for data collection that was submitted to content analysis.

**Results:** The results found constraints associated to the FC role, such as: age and time of dependence, regarding the dependent; and knowledge, motivation, perception of support, perception of self-efficacy, meaning to care, ability and monetary difficulties (related to the FC). The difficulties recognized were knowledge, perception of support, motivation, perception of physical health, perception of self-efficacy, coping with the medical diagnosis/disease, suffering and fear. Factors that motivate the use of the Urgent Care Services weren't identified.

**Conclusions:** Promoting a positive assumption of the FC role should be one of the main focuses of Nurses. This research allowed to explore the phenomenon of caring generating relevant knowledge to clinical nursing practice.

**Descriptors:** nursing, family caregiver, transition, self-care dependent.

<sup>a</sup> patriciafantunes@gmail.com

<sup>b</sup> paulomarques@esenf.pt

281

## FUNCTIONAL AND COGNITIVE DECLINE IN HOSPITALIZED ELDERLY

Eugénia Mendes<sup>1,a</sup>, José Pedro Rodrigues<sup>11,b</sup>, Leonel Preto<sup>1,c</sup>, André Novo<sup>1,d</sup>

<sup>1</sup>*Escola Superior de Saúde de Bragança. Instituto Politécnico de Bragança. Bragança, Portugal*

<sup>11</sup>*Centro Hospitalar de Trás-os-Montes e Alto Douro. Vila Real, Portugal*

**Introduction:** Hospitals can be a strange environment and sometimes hostile to elderly patients and that will accrue in the same person the effects of normal aging and the effects of bed rest and hospitalization. Although necessary, hospitalization can lead to complications not related to the initial health problem, increasing length of stay, changes in quality of life and increased morbidity and mortality.

**Objective:** Assess the impact of hospitalization on functional and cognitive decline in elderly patients.

**Methods:** A descriptive and correlational study was conducted. Functional and cognitive status was measured at admission and discharge, using the Functional Independence Measure (FIM) and the Mini-Mental State Examination (MMSE), in elderly patients with gastroenterological and respiratory disorders admitted in an internal medicine unit.

**Results:** Were included 51 elderly (75.53±7.16 years), 53% women, with a length of stay of 14.27±6.45 days. Results show a significant decrease of scores from admission to discharge in FIM ( $t=3.78$ ;  $p=0.00$ ), FIM cognitive ( $t=4.14$ ;  $p=0.00$ ), FIM motor ( $t=3.24$ ;  $p=0.041$ ) and in MMSE ( $t=5.47$ ;  $p=0.00$ ). Negative correlations between age and length of stay and the scores of all measures were found. Better scores, with significant differences between means, were obtained by the participants living at home when compared with institutionalized ones (FIM  $t=2.30$ ;  $p=0.039$  vs  $t=2.45$ ;  $p=0.03$ ; MMSE  $t=3.26$ ;  $p=0.002$  vs  $t=3.42$ ;  $p=0.001$ ).

**Conclusions:** Hospitalization contributes to a greater weakness/frailty of the elderly and is considered high risk for decline in physical fitness and cognitive function. This study highlights the importance of assessment of functional capacities in elderly patients.

**Descriptors:** Cognitive decline, Functional decline, Elderly, Hospitalization, Institutionalization.

<sup>a</sup> maria.mendes@ipb.pt  
<sup>b</sup> gena.mendes@gmail.com  
<sup>c</sup> leonelpreto@ipb.pt  
<sup>d</sup> andre@ipb.pt

282

## USER SATISFACTION WITH PRIMARY HEALTH CARE: AN ANALYSIS OF THE EMERGENCY CARE ATTENDANCES

Mariana Gomide<sup>a</sup>, Ione Pinto<sup>b</sup>, Isabela Vaz<sup>c</sup>, Brisa Figueira<sup>d</sup>, Denise Ferro<sup>e</sup>, Pilar Serrano<sup>f</sup>

*Escola de Enfermagem. Universidade de São Paulo. São Paulo, Brazil*

**Introduction:** In Brazil, patients seek urgent or emergency units without the need of urgent or emergency assistance.

**Objective:** We aimed to analyze user's satisfaction of Primary Health Care (PHC) in Ribeirao Preto, SP, Brazil, by analyzing the medical records in Emergency Care Units (ER).

**Methods:** Qualitative study. The scenario of investigation were the five ER, one for each of the five Health Districts in the city. We selected 20 users (4 for each ER) that were not in emergency situations to be interviewed. We used semi structured interview to research aspects related to access to health services at PHC, the user's satisfaction to the health assistance, the resolution of the presenting health problem, reason for seeking the ER and comprehensiveness of health care system. The interviews were recorded, transcribed, interpreted and analyzed by the researcher.

**Results and Conclusions:** Results showed that users reported receiving proper care and attention when seeking the PHC but the delay in appointment scheduling and referrals to medical specialties, that can last many months, were frequently reported complaints, leading to the increase of the number of appointments at the ER as it has 24 hours assistance and more technology. Furthermore, they reported that in ER appointments the attendances are quicker and they are only treated for the actual health complaint but there is no complete resolution of their health problem. We have observed these same complaints in the 5 ER in the city. We concluded that the users understand the importance of primary care for follow-up health but have great difficulties in getting proper assistance.

**Descriptors:** Public health; primary health care; user satisfaction; health services accessibility; emergency medical services.

<sup>a</sup> mariana.souza@usp.br  
<sup>b</sup> ionecarv@eerp.usp.br  
<sup>c</sup> isabelavazeerp@hotmail.com  
<sup>d</sup> brisa\_polyana@hotmail.com  
<sup>e</sup> denise.ferro@usp.br  
<sup>f</sup> pilar.serrano@uam.br

283

### DEMENTIA CARE: A FOCUS ON DIRECT CARE WORKERS' ATTITUDES, BURNOUT AND JOB SATISFACTION

Ana Barbosa<sup>I,a</sup>, Liliana Sousa<sup>I,II,b</sup>, Mike Nolan<sup>III,c</sup>, Alda Marques<sup>II,IV,d</sup>, Daniela Figueiredo<sup>II,IV,e</sup>

<sup>I</sup>Department of Health Sciences. University of Aveiro. Aveiro, Portugal

<sup>II</sup>Unidade de Investigação e Formação sobre Adultos e Idosos. Centro de Investigação em Tecnologias e Sistemas de Informação em Saúde. University of Aveiro. Aveiro, Portugal

<sup>III</sup>Department of Community, Ageing, Rehabilitation, Education and Research. School of Nursing and Midwifery. University of Sheffield. Sheffield, United Kingdom

<sup>IV</sup>School of Health Sciences. University of Aveiro. Aveiro, Portugal

**Introduction:** An increasing number of people with dementia are being cared in residential aged care facilities. Direct care workers (DCWs), who provide the bulk of care in these facilities, are most likely to influence the quality of care and the residents' wellbeing. Thus, understanding DCWs' attitudes towards dementia and how these relate to burnout and job satisfaction is needed.

**Objective:** This study aimed to assess the dementia-related attitudes, burnout and job satisfaction of DCWs caring for residents with dementia and to explore the associations between these variables.

**Methods:** A cross-sectional study with 60 DCWs (female, 44.97±8.97 years old) of 4 residential aged care facilities was conducted. The Dementia Attitudes Scale (DAS) was used to assess attitudes towards dementia. Burnout was assessed with the Maslach Burnout Inventory (MBI). Job satisfaction was measured with the Minnesota Satisfaction Questionnaire (MSQ) short-form. Descriptive statistics and Pearson correlations (r) were performed using SPSS v19.0.

**Results:** DCWs tend to show positive attitudes towards dementia (95.2±10.7). Regarding burnout, low emotional exhaustion (EE) (15.8±11.7) and moderate levels of depersonalization (DP) (6.4±5.9) and personal accomplishment (PA) (39.0±7.3) were found. The MSQ suggested moderate levels of job satisfaction (69.8±12.5). Significant moderate correlations were found between DAS global-score and PA (r=0.44; p<0.01). Job satisfaction correlated significantly with PA (r=0.3; p<0.05) and EE (r=-0.39; p<0.01).

**Conclusions:** Findings suggest that DCWs' job satisfaction and dementia-related attitudes are associated with burnout, particularly to feelings of accomplishment at work. These results have important implications for the design and delivery of interventions to support DCWs.

**Descriptors:** attitudes. Burnout. Dementia. Direct care workers. Job satisfaction.

<sup>a</sup> anabarbosa@ua.pt

<sup>b</sup> lilianax@ua.pt

<sup>c</sup> m.r.nolan@sheffield.ac.uk

<sup>d</sup> amarques@ua.pt

<sup>e</sup> daniela.figueiredo@ua.pt

284

### ATTACHMENT LEVELS TO THE MOTHER, THE FATHER AND THE PEERS, IN INSTITUTIONALIZED YOUNGSTERS

Cátia Alves<sup>I,a</sup>, Sofia Arriaga<sup>II,b</sup>, Mariana Marques<sup>III,IV,V,c</sup>, Sónia Simões<sup>II,d</sup>, Mariana Lucas<sup>I,e</sup>

<sup>I</sup>Instituto Superior Miguel Torga. Porto, Portugal

<sup>II</sup>Departamento de Investigação & Desenvolvimento. Instituto Superior Miguel Torga. Centro de Estudos da População, Economia e Sociedade. Porto, Portugal

<sup>III</sup>Departamento de Psicologia Médica. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>IV</sup>Escola Superior de Desporto de Rio Maior. Rio Maior, Portugal

<sup>V</sup>Polytechnic Institute of Leiria. Leiria, Portugal

**Introduction:** There are few studies comparing the attachment quality to parents and peers in institutionalized youngsters.

**Objective:** We intend to analyze the attachment levels to mother and father separately and to peers in institutionalized youngsters and explore if there are gender differences regarding the attachment dimensions.

**Methods:** Eighty institutionalized youngsters (mean age=15,1; SD=2,02; boys n=45; 56,3%) answered some sociodemographic questions and filled in the Inventory of Parent and Peer Attachment, which assesses three attachment dimensions: Trust, Communication and Alienation.

**Results:** Most institutionalized youngsters (mean time of institutionalization = three years) continue to have contact with their family (n=72; 90%), which occurs in most of the cases, very often or often (n=44; 55,1%). There was a statistically significant difference between boys and girls concerning Alienation levels, with boys presenting higher levels of Alienation to the peers. Moreover, comparing Trust, Communication and Alienation levels between mother, father and peers there was also a statistically significant difference in the Alienation dimension, which showed to be higher regarding peers.

**Conclusions:** In this sample of institutionalized youngsters there only seems to exist different attachment levels to the mother, father and peers regarding Alienation, which is higher concerning the peers. It might be possible that these youngsters, who still have a frequent contact with their family (and in average, with short time of institutionalization), might perceive themselves as being alienated/not attached by to the pairs or might feel insecure in their relation with them.

**Descriptors:** Attachment. Institutionalized youngsters.

<sup>a</sup> catiaalves.psi@gmail.com

<sup>b</sup> sofiaarriaga2@gmail.com

<sup>c</sup> mvpmarques@gmail.com

<sup>d</sup> soniasimoes76@gmail.com

<sup>e</sup> marianaclucas@msn.com



285

### PERCEPTION OF THREAT, STRESS, AND ANXIETY IN ATHLETES OF PORTUGUESE FOOTBALL CHAMPIONSHIPS

Luís Ramos<sup>I,a</sup>, Sónia Simões<sup>II,b</sup>, Helena Espírito-Santo<sup>III,c</sup>, Mariana Marques<sup>III,IV,d</sup>, Laura Lemos<sup>II,e</sup>, Sofia Arriaga<sup>II,f</sup>, Cátia Alves<sup>I,g</sup>

<sup>I</sup>Instituto Superior Miguel Torga. Porto, Portugal

<sup>II</sup>Departamento de Investigação & Desenvolvimento. Instituto Superior Miguel Torga. Centro de Estudos da População, Economia e Sociedade. Porto, Portugal

<sup>III</sup>Departamento de Psicologia Médica. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>IV</sup>Escola Superior de Desporto de Rio Maior. Rio Maior, Portugal

<sup>V</sup>Polytechnic Institute of Leiria. Leiria, Portugal

**Introduction:** In the field of sport activities the high frequency of anxiety is a concern for the participants. Certain potentially threatening situations that contribute to stress and anxiety make athletes produce anxious responses, which affect their performance and balance.

**Objective:** We want to explore the impact of the perception of threat, stress and competitive anxiety in football players. We also want to verify if there are differences among these football players regarding age, formal education and professional status.

**Methods:** 192 football players, age ranging 13 to 39 years ( $M \pm SD = 23.30 \pm 6.07$ ), participating in the Portuguese junior and senior championships were assessed with the Sport Anxiety Scale/SAS-2 (Cruz & Gomes, 2007), and the Cognitive Appraisal Scale in Sport Competition – Threat Perception/CASSC-TP (Cruz, 1996).

**Results:** Players revealed that the more threatening situations were “not reaching an important goal in their career”, “failing or making mistakes in crucial moments”, “not meeting the expectations of others”, and “not performing as desired”. The youngest players significantly presented higher levels of competitive anxiety, somatic anxiety, pre-occupation and problematic concentration. Players with lower formal education significantly revealed higher levels of competitive anxiety, and of somatic anxiety. The non-professional players significantly showed higher levels of somatic anxiety, and cognitive anxiety with problematic concentration. Finally, perception of threat and competitive anxiety were significantly and moderately correlated.

**Conclusions:** Psychotherapeutic interventions should target younger, lower educated, and non-professional football players.

**Descriptors:** Stress. Anxiety. Threat perception. Football players.

<sup>a</sup> luisramos\_21@hotmail.com

<sup>b</sup> soniasimoes76@gmail.com

<sup>c</sup> helenium@gmail.com

<sup>d</sup> mvpmarques@gmail.com

<sup>e</sup> laurastlemos@gmail.com

<sup>f</sup> sofiaarriaga2@gmail.com

<sup>g</sup> catiaalves.psi@gmail.com

286

### PRESCRIPTION OF ANTIBIOTICS BY DENTISTS: A PILOT STUDY

Ana Sofia Oliveira<sup>I,a</sup>, Mara Pereira Guerreiro<sup>II,b</sup>

<sup>I</sup>Faculdade de Farmácia da Universidade de Lisboa. Lisboa, Portugal

<sup>II</sup>Instituto Superior de Ciências da Saúde Egas Moniz & Escola Superior Enfermagem de Lisboa. Lisboa, Portugal

**Introduction:** Antibiotic resistance, primarily related to the inappropriate use of antibiotics, jeopardises the ability to effectively treat infectious diseases. Antibiotics are among the most frequent drugs prescribed by dentists.

**Objective:** To explore issues related to antibiotic prescribing by dentists. This paper focuses on issues related to information needs in clinical practice and continuing education.

**Methods:** Semi-structured qualitative interviews with 14 purposively selected dentists. Interviews were audio-taped, subjected to written consent, and transcribed verbatim. Data were analysed using the five-stage “Framework Approach”<sup>1</sup> with the aid of the software WebQDA. Ethical approval was obtained.

**Results:** There were variations in the extent to which interviewees reported patient-specific questions concerning antibiotic prescribing, ranging from “rarely” to “sometimes”. A few dentists acknowledged uncertainty on whether antibiotics were needed; when in doubt there was evidence of defensive prescribing. Analysis suggests that interviewees managed their clinical questions using four strategies: consulting bibliographic sources, following recommendations of colleagues from other medical specialties, relying on other dentists or making use of their own experience. Consulting bibliographic sources emerged as the most common strategy to respond to patient-specific questions, both on a paper and on-line format. Two divergent views were offered pertaining continuing education on antibiotic prescribing. Some interviewees showed awareness of its importance while others considered it unnecessary.

**Conclusions:** Lack of awareness on the judicious use of antibiotics may influence dentists’ perceptions of patient-care information and education needs. A larger study is warranted on this topic, to inform the design of a multimodal intervention to increase appropriateness of antibiotic prescribing by dentists.

**Descriptors:** Antibiotic prescription; Dentist; Information; Formation.

<sup>a</sup> anasofia\_oliveira@me.com

<sup>b</sup> mara.guerreiro@sapo.ptm

287

### RECONCILING OPERATIONAL AND ORGANISATIONAL LOGICS IN HOSPITAL CHANGE MANAGEMENT

Teresa Carla Trigo Oliveira<sup>1,a</sup>; Nélia Cristina Lopes Filipe<sup>11,111,b</sup>

<sup>1</sup>Faculty of Economics. University of Coimbra. Coimbra, Portugal

<sup>11</sup>Polytechnic Institute of Leiria. Leiria, Portugal

<sup>111</sup>Faculty of Economics. University of Coimbra. Coimbra, Portugal

**Introduction:** Analysis of changing practices in complex organisations, such as teaching hospitals, can be enhanced by distinguishing institutional, organizational and operational logics. Moreover, effective change management needs to recognise diversity at operational levels to achieve synergic boundary spanning between different units, services and practices (clinical, scientific, technological and political), in a manner that can assure economic efficiency, in terms of performance, and social efficiency, in terms of purposeful employee engagement and psychological wellbeing for patients.

**Objective:** In the context of New Public (Service) Management (NPM) this paper seeks to identify how different perceptions of change for top, middle and lower level managers may either facilitate or frustrate change itself.

**Methods:** Within a socio-cognitive perspective and a grounded theory approach it reports in depth analysis (with a newly developed coding system) of fifty five (n=55) audio-taped, fully transcribed semi-structured interviews with doctors as managers in a major European teaching hospital undergoing merger within an NPM perspective.

**Results:** The findings show that doctors as managers at operational unit and service levels are more concerned than higher managers, even when if the latter are doctors, with social efficiency to enhance clinical care. They also are concerned with economic efficiency but not at the cost of employees' and patients well-being.

**Conclusions:** Organisational change needs to reconcile different operational logics and domains of practices. Purposeful engagement and support for change management requires both relative autonomy for and boundary spanning between units and services.

**Descriptors:** Change management; institutional logic; organizational and operational logics; boundary spanning; social efficiency.

<sup>a</sup> tcarla@fe.uc.pt

<sup>b</sup> nelia.filipe@ipleiria.pt

288

### WEIGHT LOSS MAY BE ACCELERATED THROUGH A CHRONONUTRITION-BASED PROTEIN DIET

M.Mesa<sup>1,a</sup>, R. Bravo<sup>1,b</sup>, J.Cubero<sup>11,c</sup>, C. Galán<sup>1,d</sup>, P. Rodríguez<sup>111,e</sup>, A.B. Rodríguez<sup>1f</sup>, C. Barriga<sup>1g</sup>

<sup>1</sup>Chrononutrition Laboratory. Department of Physiology. Faculty of Science. University of Extremadura. Badajoz, Spain

<sup>11</sup>Health Education Laboratory. Science Education Area. University of Extremadura. Badajoz, Spain

<sup>111</sup>Perpetuo Socorro University Hospital. Department of Gynecology. Badajoz, Spain

**Introduction:** Chrononutrition is the field of Chronobiology that establishes the principle of consuming foodstuffs at times of the day when they are more useful for health, improving, therefore, biorhythms and physical performance. Both tryptophan and tyrosine amino acids have been postulated as chrononutrition tools because of their metabolites functions in the body.

**Objective:** To analyze if a Chrononutrition-based diet designed to improve biological rhythms in obese rats can improve weight loss with respect to a Chrononutrition non-based diet.

**Method:** Twenty-four rats participated in this assay for six weeks. Eighteen obese rats were separated in three groups: first group (diet A) was fed with a control diet for rats (N1=6); second group (diet B) was fed with a human protein diet adapted for rats (N2=6); third group (diet C) was fed with a human protein diet adapted for rats and supplemented with 125 mg tryptophan and 375 mg tyrosine once lights turned off (N3=6). A fourth non-obese control group (N4=6) was established in this assay.

**Results:** At the end of the sixth week the diet C was the only group who showed a significant correlation in weight loss. Diet B showed a decrease in body weight although diet C weights were more similar with respect to the non-obese control group.

**Conclusions:** Chrononutrition principles may be used to improve weight loss in rats; therefore, we propose its use for obese humans.

**Descriptors:** Chrononutrition; Obesity; Tryptophan; Protein diets.

<sup>a</sup> mmesarub@gmail.com

<sup>b</sup> rbravo@unex.es

<sup>c</sup> jcubero@unex.es

<sup>d</sup> carmengalandeisla@gmail.com

<sup>e</sup> patriciarg1985@gmail.com

<sup>f</sup> moratino@unex.es; cibars@unex.es

289

### ASSOCIATION BETWEEN PERCEIVED COMPETENCE, AUTONOMY AND PHYSICAL ACTIVITY

Maria Celeste Bastos-Almeida<sup>a</sup>, José Luís Pais-Ribeiro<sup>ll,b</sup>

<sup>i</sup>*Escola Superior de Enfermagem do Porto. Porto, Portugal*

<sup>ll</sup>*Faculdade de Psicologia. Universidade do Porto. Porto, Portugal*

**Introduction:** The research indicates physical activity as one of the key factors in health protection. According to Self-Determination Theory the development of a sense of competence and autonomy is important to achieve greater self-regulation and maintain a healthy behavior.

**Objective:** The aim of this study was to contribute to the understanding of the motivational process of adherence and maintenance of physical activity.

**Methods:** This is an exploratory and transversal study, with a descriptive and correlating design, conceptually based on Self-Determination Theory. The convenience sample includes 523 individuals, all adults from community of both genders, with an average of 37 years (between 19 and 64). Four instruments were used: the Sociodemographic Questionnaire, the Treatment Self-Regulation Questionnaire (exercise), the Perceived Competence Scale (exercising regularly) and the Habitual Physical Activity Questionnaire (modified version).

**Results:** The results indicate that participants in the study show moderately physical activity habits and that they feel autonomous and competent to adopt this healthy behavior. The results support the association between autonomy and competence, as well as, the association of these two variables with a higher level of physical activity. The results also show that autonomy and competence are significant predictors of physical activity.

**Conclusions:** This study contribute to a better understanding of the motivational process associated to the change in physical activity. Based on the results an intervention program was identified.

**Descriptors:** perceived competence; autonomy; self-regulation; physical activity; health behavior.

<sup>a</sup>cbastos@esenf.pt

<sup>b</sup>jlpr@fpce.up.pt

290

### CONSTRAINT-INDUCED APHASIA THERAPY: EFFECTIVENESS OF A PROGRAM IN CHRONIC APHASIC PATIENTS

Olinda Roldão<sup>la</sup>, Filipa Pestana<sup>lb</sup>, Margarida Tavares<sup>ll,c</sup>, Inês Gomes<sup>ld</sup>

<sup>i</sup>*Hospital Garcia de Orta. Almada, Portugal*

<sup>ll</sup>*Escola Superior de Saúde do Alcoitão. Alcoitão, Portugal*

**Introduction:** The effectiveness of language rehabilitation in chronic aphasia patients has been a matter of debate. Recent studies demonstrate that language function can be improved in chronic aphasic patients. Constraint-induced aphasia therapy (CIAT) is a short-term program based on the principles of prevention or restriction of compensatory strategies of communication, modeling and massive practice and has demonstrated its effectiveness in the rehabilitation of people with chronic aphasia.

**Objective:** The purpose of this study was to verify the effectiveness of CIAT principles in a sample of six patients with post-stroke chronic aphasia.

**Methods:** The treatment took place in group over three hours per day, five days a week for two consecutive weeks using images of objects and actions corresponding to words of high frequency of European Portuguese and relevance to the participants. Outcome measures included a standardized language test and ratings of functional communication.

**Results:** Using t-student for paired samples we verify significant improvements in naming (pUD=0,016) and spontaneous speech (pUD=0,016) from beginning to end of treatment, and remained stable over a 12 month follow-up period. Using the nonparametric Wilcoxon test for the results of functional communication we conclude there were only marginal differences (pUE=0,063) from beginning to end of treatment.

**Conclusions:** the results demonstrate that CIAT may be a useful tool in language restoration after stroke. However requires to be confirmed in larger randomized studies.

**Descriptors:** aphasia therapy; rehabilitation: constraint induced; intensity.

<sup>a</sup>olinda\_roldao@hotmail.com

<sup>b</sup>filipasapestana@gmail.com

<sup>c</sup>margarida.at@gmail.com

<sup>d</sup>inessallesgomes@gmail.com

291

### LEARNING MEETINGS IN THE FORMATION THROUGH WORK – THE CONSTRUCTION OF HEALTH RESIDENCIES

Daniela Dallegrave<sup>a</sup>; Ricardo Burg Ceccim<sup>b</sup>

<sup>a</sup>*Grupo Hospitalar Conceição. Porto Alegre, RS, Brasil*

<sup>b</sup>*Universidade Federal do Rio Grande do Sul. Porto Alegre, RS, Brasil*

**Introduction:** The Health Residencies are professional education programs that occur inside the health services. In Brazil, there is no curriculum for this type of training. In practice, it is observed that “signs” of the work produce the learning and conform technical and ethical profiles.

**Objective:** Evaluate the need of a curriculum for the teaching in service and the possibility of an evaluation system of learning that could be standardized.

**Methods:** Systematically analysis of the current regulations in the educational system and previous studies; “conversational circle” and “free testimonials” about the learning experiences and the regulation of training.

**Results:** Having built the concept of “learning meetings”: the possibility of ravishing the already established and producing new meanings to the care and cure. Such “meetings” are composed of an “ethics of monitoring”, which is present in the relationship between teacher (tutor) and student (resident), and of a “linkage of potencies and captures”, sometimes the education, sometimes the work.

**Conclusions:** The “ethics of monitoring” transform the becomings of work into learning. In the linkage of education-work one’s potencies propose to the other thinking processes and one’s captures puts protocols to the exercise of the other. In the end it is understood the possibility of producing “singular pedagogical projects” instead of a “curriculum programs”.

**Descriptors:** Health Residency Programs; learning meetings; education in health; Brazilian Health System. Nursing interventions to prevent pressure ulcers in intensive care units: systematic review.

<sup>a</sup> danidallegrave@gmail.com

<sup>b</sup> ricardo@ceccim.com.br

292

### NURSING INTERVENTIONS TO PREVENT PRESSURE ULCERS IN INTENSIVE CARE UNITS: SYSTEMATIC REVIEW

Isabel Lage, Rui Novais, Manuela Almendra, Simão Vilaça, Odete Araújo

*School of Nursing. University of Minho. Braga, Portugal*

**Introduction:** It is estimated that Pressure Ulcer (PU) ranges from 0.4% to 38% in acute care worldwide, causing high costs in treatments, delaying functional recovery and deferring discharge hospital.

**Objective:** To identify and synthesize primary studies which comprehend interventions focused on prevention of PU in critical care units.

**Methods:** A systematic review followed PICOS method in PUBMED database and in gray literature. 922 articles were identified, 26 retrieved, 5 of which were included based on the inclusion criteria established by the authors, i.e., adults (+18) in critical care units, high risk of development of PU and clinical trials designs. Studies were assessed for risk of bias in seven domains.

**Results:** Five papers met the inclusion criteria. The interventions used were heterogeneous and multi-faceted. Most delivered solely by nurses and were based on the use of devices (mattress) or on the impact of a nutritional formula enriched with several components. The number of irreversible heel pressure ulcers was lower with devices. A diet enriched with some components was also associated with a significantly lower occurrence of new pressure ulcer in critically ill patients.

**Conclusions:** The non-pharmacological interventions at critical care units are a key area considering its potential in PU prevention. Further research should be developed in this field to keep gold standards of quality in critical care units.

**Descriptors:** intensive care units; preventive measure; pressure ulcers; nursing interventions; systematic review.

<sup>a</sup> ilage@ese.uminho.pt

<sup>b</sup> rnovais@ese.uminho.pt

<sup>c</sup> malmendra@ese.uminho.pt

<sup>d</sup> svilaca@ese.uminho.pt

<sup>e</sup> odete.araujo@ese.uminho.pt

293

**HEALTH EDUCATION AND SEXUALITY DURING PREGNANCY**Dora Carteiro<sup>I,II,a</sup>, Sílvia Berenguer<sup>II,b</sup>, Maria Helena Presado<sup>III,c</sup>, Mário Cardoso<sup>III,d</sup>*<sup>I</sup>Agrupamento de Centros de Saúde. I Lisboa Norte – Unidade de Cuidados de Saúde Primários Charneca. Lisboa, Portugal**<sup>II</sup>Instituto Ciências da Saúde. Universidade Católica Portuguesa. Lisboa, Portugal**<sup>III</sup>Escola Superior de Enfermagem de Lisboa. Lisboa, Portugal***Introduction:** The sexuality is a part of an individual's life and health, however its approach by health professionals is still subject of constraints and controversies, particularly during pregnancy.**Objective:** Explore the importance that nurses attribute to health education in the experience of sexuality throughout pregnancy and their needs during this intervention.**Methods:** We conducted a pilot study with 5 interviews to nurses who carry out nursing appointments during pregnancy in primary health care context. We also conducted an integrative literature review in Portuguese journals and RCAAP in order to support the results of the pilot study. We used the descriptors gravid\* and sex\* with access to full text and no time restriction.**Results:** The interviews had an average of 20 minutes each and revealed difficulties in sexuality approach in terms of initiative and development of theme during nursing appointment, nevertheless they considered education important for health. We emphasize the need for training in the area of sexuality, as a strategy to minimize these difficulties and we have identified some “shame” and “constraint” of users when they had to talk about their sexual intimacy. The results obtain in literature review corroborate the interviews results.**Conclusions:** Regarding sexuality during pregnancy, the health education seems to require a bigger investment in nurses training throughout life as a facilitator strategy in this approach and in improving the care needed.**Descriptors:** Education; health; sexuality; pregnancy; nursing.<sup>a</sup> doracarteiro@gmail.com<sup>b</sup> caldeira.silvia@gmail.com<sup>c</sup> mhpresado@esel.pt<sup>d</sup> mmcardoso@esel.pt

294

**AGEING AND SOCIAL INFORMATICS: A CASE STUDY**Arminda Guerra Lopes<sup>a</sup>*Instituto Politécnico de Castelo Branco. Castelo Branco, Portugal***Introduction:** Portuguese Population is becoming older. Twenty years ago, a person was considered old at 65 years old. Nowadays, the situation changed. Technology has an important role to improve people's quality of life. However, technology is still difficult to use since these people, in general, do not have the knowledge to use it, conversely, interfaces are not created for all.**Objective:** The goal of this study was to understand the role that informatics has in the elderly person life. The research questions were: Has Informatics an important role in their quality of life? Do people with more than 60 years old use computers? Are systems adapted for these people use? What were the positive and negative aspects with the use of informatics by elderly?**Methods:** Quantitative and qualitative methods were used to gather and analyze data. A questionnaire was designed and filled by a sample of Portuguese population with more than 60 years old. Around 600 questionnaires were answered. Twelve persons who have never used a computer were selected for training: observations were made and analyzed.**Results:** The data analysis contributed to answer the proposed research questions. The responses proved that there is a long way to go before the majority of elderly people are comfortable with computers' use.**Conclusions:** This paper discusses the results of a study about elderly people using technology. We found that they face difficulties using either the software or the hardware, however; they have a high level of motivation to use a computer.**Descriptors:** elderly people; computers; communication.<sup>a</sup> aglopes@ipcb.pt

295

**BELIEFS AND STEREOTYPES IN HUMAN AGING**Maria de Lurdes Almeida<sup>a</sup>*Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal*

**Introduction:** According to the phenomenological theories, each person has her own perceptions of reality and builds her own reality. There are many different realities, as much as individuals themselves.

**Objective:** This study looks for an interpretative view, the most conceivable as possible, of beliefs and stereotypes of aging, based on the plurality of opinions, expressed by nurses as well as on their care practices.

**Methods:** Therefore, an exploratory research was made, using interviews and participant's observation. The study base population, were provided by nurses of Medicine and Neurology internment units of a Central Hospital.

**Results:** During the interviews, the nurses' concern to help old people was extremely vivid; on one hand, living with the physical limitations inherent to the aging and on the other hand, developing strategies to face loneliness and isolation very frequent at this stage of development. By analysing the notes taken from observation, we must point out the effort put on the life maintenance of care, more connected with physical care.

**Conclusions:** Nurses keep stereotypes concerning old people, but what came up especially from the analysis of the collected information are the beliefs: Being old is being dependent; aging implies lack of capacities; the majority of old people suffer from loneliness; sick old people are rejected by the family.

**Descriptors:** beliefs; stereotypes; aging; older people; nursing.

<sup>a</sup> mlurdes@esenfc.pt.

296

**AUDITORY ELECTROPHYSIOLOGICAL EVALUATION IN INDIVIDUALS WITH TYPE 2 DIABETES MELLITUS**Liliana Alves<sup>a</sup>, Cristina Nazaré<sup>b</sup>*Instituto Politécnico de Coimbra. Coimbra Health School. Coimbra, Portugal*

**Introduction:** The incidence of Type 2 Diabetes Mellitus (DM) is increasing, becoming a serious public health problem. This type is the most common, and is necessary embrace effective and non-invasive measures for your evaluation. The changes in the auditory system caused by DM have been discussed by several authors, who refer the importance of the Auditory Evoked Potentials (AEPs) in supporting the early diagnosis of neurological disorders in this metabolic disorder, as well as in clinical monitoring and prognosis.

**Objective:** To verify through a review of the literature, if the studies suggest the existence of electrophysiological changes in auditory evoked potentials in individuals with type 2 DM, and if yes, to verify what the changes are and what they indicate.

**Methods:** Was conducted a literature review related to the evaluation of adults with Type 2 DM by Auditory Brainstem Response, Auditory Middle and Long Latency Response, P300 and MMN.

**Results:** Despite some controversy, the studies reveal changes in the auditory system and/or central nervous system in individuals with DM, especially through the increased latencies in some components of the AEPs, indicative of neurological, cognitive and auditory processing disorders. It seems there is an association between cognitive disorders with peripheral neuropathy and with duration of DM.

**Conclusions:** AEPs are important in evaluation the integrity of the auditory system and they can be useful in early detection and monitoring of neurological/auditory disorders resulting from DM. With more studies, they can certainly be a useful tool for the choice of treatment to be followed.

**Descriptors:** Type 2 Diabetes Mellitus; Auditory Evoked Potentials; Auditory Brainstem Response; Auditory Middle Latency Response; Auditory Late Latency Response.

<sup>a</sup> liliana\_sofial@hotmail.com<sup>b</sup> cristinanazare@estescoimbra.pt

297

### INTENSIVE CARE NURSING: PORTUGUESE SCIENTIFIC PRODUCTION: A BIBLIOMETRIC STUDY

Cassilda Sarroeira<sup>a</sup>, Anabela Cândido<sup>b</sup>, Maria do Rosário Pinto<sup>c</sup>, Fátima Cunha<sup>d</sup>

*Escola Superior de Saúde de Santarém. Santarém, Portugal*

**Introduction:** Changes in health care occur in such promptness that permanent update is essential, especially in intensive care area (Urden, Stacy & Lough, 2008). The association between this fact and a reflexive daily practice led to the question that unleashed this study: what scientific production has been made in Portugal on Nursing Intensive Care, inducing an exploratory, descriptive study, through a bibliometric strategy and abstracts thematic analysis.

**Objective:** The main goal was to identify the scientific literature on Intensive Care Nursing presented for Master and PhD degrees in Portugal, inheriting to describe the type of study, methodology, participants and contexts.

**Methods:** Research was carried out in January 2014, on the Scientific Open Access Repository of Portugal, within the timeline 2000-2013, with abstract and full text available.

**Results:** This strategy produced 345 results, of which 100 studies were selected, according to inclusion criteria: Reports, presented to obtain Masters' Degree (69), Master Dissertations (26) and PhD Thesis (5), mostly produced after 2011 (78), with a high representativeness for Master Degree's Reports (70). Developed mainly in ICU units, through qualitative and quantitative methodologies, the main themes identified were related to skills development, quality of care, patient safety, decision making and ethical principles.

**Conclusions:** Beyond the identification of Portuguese scientific production in Intensive Care Nursing, the most noteworthy conclusion of this study is the notorious nurses' interest in investigating this area. The significant increase, and the wide range of specific themes, can lead to new approaches and disclose a tendency to maintain future research about this phenomenon.

**Descriptors:** Intensive Care; Nursing; Research.

298

### SPORTS INJURIES CHARACTERIZATION OCCURRING IN MOUNTAIN SPORTS

Henrique Frazão<sup>a</sup>, Luis Carvalhinho<sup>b</sup>

*Escola Superior de Desporto de Rio Maior. Instituto Politécnico de Santarém. Rio Maior, Portugal*

**Introduction:** The increasing popularity of nature sports, particularly in mountainous environment, naturally translates into growth in the number of practitioners and consequently, a higher likelihood of sports injuries.

**Objective:** This study sought to identify the quantity and typology of injuries that occurred during the practice of mountain sports, suffered by practitioners and technicians of mountain sports.

**Methods:** The sample consisted of 269 individuals, 68% males and 32% females, aged between 17 and 61 years. It used a questionnaire (Carvalhinho, Frazão & Moutão, 2013) to collect the data, and the descriptive analysis of the studied variables.

**Results:** The results obtained show that, 46% of the participants had an injury resulting from the practice of their sport and 54% never had any injury. The part of the body that suffered more injuries was the knee, with 11%, followed by the shoulder, with 9.3%. Regarding the type of injury sustained, lacerations (21%) and sprains (19%), were the most verified types of injury. However, there seems to be some differences between the more experienced and less experienced practitioners, as for the location of occurred injuries. Generally speaking, the typology of the injuries presents close values.

**Conclusions:** The main joints of the upper and lower limbs were the most affected areas by sports injuries, unlike places where the body load is less. On the other hand, the level of experience of the actors seems to be associated with some differentiation in the localization of the injuries.

**Descriptors:** Injuries; Mountain Sports; Nature-based Sports; Risk.

<sup>a</sup> cassilda.sarroeira@essaude.ipsantarem.pt

<sup>b</sup> anabela.candido@essaude.ipsantarem.pt

<sup>c</sup> mrosario.pinto@essaude.ipsantarem.pt

<sup>d</sup> fatima.cunha@essaude.ipsantarem.pt

<sup>a</sup> frazao@esdrm.ipsantarem.pt

<sup>b</sup> lcarvalhinho@esdrm.ipsantarem.pt

299

### CARDIOVASCULAR RISK FACTORS FOUND IN STROKE PATIENTS

André Novo<sup>a</sup>, Leonel Preto<sup>b</sup>, Eugénia Mendes<sup>c</sup>, Helena Pimentel<sup>d</sup>

*Escola Superior de Saúde. Instituto Politécnico de Bragança. Bragança, Portugal*

**Introduction:** Stroke is the second worldwide most common cause of death and major cause of disability. Over the last decades modifiable and non-modifiable risk factors have been identified with more accuracy. Early identification and treatment of modifiable risk factors can reduce the risk of stroke. In stroke patients, the identification of these variables is also important to preventing another stroke.

**Objective:** To assess the prevalence of cardiovascular risk factors in stroke patients.

**Methods:** The data were collected through electronic health records of all patients with stroke admitted to an emergency department during three years (2010, 2011 and 2012). Research protocol has been approved by an ethics committee.

**Results:** Were analyzed the electronic health records of 346 patients with ischemic stroke (78.6±9.9 years) and 96 with intracerebral hemorrhage (76.5±11.9 years). In ischemic stroke the most common risk factors were hypertension (68.2%), diabetes mellitus (27.5%), hypercholesterolemia (25.0%), atrial fibrillation (24.3%) and smoking (5.5%). We also found that 12.7% of the patients were obese. In hemorrhagic stroke the most prevalent risk factors were hypertension (53.1%), dyslipidemia (25.7%), atrial fibrillation (24.3%), obesity (18%) and smoking (7.3%).

**Conclusions:** Hypertension was more prevalent in ischemic stroke and is associated with type of stroke ( $\chi^2=7.508$ ,  $df=1$ ,  $p=0.005$ ). Atrial fibrillation also prevailed in thromboembolic events with statistical significance ( $p=0.043$ ). Only 16% of patients with ischemic stroke did not have any cardiovascular risk factor.

**Descriptors:** Prevalence; risk factors; ischemic stroke; hemorrhagic stroke.

300

### BILATERAL COCHLEAR IMPLANTATION IN A PATIENT WITH BILATERAL TEMPORAL BONE FRACTURE

Daniela Ramos<sup>l</sup>, Carlos Ribeiro<sup>l</sup>, Xavier Jorge<sup>ll</sup>

*<sup>l</sup>Centro Cirúrgico de Coimbra. Coimbra, Portugal*

*<sup>ll</sup>Faculdade de Medicina de Coimbra. Coimbra, Portugal*

**Introduction:** Bilateral severe to profound sensorineural hearing loss resulting from traumatic brain injury can be treated effectively by placing cochlear implant bilateral (JH Chung et al, 2011; Vermeire K et al, 2012; Gediz MS et al 2010). In such circumstances, there are benefits of bilateral cochlear implantation compared to unilateral cochlear implantation, as documented in the literature (Nopp P et al, 2004; Litovsky R et al, 2006).

**Methods:** Case report of a female patient, 32 years old, victim of trampling in public way by a high velocity motorized vehicle, suffered traumatic brain injury, bilateral transverse temporal bone fracture and consequent profound bilateral sensorineural deafness. Underwent simultaneous bilateral cochlear implantation, in 6 months thereafter. Started hearing rehabilitation program in speech therapy once a week, a month after the activation of the speech processor. In audiological and speech therapy evaluation, at 4 weeks of hearing rehabilitation, the patient showed an audiometric and speech perception/discrimination performance in tasks speakerphone and the phone, very favorable.

**Conclusions:** It was a clinical case of bilateral deafness, post traumatic brain injury successfully treated using bilateral cochlear implantation.

**Descriptors:** Traumatic brain injury; bilateral cochlear implant; hearing rehabilitation.

<sup>a</sup> andre@ipb.pt

<sup>b</sup> leonelpreto@ipb.pt

<sup>c</sup> maria.mendes@ipb.pt

<sup>d</sup> hpimentel@ipb.pt

<sup>l</sup> tfdanielaramos@hotmail.com

<sup>ll</sup> carlosarribeiro@gmail.com

<sup>ll</sup> cambombo@hotmail.com



301

**AUDITORY LONG LATENCY POTENTIALS BEFORE AND AFTER COCHLEAR IMPLANTATION**Marina Fernandes<sup>a</sup>, Cristina Nazaré<sup>b</sup>*Escola de saúde de Coimbra. Instituto Politécnico de Coimbra. Coimbra. Portugal*

**Introduction:** In the absence of auditory stimulation, as in the case of bilateral profound sensorineural hearing loss in pre or peri-linguistic stage, the maturation of the central nervous system (SNC) could be compromised, modifying the way that the auditory pathway processes information. The cochlear implantation (CI) is an important advancement that allows auditory stimulation. However, it should be as early as possible and enough to promote neuroplasticity as well as cortical reorganization. The effects of auditory deprivation and stimulation have been studied by auditory long latency potentials (ALLP) through the latency of the P1 wave.

**Objective:** To study through a literature review, the changes in P1 wave of ALLP in children before and after adaptation with the cochlear implant and thus demonstrate the importance of auditory stimulation in neuroplasticity and in auditory processing.

**Methods:** Was made a literature review about the electrophysiological responses of ALLP in children before and after CI.

**Results:** Studies reveal that the latency of wave P1 varies with chronological age, being an indicator of maturation and plasticity of the SNC in response to sound. Studies in children with congenital deafness show that they show rapid decrease in the latency of the P1 wave after CI. However, the ability of the CNS to reorganize after stimulation depends on several variables.

**Conclusions:** The electrophysiological evidences from these studies indicate the importance of CI at an early age, in order to preserve the auditory pathways and to allow the correct language acquisition and cognitive development.

**Descriptors:** auditory deprivation; auditory neuroplasticity; auditory processing; cochlear implantation; auditory late latency potentials - P1.

<sup>a</sup> marinaff\_89@hotmail.com<sup>b</sup> cristinanazare@estescoimbra.pt

302

**MDAIF: TRAINING TRANSFER TO THE PROFESSIONAL PERFORMANCE OF FAMILY NURSES**Palmira Oliveira<sup>1,a</sup>, Maria Henriqueta Figueiredo<sup>1,b</sup>*<sup>1</sup>Ciências de Enfermagem. Instituto Ciências Biomédicas Abel Salazar. Escola Superior de Enfermagem do Porto. Porto, Portugal**<sup>2</sup>Escola Superior de Enfermagem do Porto. Porto, Portugal*

**Introduction:** Under the Dynamic Model of Family Assessment and Intervention (MDAIF) project, of the unit research of the Nursing College of Porto, training is being developed in a professional context to the family nurses of the Primary Health Care, in national level. Learning takes a utility value with the transfer of knowledge to act.

**Objective:** To evaluate the family nurses perception concerning the transfer of training, six months after its completion.

**Methods:** Quantitative, exploratory-descriptive study. A questionnaire of Likert-type questions with 5 options was applied (1-strongly disagree, 5-strongly agree), and the sample consisted of 62 nurses, after 6 months of the MDAIF training programme was completed. In the transfer evaluation we used the indicators of Tesluk et al (1995). Descriptive analysis was made, using IBM-SPSS version 19.0.

**Results:** Mostly nurses are female (85%), licensees. On average, have 40 years, 14 years in the profession and 12 years in PHC. Majority (57%) agree that “have applied what they learned in training to improve performance” and that “what they have learned in training has helped a lot to improve it” (59%); 36% agree that “they applied in the daily work mostly of what they learned in training”.  
**Conclusions:** The transfer from what is learned only effective when have application in action and in behavioral change that endures in time, and despite the nurses have applied what they have learned, this application is not always continuous, and therefore, further study is suggested about the factors influencing the training transfer.

**Descriptors:** Dynamic Model of Family Assessment and Intervention, Training Transfer, Family Nurse, Primary Health Care.

<sup>a</sup> palmiraoliveira@esenf.pt<sup>b</sup> henriqueta@esenf.pt

303

**SEQUENTIAL LIVER TRANSPLANTATION - ETHICAL ISSUES**Liliana Mota<sup>1,a</sup>, Sónia Novais<sup>11,b</sup><sup>1</sup>*Instituto de Ciências Biomédicas Abel Salazar, Universidade do Porto. Porto, Portugal*<sup>11</sup>*Instituto de Ciências da Saúde. Universidade Católica Portuguesa. Porto, Portugal*

**Introduction:** Sequential liver transplantation use one explanted liver of a patient with Familial Amyloid Polyneuropathy (FAP) to transplant a patient with severe liver disease. The sequential liver transplantation has delicate ethical contours. The preparation of lists ranking, equity of access to organs, informed consent, the principles that guide decision making in transplantation translates issues that cast doubt on the integrity of pipelines and procedures involved in liver transplantation.

**Objective:** This work we intend to make a critical analysis of clinical practice in relation to fundamental ethical principles.

**Methods:** The methodology that guided this work support in the review of literature on the subject, research in databases such as B-on and their resources.

**Results:** Despite the debate on this subject is so delicate and difficult, put often the divided scientific community, we found that several ethical issues emerge: what extent the use of a liver that would otherwise be considered surgical waste, is it fair to confront someone with this decision at the time it is proposed to transplant? Are we not, in any way, to undermine this person against another disease which presents a FAP? In the moral life, sometimes more important than following the principles, is to have one character morality and emotional sensitivities, since the not waive application of the principles of discernment, responsibility, judgment and virtuous act.

**Conclusions:** Health professionals have a duty to safeguard the dignity of the person in the disease, have a greater capacity to act upon the patient, when it proves more vulnerable and dependent.

**Descriptors:** Liver transplantation; ethical principles; Familial Amyloid Polyneuropathy.

304

**HUMANIZATION OF NURSING CARE IN SURGICAL CENTER: AN EVERYDAY SEARCH**Amanda Raíssa Dantas de Carvalho<sup>a</sup>, Anderson Reis de Sousa<sup>b</sup>, Gilmara de Souza Sampaio Almeida<sup>c</sup>, Jaildo Gomes Rodrigues<sup>d</sup>, Nadja Beatriz Saraiva de Medeiros<sup>e</sup>, Rita Jucielma Almeida Carneiro<sup>f</sup>*Faculdade Nobre. Feira de Santana, Bahia, Brasil*

**Introduction:** The National Program for Humanization of Hospital Assistance offers a comprehensive guideline that includes projects of humanizing nature to be implemented in the various service areas.

**Objective:** To review the scientific literature on the humanization of nursing care to the patient at the surgical center.

**Methods:** This is an integrative review held on bases of national and international data, as criteria were used articles published in the last ten years, through the descriptors: humanization and surgical center. 13 articles were found and subjected to a selective reading, where only 4 articles have been suited to the objective proposed by the study.

**Results:** The analysis allowed the emergence of three categories on the theme: Systematization of nursing care; Humanization of nursing assistance; Humanization of patient assistance in surgical center and interpersonal relationships. According to the revision of literature consulted it was parsed deficiency in the forms of humanization to preoperative customers and the communication between nurse-client, thereby targeting the importance of communication in assisting clients admitted in the preoperative period aiming to minimize the degree of misinformation to clients entering into the hospital setting thus being able to minimize recurring aggravations. It was realized through this production that the thematic needs to be worked out between the health teams, using innovation strategies, update and redemption of the basic premise that is commitment in care production.

**Conclusion:** This study sought to portray about the issues involving the lack of humanization in the surgical center as a way to sensitize the people involved in this process.

**Descriptors:** Nursing, Surgical Center; Humanization.

<sup>a</sup> chelleuefs@gmail.com<sup>b</sup> son.reis@hotmail.com<sup>c</sup> gilmaras.s.sampaio@hotmail.com<sup>d</sup> dealmeida\_rodrigues@hotmail.com<sup>e</sup> nadjabeatriz@hotmail.com<sup>f</sup> ritajucy@hotmail.com<sup>a</sup> saxoenfermeira@gmail.com<sup>b</sup> snovais@gmail.com

305

### SELF-CRITICISM, BODY ESTEEM AND EATING DISORDERS SYMPTOMS IN A SAMPLE OF FEMALE ADOLESCENTS, PRACTITIONERS OF BALLET AND HANDBALL

Piló, D.<sup>1,a</sup>, Castilho, P.<sup>1,b</sup>, Simões, S.<sup>1,c</sup>, Espírito-Santo, H.<sup>1</sup>, Lemos, L.<sup>1</sup> Guadalupe, S.<sup>1</sup>, Marques, M.<sup>1,iv,v</sup>

<sup>1</sup>Instituto Superior Miguel Torga. Coimbra, Portugal

<sup>II</sup>Faculdade de Psicologia e Ciências da Educação da Universidade de Coimbra. Coimbra, Portugal

<sup>III</sup>Instituto Politécnico de Leiria. Leiria, Portugal

<sup>IV</sup>Escola Superior de Desporto de Rio Maior. Rio Maior, Portugal

<sup>V</sup>Serviço de Psicologia Médica. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

**Objective:** Few studies in Portugal explore self-criticism, body esteem and eating behavior symptoms associations. We want to explore, in a sample of girls, ballet and handball practitioners, differences in eating disorders symptoms, body mass index (BMI), appearance and self-criticism; explore if self-criticism and a more derogatory appearance perception are associated (and predict) eating disorder symptoms (in both sports).

**Methods:** 105 girls (n=52; 49,5% ballet; n=53; 50,5% handball; mean age=14,5; DP=1,80; range=12-18) filled in a sociodemographic and health questionnaire, Forms of Self-Criticizing and Reassuring Scale, Eating Attitudes Test-25 (EAT-25), Body Esteem Scale (BES) and Depression, Anxiety and Stress Scale.

**Results:** There were worrying percentages of eventual eating disorder (cutoff of 19/EAT-25) in ballet and handball (7.7%; 9,4%). A significant percentage of ballet practitioners had a low BMI (34.6%). Handball practitioners have higher BMI and inadequate self-criticism. In ballet practitioners there were positive associations between Motivation for thinness (MT), inadequate, hated and total self-criticism, and a negative association with reassuring self-criticism; between Bulimic behaviors (BB), inadequate and total self-criticism. In handball, there were associations between MT, inadequate and total self-criticism. Hated self-criticism predicted, in ballet practitioners, MT and BB. In handball practitioners BES\_Weight predicted MT.

**Conclusions:** The percentage of eventual eating disorder (both subsamples) and of ballet practitioners with thinness is worrying. In both sports self-criticism is associated with MT and BB. Awareness must be raised early among teachers/coaches/parents about the dancers/athletes critical body view, particularly in ballet, where image/weight is reinforced.

**Descriptors:** eating disorders symptoms; self-criticism; body esteem; adolescents; ballet; handball.

<sup>a</sup>denisepilo\_1@hotmail.com

<sup>b</sup>paulacastilhofreitas@gmail.com

<sup>c</sup>soniasimoes76@gmail.com

<sup>d</sup>helenium@me.com

<sup>e</sup>laurastlemos@gmail.com

<sup>f</sup>soniaguadalupe@gmail.com

<sup>g</sup>mvpmarques@gmail.com

306

### PREVENTING PRESSURE ULCERS: THE KNOWLEDGE OF THE NURSING STUDENTS FROM THE AZORES AND CANARY ISLANDS

Alexandre Rodrigues<sup>1,a</sup>, Francisco Hernández-Martínez<sup>1,b</sup>, Maria del Pino Quintana-Montesdeoca<sup>1,c</sup>, Norberto Messias<sup>1,d</sup>, Ana Júlia Silva<sup>1,e</sup>, Juan Fernando Jiménez-Díaz<sup>1,f</sup>, Bienvenida Rodríguez-de-Vera<sup>1,g</sup>

<sup>1</sup>Escola Superior de Enfermagem da Cruz Vermelha Portuguesa de Oliveira de Azeméis. Oliveira de Azeméis, Portugal

<sup>II</sup>Departamento de Enfermería da Universidad de Las Palmas de Gran Canaria. España

<sup>III</sup>Escola Superior de Enfermagem de Angra do Heroísmo. Universidade dos Açores. Portugal

**Introduction:** Current scientific knowledge makes it possible for the majority of pressure ulcers (PU) to be preventable with optimal nursing care. To accomplish that it is necessary to receive specific training from university studies degree.

**Objective:** Evaluate knowledge of PU prevention in nursing students of public universities in Las Palmas de Gran Canaria (ULPGC) and Azores (UAC).

**Methods:** Descriptive and comparative study of random sample among nursing students ULPGC (n=78) and AUC (n=43) through a questionnaire designed ad hoc. Statistical analysis with SPSS 19.0.

**Results:** Azores students have better knowledge concerning the etiology of the PU. Concerning essential interventions to prevent pressure ulcers both groups have high levels of knowledge. In assessing the risk to develop a PU, Canary students have higher percentage of correct answers. Regarding the recognition of material devices used for prevention as well as the demands of postural changes Azores students, are those that present greater knowledge. Concerning the evaluation of skin and nutritional status, the group of the Azores. have tendentially demonstrated better knowledge in this area.

**Conclusions:** Azores students have better knowledge in almost of the requirements of prevention, excluding risk assessment. The percentage of students with fully correct answers in both groups of students is low, so an specific training reinforcement is necessary.

**Descriptors:** pressure ulcers; the knowledge; nursing students; Prevention.

<sup>a</sup>alexandre.esenfcvpoa@gmail.com

<sup>b</sup>fjhernandez@denf.ulpgc.es

<sup>c</sup>mpino@dma.ulpgc.es

<sup>d</sup>messias@uac.pt

<sup>e</sup>ajmsilva@uac.pt

<sup>f</sup>jjimenez@denf.ulpgc.es

<sup>g</sup>brodriguez@denf.ulpgc.esm

307

### PUBLIC HEALTH POLICIES IN BRAZIL UNDER THE ASPECT OF ETHICS AND MANAGEMENT

Cláudio Eduardo Rodrigues<sup>1,a</sup>; Georgia Barros Fernandes<sup>1,b</sup>; Katia Rodrigues do Nascimento<sup>III,c</sup>

*Universidade Federal dos Vales do Jequitinhonha e Mucuri. Teófilo Otoni, MG, Brasil*

**Introduction:** To fulfill the legal obligation and increase benefits and social protection in health in Brazil, SUS – Sistema Único de Saúde (Unified Health System) – was created setting guidelines for promotion and organization of the health services. It also indicated ways for management, financing and budget for public health. We ask: has SUS been efficient and effective for Brazilian public health? Have the resources and their management attended the health demands? Is there an ethical application of the SUS budget?

**Objective:** We aim to analyze the impact on the implementation of public health policies in Brazil in the period 2000-2010, checking their collaboration to improve the public health and investigating the ethical aspects of their management.

**Methods:** We conducted a literature search on the Brazilian public health spending, drawing upon the FIRJAM Index of Municipal Development. The data was subjected to an econometric analysis, from linear panel data analysis, checking the variation in health spending.

**Results and Conclusions:** It appears that the variation in health spending in Brazil is positively correlated to the development of States; modifications are required in the management of expenditures, adopting an ethical conduct in the allocation of resources with the lowest possible cost. However, this does not reduce the importance of SUS to constitute a good public health policy and promote the reduction of child mortality and disease control through immunizations.

**Descriptors:** public policy; health; public spending; management; ethics.

308

### PEDAGOGICAL TRAINING TEACHER'S: A CHALLENGE IN NURSING EDUCATION

Carla Nascimento<sup>a</sup>

*Escola Superior de Enfermagem de Lisboa. Lisboa, Portugal*

**Introduction:** In higher education, teaching faces new territorialities, new challenges and realities requiring for new roles and responsibilities of teachers, drivers of other ways of thinking and practicing teaching; teaching is under the aegis of to make learn (Roldão, 2007), looking ahead to the teacher as a facilitator and manager of learning. These requirements towards a new pedagogical culture reinforce the need for pedagogical training of health teachers, in particular, in nursing teachers.

**Objective:** The aim of the study was to identify the place of pedagogical training in nursing teacher's education.

**Methods:** The study is part of the interpretative paradigm of educational research using the questionnaire. The construction of the questionnaire aimed to carry out semi-structured interviews to eight teachers. After validation of the pre-test in four Nursing Schools, the questionnaire was applied in ten public Nursing Schools, obtained 227 valid responses.

**Results:** Pedagogical training, particularly at the level of postgraduate studies, seems to be an area for construction of teaching professional knowledge, enabling the teacher a new understanding (Shulman, 2004) of teaching and pedagogical action.

**Conclusions:** Nursing teachers highlighted the need for greater educational investment. A pedagogical training focused on teaching practice, on cooperative work and on educational innovation projects. Nursing teacher professional development must be practice-oriented in order to be effective and have impact on Nursing teacher's professional practice. Teacher's education is certainly one of the more crucial challenges facing education reform.

**Descriptors:** Health Education, Pedagogical Training, Nursing Teacher.

<sup>a</sup> claudio.eduardo36@gmail.com

<sup>b</sup> georgiafbarros@gmail.com

<sup>c</sup> katianascimento.rodrigues@gmail.com

<sup>a</sup> carla.nascimento@esel.pt

309

**MAL: INSTRUMENT RATING PARETIC UPPER MEMBER**

Elisabete de Fátima Dinis Diz<sup>1,a</sup>, Maria José Gomes<sup>11,b</sup>, Ana Maria Galvão<sup>111,c</sup>

<sup>1</sup>*Centro Hospitalar de Lisboa Central. Hospital dos Capuchos. Lisboa, Portugal*

<sup>11</sup>*Departamento de Ciências Enfermagem. Escola Superior de Saúde. Instituto Politécnico de Bragança. Bragança, Portugal; Núcleo de Investigação e Intervenção no Idoso. Porto, Portugal*

<sup>111</sup>*Departamento de Ciências Sociais e do Comportamento. Escola Superior de Saúde. Instituto Politécnico de Bragança. Bragança, Portugal; Núcleo de Investigação e Intervenção no Idoso. Porto, Portugal*

**Introduction:** Stroke is one of the main causes of mortality and morbidity worldwide. In the specific case of Portugal, stroke is still the leading cause of death, being responsible for the high rate of disability and functional dependence of the adult population.

**Objective:** Analyze the relationship between the side of the brain, the duration of the stroke and the hand-gripping strength with the amount and quality of use of the paretic upper limb.

**Methods:** We developed a descriptive study with a quantitative approach against non-probabilistic sample. The instruments for collecting data were a socio-demographic survey, the Modified Ashworth Scale, a handgrip dynamometer (dynatest) and MAL-30 Scale.

**Results:** From our 84 patients sample 66.7% were male, the average age was 66.77 years (SD=11.18). Stroke occurred on average 34.45 months ago ( $a=28.96$ ) and 42.9% have had his dominant hand affected. There was a correlation between the subscales and handgrip strength on the affected side (CCS=0.523,  $p=0.000$  for the QL and CCS=0.528,  $p=0.000$  for QT). By using the T-Test we concluded that the average value on both scales was different according to whether or not the affected hand is the dominant one.

**Conclusions:** Based on these results, we believe the MAL-30 is a valid and useful tool for assessing the motor performance of the paretic upper limb of stroke victims.

**Descriptors:** paretic upper member; Motor activity Log; Rehabilitation.

310

**DENTAL AND PERIODONTAL COMPLICATIONS ARISING FROM THE USE OF ORAL PIERCINGS – CASES REPORTS**

Rodrigues B<sup>1,a</sup>, Moreira M<sup>1,b</sup>, Ribeiro C<sup>11,c</sup>, Marques T<sup>111,d</sup>

<sup>1</sup>*Universidade Católica Portuguesa. Porto, Portugal*

<sup>11</sup>*Unidade de Imunologia. Hospital Geral Santo António. Centro Hospitalar do Porto. Porto, Portugal*

<sup>111</sup>*Universidade de Aveiro. Aveiro, Portugal*

**Introduction:** The fear of tooth loss is common between patients, especially when they realize that the loss of the periodontal structures is closely linked to individual aesthetic. Besides the concern for appearance is significant that the missing periodontal structure increases mobility, and tooth hypersensitivity exposure which should encourage patients to seek appropriate treatment. This practice of body art has increased over the years and has been directly related to dental and periodontal injuries.

**Objective:** These reports describe tree cases in which gingival recession, and dental injuries were caused by oral and peri - oral piercings.

**Methods:** Tree patients' were evaluated. The clinical evaluation of patient oral health records included periodontal parameters and the presence of tooth injuries.

**Results:** Clinically where observed in the reporting of these cases an association between the use of oral piercings and dental and gingival trauma. The presence of gingival recession in the anterior lingual mandibular region was associated with the use of piercings, age, male gender and bleeding on probing.

**Conclusions:** These changes require from the Dentist a detailed clinical evaluation leading to an earlier diagnosis of predictable problems. However, Dentists must be prepared to address their patients' individual needs with the aim of avoiding or intercepting the course of potential complications and removing the causative agent when required. Despite the prognosis be booked there are several areas of dentistry that allow functional restoration and partially or totally aesthetic.

**Descriptors:** Oral piercing; peri-oral piercing; effects; case report; complications.

<sup>a</sup> e.diz@iol.pt;

<sup>b</sup> mgomes16mgomes@gmail.com

<sup>c</sup> anagalvao@ipb.ptm

<sup>a</sup> barbararodrigues.md@gmail.com

<sup>b</sup> mario\_miguel@msn.com

<sup>c</sup> claudiaribeiro.usc@gmail.com

<sup>d</sup> tiagomiguelmarques@gmail.com

311

### TOBACCO USE AMONG STUDENTS IN THE MARAJÓ ARCHIPELAGO, NORTHERN BRAZIL

Josimar M. Almeida<sup>1</sup>, Suelane C.T. Costa<sup>1</sup>, Aline L. Oliveira<sup>1</sup>, Liviane L. Nogueira<sup>1</sup>, Adriana M. Oliveira-Miranda<sup>1</sup>, Gláucia C. Silva-Oliveira<sup>11</sup>, Aldemir B. Oliveira-Filho<sup>11</sup>

<sup>1</sup>Faculdade de Ciências Naturais. Campus do Marajó. Universidade Federal do Pará. Breves, PA, Brazil

<sup>11</sup>Faculdade de Ciências Naturais, Instituto de Estudos Costeiros, Universidade Federal do Pará. Bragança PA, Brazil

**Introduction:** The use of tobacco is a major cause of preventable disease and disabling. In Brazil, alcohol and tobacco are the drugs most widely spread amongst students. In northern Brazil, epidemiological studies on tobacco use among adolescents and young adult are scarce.

**Objective:** This study determined the prevalence and associated factors concerning the frequent use of tobacco among students from public high schools in the Marajó Archipelago.

**Methods:** A cross-sectional study was conducted in public high schools of the municipalities that compose the Marajó Archipelago. During the class period (March to December 2012) a self-administered questionnaire was used to collect data for description and analysis of socio-demographic, economic and family conditions related to smoking. The statistical analysis was performed by simple and multiple logistic regression followed by the Hosmer-Lemeshow test.

**Results:** Of 40,680 students enrolled in schools, 37,817 (93.0%) participated in this study. The mean age was 18.5 years (13-50 years), mostly female (55.4%). The prevalence of frequent use of tobacco was 5.2%. The age group of tobacco users was 14-31 years. Since the first use of tobacco occurred between 7-15 years. The majority of tobacco users smoke 10-20 cigarettes/day. After statistical analysis, epidemiological factors associated with tobacco use were identified: male, school repetition, work sporadically, not involving parents in school life; smoking parents, friends and most smokers smoking friends.

**Conclusions:** The prevalence of frequent use of tobacco among students in the Marajó Archipelago is high, and the consumption initiates early in children exposed to parents and friends who smoke.

**Descriptors:** Epidemiology; Tobacco; Students; Marajó Archipelago, Northern Brazil.

312

### THERE IS MORE THAN UNDERWEIGHT IN PEDIATRIC CROHN'S DISEASE

Tânia Furtado<sup>1a</sup>, Ana Catarina Moreira<sup>1b</sup>, Inês Asseiceira<sup>11c</sup>, Patrícia Almeida Nunes<sup>11d</sup>, Sara Azevedo<sup>11e</sup>, Ana Isabel Lopes<sup>11f</sup>, Lino Mendes<sup>11g</sup>

<sup>1</sup>Escola Superior de Tecnologia da Saúde de Lisboa. Portugal

<sup>11</sup>Hospital de Santa Maria. Lisboa, Portugal

<sup>111</sup>Departamento de Pediatria. Centro Académico de Medicina de Lisboa. Portugal

**Introduction:** Nutritional problems are common in Crohn's Disease (CD), with inadequate dietary intake and an increase of resting energy expenditure (REE).

**Objective:** Assess the REE, total energy expenditure (TEE) and nutritional status of 25 children and adolescents with CD.

**Methods:** REE was measured using indirect calorimetry, nutritional status was assessed by bioimpedance and anthropometric measurements and dietary intake by 3-day diet diary.

**Results:** Mean age 14.3±3.1 years. The average z-score for weight, height and BMI was lower than the reference values. Both Underweight and overweight affected 20% of sample. Bioimpedance analysis reveal excess fat mass in 33% of subjects and anthropometric analysis reveal that 52% of sample had deficit of muscle mass. No difference was found in REE or body composition of active disease's subjects (n=10) vs remission disease's (n=15). Sugar and saturated fatty acid intake were higher than recommendations. Unsaturated fatty acid and fiber needs were not achieved and we found a tendency for a higher consumption of n-6 to n-3 fatty acids ratio. There low micronutrient intake, calcium (92%), folate (96%), iron (56%) phosphorus (44%), vitamins A (76%), C (64%) and E (84%).

**Conclusions:** We found that malnutrition affects these patients by underweight but also by overweight, with changes in the body composition (excess fat mass and muscle mass deficit) and poor dietary intake, mainly micronutrients. Disease activity not affect REE and nutritional status. Our results shown support the importance of an ongoing nutritional monitoring and intervention, even in normal weight children and regardless the stage of the disease.

**Descriptors:** Crohn's disease; resting energy expenditure; nutritional status; food intake; nutritional deficiencies.

<sup>a</sup> tania.furtado1@gmail.com

<sup>b</sup> ana.moreira@estesl.ipl.pt

<sup>c</sup> inesasseiceira@gmail.com

<sup>d</sup> patricia.nunes@chln.min-saude.pt

<sup>e</sup> saravazvedo@gmail.com

<sup>f</sup> anaaisalopes@sapo.pt

<sup>g</sup> lino.mendes@estesl.ipl.pt

313

### BINGE DRINKING AMONG STUDENTS IN THE MARAJÓ ARCHIPELAGO, NORTHERN BRAZIL

Liliane G. Araújo<sup>1</sup>, Francisco P. Castro-Junior<sup>1</sup>, Gláucia Galúcio<sup>1</sup>, Sara O. S. Carmo<sup>1</sup>, Adriana M. Oliveira-Miranda<sup>1</sup>, Gláucia C. Silva-Oliveira<sup>1</sup>; Aldemir B. Oliveira-Filho<sup>2</sup>

<sup>1</sup>*Faculdade de Ciências Biológicas, Campus do Marajó, Universidade Federal do Pará, Breves PA, Brazil*

<sup>2</sup>*Instituto de Estudos Costeiros, Universidade Federal do Pará, Bragança PA, Brazil*

**Introduction:** The practice of binge drinking (BD) by adolescents is a risk behavior. In northern Brazil, epidemiological studies on BD among students are unknown.

**Objective:** This study determined the prevalence and factors associated with BD among students who attend public high schools in the Marajó Archipelago, northern Brazil.

**Methods:** A cross-sectional study was conducted in public high schools of the municipalities that compose the Marajó Archipelago. During the class period (March to December 2012) a self-administered questionnaire was used to collect data for description and analysis of socio-demographic, economic and family conditions related to alcohol use. The statistical analysis was performed by simple and multiple logistic regression followed by the Hosmer-Lemeshow test.

**Results:** From 40,680 students enrolled in schools, 37,817 participated in this study. The mean age was 18.5 years (13-50 years), mostly female (55.4%). The prevalence of BD was 9.5% in the last month. The first BG occurred between 13-24 years. Among the alcoholic beverages was detected predominantly in beer consumption (75.2%). After statistical analysis, the factors associated with BD were: studying on the night shift, school repetition, no involvement of parents in school life, parents do not talk about alcohol consumption; parents consume alcohol; friends consume alcohol; most friends drink alcohol.

**Conclusions:** The prevalence of BD among students in the Marajó Archipelago is high, and the early consumption begins mainly from the influence of parents and friends, and it affects performance in school activities.

**Descriptors:** Epidemiology, Alcohol, Binge Drinking, Students, Marajó Archipelago.

314

### THE LEARNING PROCESS OF THE STUDENT CARE: STARTING OF CRITICAL REFLECTIONS

Ana Cristina Spínola<sup>1,a</sup>, José Amendoeira<sup>1,11,b</sup>

<sup>1</sup>*Escola Superior de Saúde. Instituto Politécnico de Santarém. Santarém, Portugal*

<sup>11</sup>*Unidade de Investigação. Instituto Politécnico de Santarém. Santarém Portugal*

**Introduction:** Clinical education is a privileged context in the training of nursing students, because of the specificity of the learning process of care. The use of pedagogical strategies such as critical thinking, promotes the development of critical thought used for the best clinical judgment of these actors.

**Objective:** Characterize the dimensions of the concept of care valued by the student during the clinical teaching process.

**Methods:** The research method utilized is case study; as source of data we used the critical thinking narration episodes, developed in the context of clinical education with students in the 4th year of the 1st Cycle of the nursing program at a health school. At this stage of research, we mobilize the material produced by the students in different clinical contexts of education, giving them the database status for the investigation developed. We resorted to content analysis and CmapsTools software for identification of the care process material dimensions.

**Results:** This study highlights three dimensions into care concept: design, nursing intervention, and the learning process of nursing care.

**Conclusions:** Students emphasize planning and nursing care dimensions and its organization into process care. They seek the appropriate intervention for each person as the center point of care. They value learning process of care, reflecting on the practice of it. We consider these aspects as integrators in the theoretical teaching and as important aspects for students in the knowledge appropriation of clinical education. The integration and implementation of this knowledge, by the students, becomes visible in their clinical practice.

**Descriptors:** nursing students, care process, clinical teaching, critical thinking, learning strategies.

<sup>a</sup> aspinola748@gmail.com

<sup>b</sup> jjpam2@gmail.com

315

### SOCIODEMOGRAPHIC AND GYNECOLOGICAL OBSTETRIC CHARACTERISTICS OF ITALIAN NURSING ACADEMICS

Karine Bezerra<sup>1,a</sup>, Camila Moreira<sup>1,b</sup>, Igor Mendes<sup>1,c</sup>, Jamilly Torres<sup>1,d</sup>, Ana Kelve Damasceno<sup>1,e</sup>, Ana Fátima Fernandes<sup>1,f</sup>, Mônica Oriá<sup>1,g</sup>

<sup>1</sup>Universidade Federal do Ceará. Brazil

<sup>II</sup>Università degli Studi di Roma La Sapienza. Rome, Italy

**Introduction:** To know and comprehend cultural, social e obstetrics characteristics became an important subject on consolidation of health public politics.

**Objective:** This study aimed to delineate the sociodemographic and gynecological obstetric profile of Nursing students.

**Methods:** Quantitative and cross-sectional study developed in Rome, Italy, involving 135 nursing students. Data collection was performed using an online form and addressing the sociodemographic and gynecological obstetric profile of participants.

**Results:** About the participants' age, we identified that a population in late adolescence and early youth. The average age was 21.7 years (SD±11.4). With regard to socio-demographic characteristics, most participants were Caucasian (n=98, 72.6%), single 118 (87.4%), Catholic (n= 84, 62.2%), per capita income of up to 3,000 euros (n=89,65.9%) and lived with the family 88 (65.2%). It was noticed that almost the entire sample (N=133, 98.5%) who performed the paptest, gynecological examination for prevention of cervical cancer, 122 (88.9%) reported performing the exam annually. Regarding the use of contraceptive methods 101 (74.8%) stated academic use oral contraceptives, 56 (41.5%) use male condoms and 7 (5.2%) did not use any method. Entire sample showed no previous pregnancy and only 1 participant (0.7%) had presented miscarriage.

**Conclusions:** Describing the socio-demographic and obstetric gynecological profile of nursing students is necessary in order to helps to target interventions, seeking to understand the risk factors for which the customer is predisposed and thus strengthen educational strategies for effective health promotion.

**Descriptors:** Health Profile; Students; Young Adult; Nursing; Health Promotion.

<sup>a</sup> karineufc@gmail.com

<sup>b</sup> camilabrazil@alu.ufc.br

<sup>c</sup> igormendesufc@yahoo.com.br

<sup>d</sup> jamilly.farma@hotmail.com

<sup>e</sup> anakelve@yahoo.com.br

<sup>f</sup> afcana@ufc.br

<sup>g</sup> oriaremon@hotmail.com

316

### SEXUAL PROFILE OF NURSING STUDENTS ABOUT YOUR SEXUAL BEHAVIORS

Karine Bezerra<sup>1,a</sup>, Camila Moreira<sup>1,b</sup>, Igor Mendes<sup>1,c</sup>, Maria Jussara Melo<sup>1,d</sup>, Tiago Barros<sup>1II,e</sup>, Ana Fátima Fernandes<sup>1,f</sup>, Mônica Oriá<sup>1e</sup>

<sup>1</sup>Universidade Federal do Ceará. Brazil

<sup>II</sup>Università degli Studi di Roma La Sapienza. Rome, Italy

<sup>III</sup>Universidade Federal de Pernambuco. Brazil

**Introduction:** The knowledge about the sexual reality of academic is relevant to support and direct preventive, educational, evaluative and planning action's care.

**Objective:** This study aimed to describe the sexual profile of Italian academic nursing.

**Methods:** This is a quantitative and cross-sectional study developed in Rome, Italy, involving 135 nursing students. Data collection was performed using an online form addressing sexual characteristics of participants.

**Results:** It was observed that 105 (77.8%) of participants have a stable partner, with much of the time relationship between 1 and 2 years (n=53, 50.5%). The average age of first intercourse was 16 years ( SD 1.9 ), with an age range of 17 to 18 years the most prevalent (n=87, 67.9%). Despite the onset of sexual activity among women having sex with feelings and passion, in this study various academic cited first sexual as curiosity 44 (34.3 %) and desire 43 (33.6%). Data on age at menarche showed a greater frequency range 11-13 years of age (n=88, 65.2%), followed by the age group 14-17 years (n=45, 29%). However, a significant proportion had early onset of menstrual cycles, so that 34 (25.2%) participants had menarche before age 11. The mean age at menarche was 11.5 years. Sexual orientation was predominantly heterosexual (n=126, 93.4%) and only 9 (6.7%) reported having had sexual experience with the same sex.

**Conclusions:** Describing the sexual characteristics of nursing students is necessary to support and direct interventions and thus strengthens educational strategies for effective health promotion.

**Descriptors:** Health Profile; Sexual Behavior; Students; Nursing; Health Promotion.

<sup>a</sup> karineufc@gmail.com

<sup>b</sup> camilabrazil@alu.ufc.br

<sup>c</sup> igormendesufc@yahoo.com.br

<sup>d</sup> jussaramelo.farma@hotmail.com

<sup>e</sup> tiago\_sousajn@yahoo.com.br

<sup>f</sup> afcana@ufc.br

<sup>g</sup> oriaremon@hotmail.com



317

### PATIENTS UNDERGOING CHEMOTHERAPY: EFFECT OF A HIGH-CALORIE SUPPLEMENT ON NUTRITIONAL STATUS

Mariana M. Boz<sup>1,a</sup>, Flávia Dezordi<sup>1,b</sup>, Camila L. R. Cichacewski<sup>1,c</sup>, Igor Pedroso<sup>1,d</sup>, Joselayne C. dos Santos<sup>1,e</sup>, Maikol Kurahashi<sup>1,f</sup>, Ivone M.I. Morimoto<sup>1,g</sup>

<sup>1</sup>Pontifícia Universidade Católica do Paraná. Brazil

<sup>11</sup>Hospital Santa Casa de Misericórdia de Curitiba. Brazil

**Introduction:** Unsatisfactory food intake, metabolic changes in the body and high calorie demand due to the tumor are side effects of treatment modalities such as chemotherapy, radiation and surgery are the main causes of malnutrition in cancer patients.

**Objective:** To evaluate the effect a calorie dense industrialized supplement has on the body mass index of cancer patients receiving chemotherapy.

**Methods:** A retrospective, quantitative study. Medical records of 58 patients undergoing chemotherapy in the Oncology's Clinic in a general hospital in Curitiba-Brazil, from 12/2010 to 10/2012, who drank 400ml/per day of a high-calorie industrialized supplement, during 90 days, were collected. P values <0.05 were considered statistically significant.

**Results:** The same numbers of patients by gender with mean age 60±11.7 years were evaluated. There was a predominance of gastric cancer location (15.5%) followed by colon (12.1%) and breast (10.3%). During the nutritional consultations decreased the frequency of lack appetite (44.8% to 27.6%), nausea (41.4% to 22.4%), heartburn (19% to 5.2%), constipation (13.8% to 10.3%), diarrhea (12.1% to 10.4%) and asthenia (8.6% to 3.4%) reports. The initial BMI resulted in 21.12±3.41 kg/m<sup>2</sup> and the final in 24.55±3.67 kg/m<sup>2</sup> without statistical significance. There was a reduction in the frequency of underweight (44.8% to 39.7%) and increased normal weight (44.8% to 48.3%). It is noted that 72.4% increased BMI and 10.4% maintained BMI classification.

**Conclusions:** The patients increased BMI and decreased frequency of complications, demonstrating efficacy of performed nutritional intervention.

**Descriptors:** Nutritional intervention; nutritional supplements; malnutrition; chemotherapy; nutrition and cancer.

<sup>a</sup> mariboz16@yahoo.com.br

<sup>b</sup> flaviadezordi@hotmail.com

<sup>c</sup> camila.roda@pucpr.br

<sup>d</sup> igor\_pedroso.2@hotmail.com

<sup>e</sup> joselaynecorrea@yahoo.com.br

<sup>f</sup> maikol.oncopar@gmail.com

<sup>g</sup> ivone.morimoto@pucpr.br

318

### ANALYSIS OF MATERNAL SELF-EFFICACY IN THE PROCESS OF TEENAGE MOTHERS' BREASTFEEDING

Renata de Lima Bizerra<sup>1,a</sup>, Anne Fayma Lopes Chaves<sup>11,b</sup>, Karine de Castro Bezerra<sup>11,c</sup>, Livia Maria Damasceno dos Santos<sup>11,d</sup>, Maria Jussara Melo<sup>11,e</sup>, Tiago Sousa Barros<sup>11,f</sup>, Mônica Oliveira Batista Oriá<sup>11,g</sup>

<sup>1</sup>Faculdade Católica Rainha do Sertão. Quixadá, Brazil

<sup>11</sup>Universidade Federal do Ceará. Brazil

<sup>111</sup>Università degli Studi di Roma La Sapienza. Rome, Italy

<sup>11V</sup>Universidade Federal do Pernambuco. Brazil

**Introduction:** The evaluation of maternal self-efficacy in the act of breastfeeding allows us to observe which areas mothers have greater difficulty, and it is possible to devise strategies to improve this reality.

**Objective:** Assess self-efficacy in adolescent mothers to breastfeed in the Northeastern region of Brazil.

**Methods:** This is a quantitative study conducted in 14 Basic Health Units in the municipalities of Quixadá, Mombaça and Tabuleiro do Norte during the months of September and October of 2013. The collection occurred through a form containing socioeconomic and obstetric aspects, besides the application of Breastfeeding Self-Efficacy Scale- SF. The data were analyzed using Epi Info program. The study was approved by the Committee of Ethics and Research of the Catholic Faculty Rainha do Sertão.

**Results:** The sample consisted of 172 mothers of children under six months of age, with mean age of 16 years old, married, with complete high school education, that worked at home and had income from one to three minimum wages. These women had higher self-efficacy in breastfeeding, having greater adhesion to the items related to breastfeeding technique and less adhesion to items related to feeding the baby without using powdered milk.

**Conclusions:** It is concluded that the nurse who assists the woman during the pregnancy-puerperal cycle should develop health education strategies in order to empower these mothers on aspects still with gaps, as well as seeking to maintain confidence of these women to breastfeed.

**Descriptors:** Breast Feeding; Self Efficacy; Adolescent; Nursing; Health Promotion.

<sup>a</sup> faymalopes@bol.com.br

<sup>b</sup> anneyfayma@yahoo.com.br

<sup>c</sup> karineufc@gmail.com

<sup>d</sup> livia\_damasceno@yahoo.com.br

<sup>e</sup> jussaramelo.farma@hotmail.com

<sup>f</sup> tiago\_sousajn@yahoo.com.br

<sup>g</sup> oriaremon@hotmail.com

319

### ANALYSIS OF THE DEVELOPMENT OF CHILDREN IN THE NORTHEASTERN REGION OF BRAZIL

Amanda Nogueira<sup>1,a</sup>, Anne Fayma Lopes Chaves<sup>11,b</sup>, Rebeca Rocha<sup>11,c</sup>, Karine de Castro Bezerra<sup>11,d</sup>, Jamilly Torres<sup>11,e</sup>, Elizian Braga Rodrigues Bernardo<sup>11,f</sup>, Mônica Oliveira Batista Oriá<sup>11,g</sup>

<sup>1</sup>Faculdade Católica Rainha do Sertão. Brazil

<sup>11</sup>Universidade Federal do Ceará. Brazil

<sup>111</sup>Università degli Studi di Roma La Sapienza. Rome, Italy

**Introduction:** The profile of infant mortality has decreased due to aspects of assessment of growth and development, which is performed by the nurse during childcare.

**Objective:** Evaluate the development in children up to five years in the Health Centers of Sertão Central, in Ceará, Brazil.

**Methods:** This is a quantitative study. The sample consisted of 100 children from zero to five years. The data were collected by an instrument containing socioeconomic information, issues related to child development and the milestones of development. The study was approved by the Committee of Ethics and Research of the Catholic Faculty Rainha do Sertão.

**Results:** The majority of the mothers had not completed elementary school, worked at home, had income less than a minimum wage and held prenatal care. Regarding the children, 84% had normal weight at birth and 70% had the appropriate cephalic perimeter for their age. It was noted that 46% of children had no risk factor and 54% had one or more risk factors. The majority of children had the landmarks for their age group. As far as the classification of the development, it was found that 46% had a normal development, 43% had normal development with risk factors, 1% with alert for the development and 10% had probable developmental delay.

**Conclusions:** We realize the importance of the nurse is on the alert regarding the presence of risk factors, seeking care focused on the prevention of complications to promote the health of children.

**Descriptors:** Early childhood care; Child Care; Child Development; Nursing; Health Promotion.

<sup>a</sup> faymalopes@bol.com.br

<sup>b</sup> annefayma@yahoo.com.br

<sup>c</sup> rebecasuez@hotmail.com

<sup>d</sup> karineufc@gmail.com

<sup>e</sup> jamilly.farma@hotmail.com

<sup>f</sup> elizian\_rodrigues@yahoo.com.br

<sup>g</sup> oriaremon@hotmail.com

320

### INFECTIONS, RESISTANCE AND ANTIBIOTIC THERAPY IN AN INTERNAL MEDICINE SERVICE

Isabel C. Pinto<sup>a</sup>, L.M. Nascimento<sup>b</sup>, I. Cunha<sup>c</sup>, P. Laranjeira<sup>d</sup>, C. Morais<sup>e</sup>, L. Vendeiro<sup>f</sup>

*Escola Superior de Saúde. Instituto Politécnico de Bragança. Portugal*

**Introduction:** Currently, bacterial resistance to antibiotics is one of the greatest health challenges, particularly in Medicine Services. In this service you will find the largest number of patients with infectious disease, which is a major cause of hospitalization.

**Objective:** It is intended to determine the rates of infectivity, the etiology of infections and patterns of antimicrobial susceptibility in the service of Medicine from Centro Hospitalar do Nordeste (CHNE) - Unidade Hospitalar de Bragança.

**Methods:** During the period between January 1 and December 31 of year 2008 were received at the hospital laboratory 3,547 bacteriological examination, of which 363 with positive results.

**Results:** In urine cultures identified an infectivity rate of 9.04%, noting that these 64.15% are due to E. Coli. As for the cultures of sputum, there was an infectivity rate of 19.68%, being that, of these 23.23% were Staphylococcus aureus. Blood cultures identified an infectivity rate of 5.66%, this should be mainly to the presence of Staphylococcus aureus (25.00%).

**Conclusions:** Gram-negative (*P.aeruginosa*, *E.coli* e *Klebsiella pneumoniae*) showed the majority of resistance to Penicilins and Cefalosporins, belong to the group of b-lactam antibiotics. *Staphylococcus aureus* were resistant to Methicilin, one MRSA strain.

**Descriptors:** Antibiotic therapy, Antimicrobial susceptibility, Infections, Rates of infectivity, Resistance.

<sup>a</sup> isabel.pinto@ipb.pt

<sup>b</sup> luis.miguel@ipb.pt

<sup>c</sup> a18205@alunos.ipb.pt

<sup>d</sup> a17254@alunos.ipb.pt

<sup>e</sup> a18203@alunos.ipb.pt

<sup>f</sup> a17692@alunos.ipb.ptm

321

### PARENTAL STRESS IN PARENTS OF CHILDREN WITH DEVELOPMENTAL DISORDERS

Luiza Nobre-Lima<sup>1,a</sup>, Lisete Mendes Mónico<sup>1,b</sup>, Rita Silva<sup>1,c</sup>, Hugo Manuel Oliveira Lucas<sup>1,d</sup>

<sup>1</sup>*Faculdade de Psicologia e Ciências da Educação. Universidade de Coimbra. Portugal*

<sup>11</sup>*Hospital Pediátrico. Centro Hospitalar Universitário de Coimbra. Portugal*

<sup>111</sup>*Department of Psychology and Anthropology. Universidad de Extremadura. Spain*

**Introduction:** Developmental disorders are a diverse group of severe chronic diseases with a great impact on the family. Since the adaptation to parenthood is a transitional process with some stress involved, it is important to know how this stress is experienced by parents of this kind of children.

**Objective:** The goals of this study were: 1) to analyze the levels of stress experienced by parents of children with developmental disorders (Autism and Down syndrome) compared to parents of children with no such diagnosis; 2) to compare the levels of stress between parents of autistic children and parents of Down syndrome children.

**Methods:** The sample was composed of two groups: Group 1 – 39 parents of children without developmental disorders (mean age of 39.17 (DP=4.87); 51% women; their children's mean age was 6,86 (DP=0.48)); Group 2 – 36 parents whose children have developmental disorders (mean age of 38,23 (DP=6.84); 61% women; their children's mean age was 7,00 (DP=1,73)), of which 16 are parents of children with Autism and 20 are parents of children with Down syndrome. The instrument used was the Parenting Stress Index.

**Results:** Parents of children with developmental disorders experience greater levels of stress than parents of children with no such diagnosis. Among those, parents of Autistic children experience greater levels of stress due to the perception of some characteristics of the child.

**Conclusions:** Results are discussed considering the families' skills and resources to help minimize the stress inherent in taking care of a child with a developmental disorder.

**Descriptors:** Parental stress; Developmental disorders; Autism; Down syndrome.

322

### MARIJUANA USE AMONG STUDENTS IN THE MARAJÓ ARCHIPELAGO, NORTHERN BRAZIL

Furtado IM<sup>1</sup>, JRV Ladislau<sup>1</sup>, Sousa MS<sup>1</sup>, Oliveira-Miranda AM<sup>1</sup>, Silva-Oliveira GC<sup>11</sup>, Oliveira-Filho AB<sup>11</sup>

<sup>1</sup>*Faculdade de Biologia. Campus do Marajó. Universidade Federal do Pará. Breves, PA, Brazil*

<sup>11</sup>*Faculdade de Ciências Biológicas. Instituto de Estudos Costeiros. Universidade Federal do Pará. Bragança, PA, Brazil*

**Introduction:** In general, the first contact with illicit drugs occurs during adolescence. In Brazil, marijuana is the most used illicit drug among teenagers.

**Objective:** This study determined the prevalence and associated factors about the use of marijuana among students from public high schools in the Marajó Archipelago.

**Methods:** A cross-sectional study was conducted in public high schools from the municipalities that compose the Marajó Archipelago. During the class period (March to December 2012) a self-administered questionnaire was used to collect data for description and analysis of socio-demographic, economic and family conditions related to the use of marijuana and other drugs. The statistical analysis was performed by simple and multiple logistic regression followed by the Hosmer-Lemeshow test.

**Results:** Of 40,680 students enrolled in schools, 37,817 (93.0%) participated in this study. The mean age was 18.5 years (13-50 years), mostly female (55.4%). The prevalence of frequent use of marijuana was 3.6%. The age group of marijuana users was 16-34 years. The first use of marijuana occurred between 7-19 years. Among marijuana users, about 576 have experienced cocaine by once in a lifetime. After statistical analysis, epidemiological factors associated with marijuana use were identified: school repetition, family conflict, frequent use of licit drugs, parents who use drugs, friends who use drugs.

**Conclusions:** The prevalence of marijuana use among students in the Marajó Archipelago is high. The initial consumption occurs during childhood or adolescence, in suitable living environment for the use of drugs that compromises the school life activities.

**Descriptors:** Epidemiology; Marijuana; Students; Marajó Archipelago, Northern Brazil.

<sup>a</sup> luizabelima@fpce.uc.pt

<sup>b</sup> lisete\_monico@fpce.uc.pt

<sup>c</sup> rmsfsilva@hotmail.com

<sup>d</sup> hhlucas@sapo.ptm

323

### PERCEPTIONS OF AIDER NURSES ABOUT THE ASSISTANCE TO WOMEN VICTIMS OF VIOLENCE IN BRAZIL

Flávia Dayana Ribeiro da Silveira<sup>1,a</sup>, Sarah Carolinne Mazza Oliveira<sup>1,b</sup>, Grazielle Roberta Freitas da Silva<sup>1,c</sup>, Priscila do Vale Machado<sup>1,d</sup>, Nadyelle Elias Santos Alencar<sup>1,e</sup>; Renata Dias da Silva Santos<sup>1,f</sup>; Francisca Fabiana Fernandes Lima<sup>1,g</sup>

<sup>1</sup>Universidade Federal do Piauí. Brazil

<sup>2</sup>Faculdade Integral Diferencial. Teresina, Brazil

**Introduction:** In Brazil, violence has been one of the most common health injuries. Due to the increase to search for health services caused by the most several kinds of violence, it was implemented in the country a reference service which provides the first aids to victims of violence. Violence against women, especially, raises concerns to public and health authorities. It can be inferred, as well, that suffering caused to injured women also generates conflicts to professionals who attend them.

**Objective:** Describe perceptions and experiences of aider nurses about the assistance to women victims of violence; comprehend the assistance experiences to injured women; evaluate the occurrence of influence in their work and interpersonal relations.

**Methods:** This qualitative research was realized with 13 aid nurses who have worked in an urgent care service in a city from the Brazilian Northeast. The answers were recorded, analyzed and grouped according to the similarity of responses in three categories: perceptions and limitations about the violence against women, the feeling of aider nurses and the defense mechanisms in an attempt to better quality of life these nurses.

**Results and Conclusions:** From the division into categories, according to the interviewers' answers, it was perceived the nurses' limitation in the assistance to injured women and also the fragility of these professionals, who feel powerless and sensitized during the assistance to women victims of mistreatment. It was also found that nurses aiders, they try to find their physical and psychological self-protection through coping techniques.

**Descriptors:** violence against women; nursing; urgency care service; Brazil.

<sup>a</sup> flaviadayana@gmail.com

<sup>b</sup> mazza.mazza1@hotmail.com

<sup>c</sup> grazielle\_roberta@yahoo.com.br

<sup>d</sup> prisciladovale@live.com

<sup>e</sup> nadyelle-elias@hotmail.com

<sup>f</sup> renatadias92@hotmail.com

<sup>g</sup> ffabiana-fl@hotmail.com

324

### NURSING CARE SYSTEMATIZATION IN A PSYCHIATRIC HOSPITAL IN THE BRAZILIAN NORTHEAST

Daniele Barbosa Costa Oliveira<sup>1,a</sup>, Iraneide da Silva Castillo<sup>1,b</sup>, Renata Lopes de Andrade e Silva Lebre<sup>1,c</sup>, Marcia Astres Fernandes<sup>1,d</sup>, Anna Karolinne de Oliveira Silva<sup>1,e</sup>, Nadyelle Elias Santos Alencar<sup>1,f</sup>, Francisca Fabiana Fernandes Lima<sup>1,g</sup>

<sup>1</sup>Faculdade de Saúde. Ciências Humanas e Tecnológicas Do Piauí. Brazil

<sup>2</sup>Universidade Federal do Piauí. Brazil

**Introduction:** Nursing Care Systematization (NCS) is a systematic and dynamic way to provide the nursing cares, leading them to the clients' health problems identification, also, intervening and evaluating their human answers to prescribed cares. The mental health nurse focuses his attention on a holistic care, it ensures interventions can be elaborated to the individual and not to the disease.

**Objective:** To evaluate NCS in mental health in a public psychiatric hospital in the Brazilian northeast.

**Methods:** Retrospective descriptive quantitative study performed through documental analysis or searching on the patient records during the period from January until June 2011. This search was approved by The Research Ethics Committee of The University Center UNINOVAFAPI, CAAE Protocol 0405.0.043.000-11 and it obeyed to the Brazilian Health Council resolution 466\ 2012.

**Results and Conclusions:** It became evident that from the three corresponding records for Nursing Problems, Nursing Diagnosis and Nursing Prescriptions only 24,3% of the records had all of them; In relation to the nursing problems, the most prevalent of them were: Change in sleep pattern (insomnia) and psicomotricity change (aggressiveness), recorded 114 and 60 times, respectively. In relation to Nursing Prescription: Supervising sleep and repose was the most prevalent with 186 records; In relation to Nursing Diagnosis, it was perceived an evident gap, in a way that prescription of the care plan was generalist. Failures were identified during the execution of some nursing process steps, which provides subsidies for minimizing this problem and improving the NCS applicability in the institution.

**Descriptors:** mental health; nursing diagnosis; nursing care; Brazil.

<sup>a</sup> daniellysudario@hotmail.com

<sup>b</sup> iraneide.castillo@hotmail.com

<sup>c</sup> renatinha\_lebre@hotmail.com

<sup>d</sup> m.astres@bol.com.br

<sup>e</sup> annakrol@hotmail.com

<sup>f</sup> nadyelle-elias@hotmail.com

<sup>g</sup> ffabiana-fl@hotmail.com

325

### LUNCH EATING HABITS IN PORTUGUESE COLLEGE STUDENTS CONSIDERING THE LOCATION OF MEAL

Andreia Azevedo<sup>1,a</sup>, Filipa Fernandes<sup>1,b</sup>, Lara Fernandes<sup>1,c</sup>, Patrícia Fernandes<sup>1,d</sup>, António Fernandes<sup>1,e</sup>, Vera Ferro-Lebres<sup>1,f</sup>

<sup>1</sup>*Escola Superior de Saúde. Instituto Politécnico de Bragança. Portugal*

<sup>2</sup>*Escola Superior Agrária. Instituto Politécnico de Bragança. Portugal*

**Introduction:** A healthy diet is associated with indicators of proximity to family, colleagues and school, and a perception of personal and social well-being.

**Objective:** To understand the eating habits of undergraduate higher education students, considering the location of meal.

**Methods:** A cross-sectional, quantitative study was developed using a probabilistic sample of 405 students from a Portuguese public higher education institution. Data collection involved the use of a questionnaire that included questions about the meal location, the type of meal, food/ingredients and their portion sizes. To verify if the consumption of different food groups, at lunch varies given the location where the meal was consumed, it was used the Kruskal-Wallis test.

**Results:** At lunch, significant differences were found in what concerns the consumption, being higher in cereals, cereal products and tubers, at “home”, “school canteen” and “restaurant”; milk and derivatives in “other places”; oils and fats in the “restaurant”; candy in “restaurant”; fats in the “school canteen”, “restaurant” and “other places”; and, juices in “other places”.

**Conclusions:** These results suggest that higher education students eating habits vary according to the location of meal, only in some food groups. Regarding the consumption of fruits, vegetables, meat, fish and eggs, legumes, alcohol and salty there were no statistically significant differences, which suggests that the consumption of these foods is independent from the meal location.

**Descriptors:** Eating habits; Higher education; Students; Lunch; Location of Meal.

<sup>a</sup> andrea.fta@live.com.pt

<sup>b</sup> pipalex@hotmail.com

<sup>c</sup> larex\_17@hotmail.com

<sup>d</sup> patricia\_16\_pati@hotmail.com

<sup>e</sup> toze@ipb.pt

<sup>f</sup> verrolebres@ipb.pt

326

### EATING ATTITUDES AND RISK OF EATING DISORDERS IN ADOLESCENTS: ROLE OF THE THINNESS STEREOTYPE

Susana Cardoso<sup>1,a</sup>, Osvaldo Santos<sup>11,b</sup>, Carla Nunes<sup>111,c</sup>, Isabel Loureiro<sup>111,d</sup>

<sup>1</sup>*Escola Nacional de Saúde Publica. Universidade Nova de Lisboa. Portugal*

<sup>11</sup>*Instituto de Medicina Preventiva. Faculdade de Medicina de Lisboa. Portugal*

<sup>111</sup>*Escola Nacional de Saúde Publica. Universidade Nova de Lisboa. Portugal*

**Introduction:** In societies where thinness is seen as a sign of ideal beauty, there is a significant social pressure for teenagers to follow this model. Such cultural stereotypes can create risky situations in what eating behaviors are concerned. Those risky situations are associated with attitudes connected with fear of gaining weight and with low self-esteem.

**Objective:** To identify risky eating attitudes in adolescents and to characterize associations between eating attitudes (promoting risk of developing an eating disorder), sex and age.

**Methods:** 358 adolescents (convenience sample) of two secondary schools (aged 14-18 years) were asked to complete the EAT-25 (eating attitudes test) (range from 0 to 75; cutoff=19).

**Results:** We found 4, 5% of increased-risk cases (boys: scores between 20 and 25; girls: scores between 19 and 35). No statistically significant differences were found between overall score of EAT-25 and age. Girls have higher ( $p<.001$ ) scores (mean=7.04; SD=4.48) than boys (mean=4.78; SD=7.15), and higher prevalence of increased-risk cases. This difference between sexes results mainly from factor “Drive for thinness” ( $p<.001$ ).

**Conclusions:** A relevant percentage of adolescents revealed attitudes that put them in a spectrum of increased risk for eating disorders (more prevalent in girls). Desire to be thin is the most relevant attitudinal dimension. Health education interventions oriented to set objective and healthy standards of body image and to promote overall self-esteem building among adolescents are strategic to avoid the eventual development of eating disorders.

**Descriptors:** Eating attitudes; Eating disorders; Adolescents.

<sup>a</sup> sm.cardoso@ensp.unl.pt

<sup>b</sup> osvaldorsantos@gmail.com

<sup>c</sup> cnunes@ensp.unl.pt

<sup>d</sup> isalou@ensp.unl.ptm

327

### TEACHING AND LEARNING IN FAMILY NURSING: FROM THEORETICAL FRAMEWORK TO EXPERIENTIAL REFLECTION

Maria Henriqueta Figueiredo<sup>1,a</sup>, Zaida Charepe<sup>11,b</sup>, Manuel Brás<sup>111,c</sup>, Palmira Oliveira<sup>1,d</sup>

<sup>1</sup>Escola Superior de Enfermagem do Porto. Portugal

<sup>11</sup>Universidade Católica Portuguesa. Portugal

<sup>111</sup>Instituto Politécnico de Bragança. Portugal

**Introduction:** The complexity of the family system, as the target of nursing care, requires specific skills to act in a situation. The Dynamic Model of Family Assessment and Intervention - MDAIF (Figueiredo, 2009), based in the systemic paradigm can contribute to the experiential reflection on nursing care with families in nursing education.

**Objective:** to identify the acquisition of skills to assess and intervene in families and to identify the pedagogical strategies to enhance family nursing practice.

**Methods:** This is a qualitative study of descriptive nature. Participants are 25 students Master's Degree in Nursing from a Portuguese University. Data were collected through a questionnaire with open questions and analyzed using content analysis.

**Results:** The use of MDAIF was perceived as a change influence in the acquisition of skills in family assessment and intervention, in clinical practice. Real-life situations, simulations, and abstractions of reality, were emphasised as the teaching-learning strategies.

**Conclusions:** The use of MDAIF, as a theoretical framework, contributed to the acquisition of skills, anchored on personal meaningful experiences of practices with families. The study confirmed the importance given to the students' reflective and autonomous participation in their learning, to acquire and develop skills in family nursing.

**Descriptors:** Family Nursing, Family Nursing Education, Dynamic Model of Family Assessment and Intervention.

328

### PROFILE OF THE WOMEN WHO REPEAT AN INDUCED ABORTION

Marina Sofia Silva Cordeiro<sup>a</sup>

*Escola Superior de Saúde. Instituto Politécnico de Leiria. Portugal*

**Introduction:** An increase of repeated induced abortions has been observed since its decriminalization was introduced in Portugal. Considering the health risks of this phenomenon, its ethical questions, economic costs and even the impact in health professionals, a systematic review can provide relevant knowledge about women who repeat induced abortion.

**Objective:** To profile women who request induced abortion repeatedly.

**Methods:** This systematic review was performed according to the Joanna Briggs Institute orientations using MEDLINE, CINAHL and Cochrane databases, with main descriptors as: "women"; "abortion, induced"; "abortion, legal"; "abortion seekers, repeated". Only publications between January of 1998 and May of 2013 were considered. After meeting inclusion and exclusion criteria, eleven articles were selected and a narrative synthesis of the data was made.

**Results:** Women who repeat induced abortion are probably older, non-Caucasian, unemployed, foreign, multiparous, have less school education and live in urban areas. They show a good knowledge of contraception methods, but frequently use the less effective ones and assume risk behaviors when consciously choose not to use them. They have a higher probability of physical and sexual abuse history, childhood adverse life events, low emotional support and abuse of alcohol, drugs and tobacco.

**Conclusions:** Evidence shows that women with repeated induced abortion have a higher probability of having specific characteristics that allow determining a particular profile. These results can assist health professionals developing individualized and personalized interventions to these women, aiming to reduce this phenomenon.

**Descriptors:** repeated induced abortion; legal abortion; women.

<sup>a</sup> henriqueta@esenf.pt

<sup>b</sup> zaidacharepe@ucp.pt

<sup>c</sup> mambras@gmail.com

<sup>d</sup> palmiraoliveira@esenf.pt

<sup>a</sup> marina.cordeiro@ipleiria.pt

## QUALITY OF LIFE AND WELL-BEING

329

### ACNE AND PUBLIC HEALTH

Catarina Rebelo-Neves<sup>1,a</sup>, Sara S. Dias<sup>1,II,b</sup>, Carlos Amaral Dias<sup>1,c</sup>, Jorge Torga<sup>II,d</sup>

<sup>1</sup>*Faculdade de Ciências Médicas. Universidade Nova de Lisboa. Lisboa, Portugal*

<sup>II</sup>*Unidade de Investigação em Saúde. Escola Superior de Saúde de Leiria. Leiria, Portugal*

<sup>III</sup>*Instituto Superior Miguel Torga. Coimbra, Portugal*

**Introduction:** In psychotherapeutic clinic, patients without acne marks report this experience with great emotional charge. In these individuals, it is expected to find: decrease in quality of dermatological life; increasing depression levels, anxiety and/or stress; strategies of coping adapted to the problem situation; disturbed capacity for symbolizing and modulating affective experiences (alexithymia).

**Objective:** The present work aims to identify what makes acne experience to be lived as a trauma.

**Methods:** Preliminary work included 45 semi-structured interviews to patients with or who had acne and 30 health-care professionals. Quantitative methodology including a preliminary version of the Inventory of beliefs and behaviors about Acne and its treatment (ICA), American Dermatology Academy Acne Scale, Quality of Dermatologic Life Index, Brief Coping, Depression, Anxiety and Stress Scale and Toronto Alexithymia Scale, was applied to a pilot sample (N=367) and, after reformulation, to the of university students (N=1,666). After this, 95 dermatologists answered questions about ICA. Comparative analysis of results is in progress.

**Results:** Studies II and III show that acne and the way it is perceived relates with the level of quality of dermatological life; depression, anxiety and stress; strategies of coping and capacity for symbolizing. The constructed ICA points out that although most subjects search for medical help, those with moderate to severe acne wait longer, but do it more often.

**Conclusions:** Data points to the existence of a relationship between having acne, psychological condition and behaviors. The present work reveals an association between moderate and/or severe acne and alexithymia, which without being surprising, is poorly reported.

**Descriptors:** Acne. Public Health. Quality of Life. Young Adults. Health Promotion.

<sup>a</sup> crebeloneves@gmail.com

<sup>b</sup> sara.dias@ipleiria.pt

<sup>c</sup> psicad@sapo.pt

<sup>d</sup> jorge.torgal@fcm.unl.pt

330

### EFFECT OF MASSAGE THERAPY IN CANCER PATIENTS IN PALLIATIVE SITUATION

Márcia Alves<sup>1,a</sup>, Maria Helena Jardim<sup>II,b</sup>, Bárbara Gomes<sup>III,c</sup>, Otília Freitas<sup>II,d</sup>

<sup>1</sup>*Hospital Dr. Nélio Mendonça. Instituto de Ciências Biomédicas Abel Salazar. Porto, Portugal*

<sup>II</sup>*Universidade da Madeira. Funchal, Portugal*

<sup>III</sup>*Escola Superior de Enfermagem do Porto. Porto, Portugal*

**Introduction:** The nurse must interact with people in situations of health or disease, improving their socio-cultural context and its transition process, using actions such as therapeutic massage which consists of pressing and rubbing the body or parts thereof.

**Objective:** Evaluating the effect of massage therapy in cancer patients in palliative situation.

**Methods:** We conducted a systematic literature review. Was held in databases online. Inclusion criteria were: articles between 2006 and 2012, full-text; adult patients. We selected 21 studies.

**Results:** The massage therapy reduces: a total pain and pain levels in the immediate and short-term. Showed a decrease in the use the SOS, however there is a study opposed to this result. Also contributing to decreased levels of nausea in the short term as well as in relaxation, depressed mood, muscle fatigue, stress, physical and emotional discomfort and improves the level of emotional well-being and sleep. In the long term there was no statistically significant difference in the improvement of quality of life, stress and suffering.

**Conclusions:** The massage therapy has beneficial effects in the short term and the level of quality of life and suffering are so contradictory referring to future investigations. We suggest the pursuit of empirical studies for greater consistency on the effects of massage therapeutic intervention in cancer patients in palliative situation and thus contribute to the practice of nursing excellence based on evidence.

**Descriptors:** Palliative care. Oncology. Cancer. Massage therapy.

<sup>a</sup> marcialves96@hotmail.com

<sup>b</sup> hjardim@uma.pt

<sup>c</sup> bgomes@esenf.pt

<sup>d</sup> omsfreitas@uma.pt

331

### BENEFITS OF PHYSICAL ACTIVITY IN CHOLESTEROL AND TRIGLYCERIDES IN THE ELDERLY

Marco Batista<sup>1,a</sup>, Samuel Honório<sup>1,b</sup>, Júlio Martins<sup>1,c</sup>, João Brito<sup>1,d</sup>

<sup>1</sup>Escola Superior de Educação de Torres Novas. Torres Novas, Portugal

<sup>11</sup>Universidade da Beira Interior. Covilhã, Portugal

Centro de Investigação em Atividade Física, Saúde e Lazer. Universidade do Porto. Porto, Portugal

<sup>111</sup>Escola Superior de Desporto de Rio Maior. Instituto Politécnico de Santarém. Rio Maior, Portugal

**Introduction:** According to Carvalho (1996), physical activity is now seen as a crucial mean of preventing some phenomenon associated with aging. This should not be understood only as an exercise in encoded form (aerobic exercise, muscle, etc.), but above all as spontaneous. A systematic increase in PA may prove to be an effective preventive strategy, for the individual and a way to improve public health.

**Objective:** Achieve the importance of physical activity programs for the elderly and their influence on BMI, triglycerides and cholesterol.

**Methods:** The sample consisted of 91 elderly individuals, 63 females and 28 males aged between 65 and 78 years of age. All seniors practice water activities, including swimming and gymnastics. It was analyzed the following aspects: BMI, Cholesterol, Triglycerides and practice time, seniors who were physically active at least 3 months, and seniors who maintained habits of physical activity for more than 3 months and still accumulated 30 or more minutes of other activities. We have applied cross-tables in order to confront the analyzed variables.

**Results:** It was found that seniors who maintained physical activity programs were broader outnumbered those who were overweight and obesity rates in Table I of BMI, and cholesterol and lower triglycerides.

**Conclusions:** We concluded therefore that physical activity programs that contemplate 2 or more hours per week, duly organized and systematized constitute a positive factor in combating inactivity and turn into a more active and cheerful elderly, and also can be a successful and extremely effective factor in the maintenance and regulation of triglycerides and cholesterol levels considered normal.

**Descriptors:** Physical Activity. Active Aging. BMI. Cholesterol. Triglycerides.

<sup>a</sup> marcobatist@gmail.com

<sup>b</sup> samuelhonorio@hotmail.com

<sup>c</sup> jmartins4@gmail.com

<sup>d</sup> jbrito@esdrm.ipsantarem.pt

332

### COMPARISON OF FUNCTIONAL FITNESS BETWEEN SEDENTARY AND ACTIVE ELDERLY WITH AAHPERD TESTS

Samuel Honório<sup>1,a</sup>, Marco Batista<sup>1,b</sup>, Júlio Martins<sup>1,c</sup>, João Brito<sup>1,d</sup>

<sup>1</sup>Escola Superior de Educação de Torres Novas. Torres Novas, Portugal

<sup>11</sup>Universidade da Beira Interior. Covilhã, Portugal

Centro de Investigação em Atividade Física, Saúde e Lazer. Universidade do Porto. Porto, Portugal

<sup>111</sup>Escola Superior de Desporto de Rio Maior. Instituto Politécnico de Santarém. Rio Maior, Portugal

**Introduction:** Cardoso (2002) reveals that physical activity in relation to body composition is an important factor in weight control, as it increases caloric expenditure and helps to maintain or increase lean body mass, decreases fat mass, and increases muscle mass, by regular physical activity in elderly people.

**Objective:** To analyze and compare the level of functional fitness in sedentary and physically active elderly.

**Methods:** The sample consists of 62 seniors, 42 female and 20 male gender. Data collection was conducted through a questionnaire with a total of 5 questions, and was applied a Battery Test AAHPERD.

**Results:** In tests of Coordination, sedentary and physically active elderly had an M=85 with a standard deviation of 27 in the Test Force upper limb, an M=24 with a standard deviation of 24, the Agility and balance test, an M=89 with a standard deviation of 23 in test Flexibility, an M=89 with a standard deviation of 10, and finally the General Aerobic Endurance test obtained an M=23 with a standard deviation of 23. This means that best results were obtained where the Test Coordination, Agility and Balance and Flexibility.

**Conclusions:** We concluded that physically active elderly showed more favorable in testing engines and sedentary. In most tests there were higher values in tests Coordination and Agility/Balance, and lower values in more physically demanding tests, including the test of upper limb strength and aerobic endurance overall.

**Descriptors:** Active Aging. Functional Fitness. Exercise. Battery Tests. Aerobic Endurance.

<sup>a</sup> samuelhonorio@hotmail.com

<sup>b</sup> marcobatist@gmail.com

<sup>c</sup> jmartins4@gmail.com

<sup>d</sup> jbrito@esdrm.ipsantarem.pt



333

**PSYCHOMETRIC PROPERTIES OF PORTUGUESE VERSION OF PERSONAL OUTCOMES SCALE: EPR**Cristina Simões<sup>1,a</sup>, Sofia Santos<sup>1,b</sup><sup>1</sup>*Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal*<sup>11</sup>*Centro de Estudos de Educação Especial. Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal*

**Introduction:** Assessing Quality of life (QOL) for people with Intellectual Disability (ID) have recently become a major emphasis in research because this concept is essential for intervention with this population. In Portuguese services, it is crucial develop, implement and use a systematic approach to the assessment of core QOL domains. It is necessary to develop a scale that allows self-reported measures to gather information about subjective perspectives and goals.

**Objective:** This study aims to analyse the reliability and validity of Escala Pessoal de Resultados (EPR), the Portuguese version of Personal Outcomes Scale (POS).

**Methods:** After the cross-cultural adaptation, EPR was re-administered to same person (with ID) and proxy at 2-3 weeks following its first application. The EPR' reliability was analyzed by Cronbach's alpha, split-half, test-retest and inter-rater coefficients. Were also performed content validity, construct and concurrent validity. Sample included 447 adults with ID (intermittent and limited support needs) and respective proxies.

**Results:** Study' results are discussed in terms of reliability and validity: EPR showed a good performance concerning internal consistency ( $\alpha > .90$ ), test-retest reliability ( $> .89$ ), interrater reliability, content, construct and concurrent validity.

**Conclusions:** EPR scale showed adequate scores concerning to validity indexes and it seems to be a useful measure of personal outcomes for Portuguese adults with ID. EPR can be use to improve program services and support planning, based on ratings. Also gives to Portuguese rehabilitation services QOL indicators that should be included in interventions.

**Descriptors:** Quality of life. Intellectual disability. Cross-cultural adaptation. Reliability. Validity.

334

**ASSESSING QUALITY OF LIFE ON ADULTS WITH INTELLECTUAL DISABILITY: ESCALA PESSOAL DE RESULTADOS VERSUS WHOQOL-BREF**Cristina Simões<sup>1,a</sup>, Sofia Santos<sup>1,b</sup><sup>1</sup>*Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal*<sup>11</sup>*Centro de Estudos de Educação Especial. Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal*

**Introduction:** Quality of life (QOL) has been increasingly used as a key outcome to determine the global impact of interventions for persons with intellectual disability (ID). It is also verifiable the scarcity of adjusted culture Portuguese tools, as well blind confidence in clinical (vs. inclusive) approach and overvaluation of proxies rather than client's with ID.

**Objective:** Two of QOL scales are Personal Outcomes Scale, which was translated to Portuguese (EPR) and WHOQOL-Bref. Both versions were compared and correlated to analyse its feasibility and usefulness in special education and rehabilitation field, in the assessment of Portuguese adults with ID.

**Methods:** EPR was applied to 219 institutionalized adults with ID from 18 to 64-years, who completed both questionnaires in self-administered way (respondents with sufficient reading ability) or under the way of interviewer administered form (most cases).

**Results:** Results are focused on reliability and validity of both instruments as well on their correlation. The total scores of both measures were higher for all participants. The internal consistency measured by Cronbach's alpha was .88 for EPR and .87 for WHOQOL-BREF. Expected associations (weak to moderate) were found between both scales ( $.25 > r < .52$ ;  $p < .01$ ). Domains scores differentiated between participants with different levels of support needs. Concurrent validity and convergent validity were studied.

**Conclusions:** Both scales demonstrated good psychometric performance and seem valuable to be used with populations with ID. However, moderate ID has higher scores in WHOQOL-BREF than EPR. Concurrent validity showed weak to moderate correlations between related measures of QOL construct.

**Descriptors:** Personal outcomes. Quality of life. Evaluation. Intellectual disability. EPR. WHOQOL-Bref.

<sup>a</sup> cristinasimoes.qv@gmail.com<sup>b</sup> sofiasantos@fmh.ulisboa.pt<sup>a</sup> cristinasimoes.qv@gmail.com<sup>b</sup> sofiasantos@fmh.ulisboa.pt

335

### HERB-DRUG INTERACTIONS AMONG COMMONLY USED PSYCHOACTIVE SUBSTANCES BY HEALTHCARE STUDENTS

André Coelho<sup>a</sup>, Liliana Aranha Caetano<sup>b</sup>

*Escola Superior de Tecnologia da Saúde. Instituto Politécnico de Lisboa. Lisboa, Portugal*

**Introduction:** Despite the widespread use of psychoactive substances among student populations, documented interactions between herbal medicinal products and prescribed drugs are rare.

**Objective:** The aim of this study was to determine the prevalence of concomitant use of psychoactive substances among healthcare students in the Lisbon School of Health Technology, Portugal, in order to assess the risk of potential herb-drug interactions.

**Methods:** During April 2011, all consenting healthcare students were requested to fill a modified pilot-tested semi-structured self-reported questionnaire based on previous national surveys. The questionnaire consists of 66 items covering demographic characteristics, health and well-being, prevalence and frequency of use of several types of substances, including alcohol and tobacco, prescribed drugs and OTCs. Possible interactions were determined from a literature review of documented interactions. Chi-square test and Spearman correlation coefficient were used to evaluate the association between variables.

**Results and Conclusions:** The results indicate that the most currently used substances were xanthines (97%), alcohol (97%), and herbal medicinal products with psycho stimulant effect (61%). Except for xanthines, the use of these substances seemed to be only punctual. Use of prescribed sedatives or mild anxiolytic herbal medicines at least once in the year (56%) was relatively high when compared with previous studies among students populations. Concomitant use of sedatives and mild stimulants ( $P=0.502$ ) indicate potential risk for antagonism. The high rates of drug use among surveyed healthcare students, and the increasing popularity of herbal medicines, make it important to assess potential herb-drug interactions in broader student populations.

**Descriptors:** Psychoactive substance use. Healthcare students. Herb-drug interactions.

<sup>a</sup> andre.coelho@estesl.ipl.pt

<sup>b</sup> liliana.caetano@estesl.ipl.pt

336

### COMMUNICATION WITH ELDERLY PATIENTS – A WEAKNESS OR AN OPPORTUNITY TO YOUNG NURSES?

Cátia Pereira<sup>a</sup>, Teresa Matos<sup>b</sup>

*Centro Hospitalar Barreiro-Montijo. Barreiro, Portugal*

**Introduction:** In everyday professional there is a generational gap between nurses and patients, implying different values, beliefs, expectations, language, among others, affecting the quality of care provided. Develop communication skills is essential to transform potential difficulties into opportunities and professional enrichment.

**Objective:** To answer the research question: which factors influence communication with elderly patients and which implications for nursing practice? We pretend to contribute to development of evidence-based practice and the highest quality of nursing care.

**Methods:** Research in EBSCO databases (MEDLINE and CINHALL) and SciELO, October 2013, using the keywords: communication AND elderly AND nurs\*. Analyzed abstracts and included articles in Full Text which approach communication between nurses and elderly patients in nursing homes or hospitals. Analyzed 11 articles.

**Results:** Factors related to: Nurses – active listening, positive attitude, technique language, attention to the cognitive abilities, sensibility to the problems and changes related to inpatient, time to communicate, perception of the role of the elderly an aging, appreciation of touch. Patients – personal and territorial invasion, lack of privacy, feeling of loneliness, cognitive changes, disease, level of education, differences in language, forgetfulness. Environment – noises, nurse's workload, presence/absence of family, luminosity, color of walls, temperature and odors, change of room without consent, no use of curtains/folding screens.

**Conclusions:** Nurses have responsibility for optimizing communication. They should undertake training to develop communication skills helping the elderly's transition health/disease or adaptation to new conditions related with aging, improving their quality of life.

**Descriptors:** Elder. Nurse. Communication. Aging. Hospitalization.

<sup>a</sup> catia.sp@gmail.com

<sup>b</sup> magui84@msn.com

337

### THE CHILD WITH HIV/AIDS: TRUTH DISCLOSURE

Dulce Galvão<sup>a</sup>, Cristiana Rebelo<sup>b</sup>, Daniela Almeida<sup>c</sup>, Mafalda Vale<sup>d</sup>

*Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal*

**Introduction:** HIV/AIDS diagnosis disclosure to children brings health benefits and less psychological damage; however, parents avoid it because of HIV-related stigma (WHO, 2011).

**Objective:** To identify key aspects, strategies and consequences of parents' disclosure to the child with HIV/AIDS.

**Methods:** Systematic review of studies published between January/2002 and July/2013 which, regardless of their research methodology, included parents' disclosure to the child with HIV/AIDS, according to the WHO definition, and full-text papers found in EBSCO and in CINAHL, MEDLINE, MedicLatina, Academic Search Complete and Psychology and Behavioral Sciences Collection databases. Search keywords were: child, family, parents, mother, father, HIV/AIDS, diagnosis disclosure and its corresponding terms in Portuguese and Spanish. Studies on disclosure to children with a diagnosis other than HIV/AIDS were excluded. A total of 1791 papers were found: 20 were selected and 9 were used.

**Results:** Disclosure should be previously prepared. It is a responsibility of the parents/caregivers. Parents fear that their child will react to stigmatization and discrimination. Factors such as the child's age, the parents' level of education, the country's development, reluctance to take medication, and the use of antiretroviral schemes were considered. Diagnosis is partially disclosed or disclosed in a single moment, using simple explanations. It enables higher adherence to therapeutics and responsibility. Stigmatization, social isolation and discrimination are negative consequences.

**Conclusions:** Nurses should help parents/caregivers dealing with this process. There should be a relationship of trust and preparation as to how and when diagnosis should be disclosed.

**Descriptors:** Child. Family. Parents. HIV/AIDS. Diagnosis disclosure.

<sup>a</sup> dgalvao@esenfc.pt

<sup>b</sup> cristianaarebelo@gmail.com

<sup>c</sup> daniela.sf.almeida@hotmail.com

<sup>d</sup> mafaldafesta@hotmail.com

338

### INFERTILITY IN MALES

Carolina Henriques<sup>1,a</sup>, Paula Amado<sup>11,b</sup>, João Franco<sup>111,c</sup>

<sup>1</sup>*Unidade de Investigação em Saúde. Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

<sup>11</sup>*Maternidade Dr. Daniel de Matos. Centro Hospitalar e Universitário de Coimbra. Coimbra, Portugal*

<sup>111</sup>*Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal*

**Introduction:** Infertility is still a taboo subject in many socio - cultural contexts, while remaining an emerging phenomenon in accordance with current statistical data.

**Objective:** To understand the experiences of the infertile man who wants to have children.

**Methods:** A study of phenomenological nature was developed. Data were collected among ten men to whom infertility had been diagnosed.

**Results:** With regard to the experiences of the infertile man who wants to have children, we found the following categories: the significance of having a child, meaning and feelings before diagnosis and due to the diagnosis of infertility, infertility implications, meaning of being infertile, strategies for coping with infertility, changes experienced, concerns and difficulties experienced throughout the process.

**Conclusions:** We believe that our study may contribute to a better understanding of men's experiences of this human experience, representing an added value for health professionals and human caring in nursing.

**Descriptors:** Infertility. Men. Phenomenology.

<sup>a</sup> carolina.henriques@ipleiria.pt

<sup>b</sup> paula-amado@hotmail.com

<sup>c</sup> franco@esenfc.pt

339

### EMOTIONAL CHANGES IN POSTPARTUM WOMEN

Carolina Henriques<sup>1,a</sup>, Elisa Caceiro<sup>1,b</sup>, Maria Santos<sup>1,c</sup>, Sónia Ramalho<sup>1,d</sup>

<sup>1</sup>*Unidade de Investigação em Saúde. Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

<sup>11</sup>*Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

**Introduction:** Transition to parenthood is a complex phenomenon that involves different stages of physical and psychological development.

**Objective:** To describe the sociodemographic and obstetric characteristics of a group of postpartum women, and to identify the level of auto-perception of psycho-emotional changes.

**Methods:** Cross-sectional descriptive study. Application of a sociodemographic and obstetric questionnaire, along with a scale to rate the psycho-emotional changes felt by the puerperal, to a sample of 110 postpartum women, admitted to obstetric services.

**Results and Conclusions:** The puerperal had on average 29.1 years old, 78.0% were married, 33.0 % had secondary education, whereas 80% planned and 95.0% wished their pregnancy. The majority (95.4%) had a supervised pregnancy and 55.0% attended to childbirth preparatory courses. While 54.0 % had a normal delivery, 31.0% were submitted to caesarean, and in 72.7 % of the cases, the birth was assisted by the father of the newborn. In what concerns nursing care, 53.7% of the women considered the care provided during labor as “very sufficient”, reporting as significant the “sympathy, affection and readiness to act”. During hospitalization, 58.2 % of the women reported that the provision of nursing care was “very sufficient”, having highlighted as important aspects the “sympathy and affection shown” (24.5 %), and that nurses should give more importance to “understanding and supporting the adaptation to a new reality/life situation” (19.1%). In terms of psycho-emotional changes, an average of 37.4 ( $\sigma=9.4$ ) was obtained, indicating low levels of psycho-emotional changes ( $X_{med}=56$ ).

**Descriptors:** Parenting. Puerperium. Emotions. Nursing.

<sup>a</sup> carolina.henriques@ipleiria.pt

<sup>b</sup> elisa.caceiro@ipleiria.pt

<sup>c</sup> lsantos@ipleiria.pt

<sup>d</sup> sonia.ramalho@ipleiria.pt

340

### EFFECTS OF TWO EXERCISE TRAINING PROGRAMS AND DETRAINING IN OLDER WOMEN

Rafael Oliveira<sup>1,II,a</sup>, Liliana Ramos<sup>1,II,b</sup>, Rafael Souza<sup>1,c</sup>, Carlos Santamarinha<sup>III,d</sup>, João Brito<sup>1,II,IV,e</sup>

<sup>1</sup>*Escola Superior de Desporto de Rio Maior. Rio Maior, Portugal*

<sup>11</sup>*Unidade de Investigação. Instituto Politécnico de Santarém. Santarém, Portugal*

<sup>111</sup>*Câmara Municipal de Esposende. Esposende, Portugal*

<sup>1111</sup>*Centro de Investigação e Qualidade de Vida. Santarém, Portugal*

**Introduction:** Physical exercise outcomes in morbidity prevention and quality of life improvement show benefits for the aging process delay.

**Objective:** Evaluate the impact of training in elderly women over nine months under two exercise programs and three months of detraining.

**Methods:** 51 Women (age 68,22±9,12 years) participated in a supervised exercise program divided in two groups: land-exercise group (GA) and group of land-exercise plus aquatic-exercise (GB). They were evaluated at the beginning, at the end of the exercise training program and after a detraining period.

**Results:** After the training period GA shows a decrease in systolic (SBP) and diastolic (DBP) blood pressure, respectively  $p=0,001$  and  $p=0,001$  while resistance of lower limbs ( $p=0,013$ ) improved. Group B shows a decrease in SBP ( $p=0,035$ ) and DBP ( $p=0,001$ ) while agility ( $p=0,045$ ) and resistance upper limbs ( $p=0,014$ ) improved. After a detraining period, GA increases SBP ( $p=0,009$ ) and DBP ( $p=0,005$ ). Resistance of lower and upper limbs (respectively  $p=0,000$  and  $p=0,000$ ), agility ( $p=0,002$ ), balance ( $p=0,029$ ) and aerobic capacity ( $p=0,002$ ) decreased. Group B significantly increases in SBP ( $p=0,021$ ). Resistance of lower and upper limbs (respectively  $p=0,000$  and  $p=0,000$ ), agility ( $p=0,000$ ) and aerobic capacity ( $p=0,003$ ) decreased.

**Conclusions:** These findings suggest the practice of regular supervised exercise program over 9 months can improve strength and agility in elderly women. In addition, increased physical activity was associated with better improvements. However 3 months of detraining results in a loss of capacities.

**Descriptors:** Older women. Exercise. Training. Detraining.

<sup>a</sup> oliveira321@hotmail.com

<sup>b</sup> lilianaramos@esdrm.ipsantarem.pt

<sup>c</sup> rleaosouza@hotmail.com

<sup>d</sup> ctsantamarinha@hotmail.com

<sup>e</sup> jbrito@esdrm.ipsantarem.pt

341

### MOTHER-INFANT RELATIONSHIP WITH MOTHERS SUFFERING FROM ANXIETY AND MOOD AMENDMENT

Sónia Ramalho<sup>1,a</sup>, Dulce Galvão<sup>1,b</sup><sup>1</sup>*Unidade de Investigação em Saúde. Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*<sup>11</sup>*Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal*

**Introduction:** Safety, protection and emotional regulation are key aspects for constructing mother-child relationships. Therefore, the postpartum period is critical to early promote this relationship.

**Objective:** To describe the feelings and experiences of mothers presenting anxiety and mood alterations and their relationships with the newborn.

**Methods:** Cross-sectional descriptive study. Application of the “Observation Mother-Baby” grid to 44 postpartum women interned in a midwifery service.

**Results:** The puerperal group had a mean age of 31.7 years; 79.5% were married and 45.5% rural residents. The percentage of women without obstetric history was of 59.1% and 52.3% had normal deliveries. The proportion of primiparous women was of 47.7%, and in 88.6% of the cases, mothers were accompanied by the husband or the baby’s father. Somatic complaints were reported in 93.1% of the cases, along with anxiety (54.5%), tearfulness (40.9%), lack of affection (34%), and 54.5% of the women reported fear of being unable to provide baby care. Poor communication was presented by 59.0% of the mothers, whereas only 56.8% would carry the baby, and 47.7% showed head and facial movements. Among the group, 52.2% presented a tense facial expression and 36.3% sorrow. Regarding the concern with the baby, 65% responded to the requests, 25% exaggerated and 13% ignored the requests of the baby.

**Conclusions:** Women with mood swings and anxiety deserve priority intervention for emotional and psychological support. During the transition to parenthood, nurses can promote and oversee the mother-infant relationship and teach mothers to care for their babies.

**Descriptors:** Mother. Postpartum. Feelings. Nursing.

<sup>a</sup>sonia.ramalho@ipleiria.pt<sup>b</sup>dgalvao@esenfc.pt

342

### INFLUENCE OF HEALTH INDICATORS IN PREVALENCE OF HTA AND OBESITY IN HIGHER EDUCATION

Rosa Pereira<sup>1,11,a</sup>, Catia Monteiro<sup>11</sup>, Rui Soares<sup>11</sup>, Sandra Ribeiro<sup>11</sup>, Vera Paiva<sup>11</sup>, Orelbe Medina<sup>1,11</sup>, Fernando Azevedo<sup>1,11</sup><sup>1</sup>*Centro Interdisciplinar de Ciências da Saúde. Póvoa de Lanhoso, Portugal*<sup>11</sup>*Instituto Superior de Saúde do Alto Ave. Póvoa de Lanhoso, Portugal*

**Introduction:** Several studies showed the prevalence of risk factors in younger populations and associations between their variables and increased risk of cardiovascular diseases (CD); to our knowledge there are no studies to examine these factors in young adults belonging to the region of Alto Ave. They will be an important part of the working population and, as such, the onset of CD in these individuals could lead to negative consequences.

**Objective:** To analyze the prevalence of hypertension and obesity as risk factors for cardiovascular disease, in a representative sample of the student population at higher education institution, ISAVE.

**Methods:** It was carried an exploratory, descriptive, correlational and cross-sectional study in a sample from a total population of 825 students. There were selected modifiable and non-modifiable risk factors associated with CV. Both questionnaire and physical measurements were performed upon signed consent.

**Results:** There was no significant difference in prevalence of hypertension among the male and female students. The prevalence of obesity was significantly higher in the male than in the female population. Abdominal obesity was more frequently encountered in the male. Alcohol consumption and smoking cigarettes were a significantly higher problem in the male population than in the female one. Physical inactivity was more often found in the female students.

**Conclusions:** Cardiovascular risk factors are present in the students. Considering the high levels of morbidity and mortality of CD, as well as the high costs associated with treatment, there should be a high interest in prevention programs aimed at students in high learning institutions.

**Descriptors:** Risk factors. Higher Education. Cardiovascular Diseases. Hypertension. Obesity.

<sup>a</sup>rpereira@isave.pt

343

### COCAINE, CRACK AND MULTIPLE DRUGS CONSUMPTION: INTERFACE WITH USERS' QUALITY OF LIFE

Sandra Pillon<sup>1,a</sup>, Natália Jora<sup>1,II,b</sup>, Josélia Rocci<sup>III,c</sup>, Maria Raimundo<sup>d</sup>, Paulo Ferreira<sup>1,e</sup>

<sup>I</sup>Universidade de São Paulo. São Paulo, Brasil

<sup>II</sup>Psychosocial Rehabilitation Centre. Ribeirão Preto, SP, Brasil

<sup>III</sup>Psychosocial Rehabilitation Centre. Jaboticabal, SP, Brasil

**Introduction:** The dependence on alcohol and tobacco has been strongly associated negatively with the general state of health. In relation to alcohol misusers, there is evidence to suggest that alcohol misusers presented with more impaired physical, social and mental health area of the quality of life, when compared to those who are abstinent.

**Objective:** This study examined the relationship of the use of cocaine, crack and multiple drugs and their interface with quality of life of users.

**Methods:** A cross-sectional study was undertaken at an addiction centre in Southern Brazil. Data were collected from a sample of 140 substance misusers who completed Socio-demographic information, Severity Alcohol Dependence Data (SADD), Severity of Dependence Scale (SDS), World Health Organization Quality of Life – short version (WHOQOL-bref), and the Addiction Severity Index (ASI-6). For data analysis, Fisher's Exact Test, Pearson and Spearman's correlation coefficients were used; in the comparison, Analysis of Variance (ANOVA), the multiple linear regression analysis model was used.

**Results:** Severe levels of the alcohol and drug dependence syndromes were evident. No significant differences were found between the cocaine and crack groups, but these differed from the multiple drug users' group showing higher scores on the scales (SADD, SDS and ASI6). The findings also indicate that the severity of the drug use problems interferes with perceived quality of life.

**Conclusions:** The study showed that that the consumption of these substances have significant, influences on the biological, psychological, and social aspects of the quality of life of substance misusers.

**Descriptors:** Cocaine. Crack Cocaine. Quality of life; Substance Misuse. Alcohol.

<sup>a</sup>pillon@eerp.usp.br

<sup>b</sup>natalia.jora@usp.br

<sup>c</sup>joselia.rocci@hotmail.com

<sup>d</sup>mf.mariafernanda@yahoo.com.br

<sup>e</sup>pausefer@eerp.usp.br

344

### THE INFLUENCE OF WEIGHT STATUS ON PHYSICAL FITNESS OF PRIMARY SCHOOL CHILDREN

Carlos Luz<sup>1,a</sup>, Gabriela Almeida<sup>II,b</sup>, Luís Rodrigues<sup>III,c</sup>, Rita Cordovil<sup>IV,d</sup>

<sup>I</sup>Escola Superior de Educação de Lisboa. Instituto Politécnico de Lisboa. Lisboa, Portugal

<sup>II</sup>Faculdade de Ciências da Saúde. Universidade Fernando Pessoa. Porto, Portugal

<sup>III</sup>Escola Superior Desporto e Lazer de Melgaço. Instituto Politécnico de Viana do Castelo. Viana do Castelo, Portugal

<sup>IV</sup>Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal

**Introduction:** Low levels of physical fitness among children result in an increased incidence of obesity and other diseases that are typically associated with older people, therefore physical fitness plays an important role in maintaining a healthy lifestyle.

**Objective:** The aim of this study was to analyse the differences in cardiovascular fitness and speed/agility tests between normal and overweight/obese children.

**Methods:** A sample of 338 participants (6 to 11 year-olds) was divided in 2 groups (243 with normal BMI and 95 with overweight/obese problems), using the international cut-off points for Body Mass Index (BMI) (Cole & Lobstein, 2012). The PACER test was used to measure cardiovascular fitness and the shuttle run test was used to measure speed/agility.

**Results:** We found significant differences between the 2 groups in the PACER and shuttle run tests, indicating lower fitness scores in overweight/obese children. This trend appears for both genders in the PACER test and only for boys in the shuttle run test. It is important to notice that these significant differences only appear from the age of 8 in both tests.

**Conclusions:** It seems that being overweight and obese could become a serious problem with aging, with greater emphasis on cardiovascular fitness. It is imperative to begin health promotion policies and physical activity programs to improve not only cardio-respiratory fitness, but also other physical fitness components such as speed/agility. Schools may play an important role in identifying children with low physical fitness and overweight/obese problems in order to define strategies to promote healthy lifestyles.

**Descriptors:** Children obesity. Cardiovascular fitness. Speed. Agility.

<sup>a</sup>carlosmiguelluz@gmail.com

<sup>b</sup>gabrielasna@hotmail.com

<sup>c</sup>lprodrigues@esdl.ipv.pt

<sup>d</sup>ritacordovil@fmh.ulisboa.pt

345

### EDUCATION FOR HEALTH: ALCOHOL AND YOUNG AGED SCHOOL TEENAGERS

Paula Mendonça<sup>1,a</sup>, Ana Rocha<sup>1,b</sup>, Ana Sousa<sup>1,c</sup>, Flávia Santo<sup>1,d</sup>, Francisco Costa<sup>1,e</sup>, Patrícia Dôro<sup>1,f</sup>

<sup>1</sup>*Escola Superior de Tecnologia da Saúde. Instituto Politécnico de Lisboa. Lisboa, Portugal*

<sup>11</sup>*Centro de Estudos de Sociologia. Universidade Nova de Lisboa. Lisboa, Portugal*

**Introduction:** Alcohol consumption starts at an early age in Portuguese people. Health problems and risk behavior associated with excessive consumption can be prevented or highly reduced through effective school programs. Health professionals, such as biomedical scientists, (BSc), are important in promoting healthy lifestyles through the transmission of knowledge.

**Objective:** Explore the role of the BSc in promoting health via intervention and clarification actions, (ICA), with 9<sup>th</sup> grade students from Agrupamento de Escolas da Portela e Moscavide (AEPM) and Visconde Juromenha (AEVJ); Verify the relationship between participating in the ICA and the level of knowledge acquired from it.

**Methods:** Behaviors and beliefs concerning alcohol consumption and knowledge about the repercussions of it in the human body, mainly regarding the liver, were assessed by questionnaire. The questionnaire was completed before and after the ICA, by the control group (CG) and the study group (SG), respectively. The answers concerning knowledge were given points, later converted to a score from 0 to 100%. Data was analyzed applying descriptive statistics and the t-student test using SPSS 20.0.

**Results:** After statistical analysis, it was found an average score of 48.8% for SG and 46.2% for CG. The difference between groups was statistically significant only in AEPM where ICA included a practical methodology (microscopic and macroscopic observation of pork livers), contrary to AEVJ.

**Conclusions:** BSc intervention through ICA's improves teenagers' knowledge. Theoretical knowledge associated with practical approaches improves the retention of information and the development of a conscious behavior about the consumption of alcohol.

**Descriptors:** Health Promotion. Teenagers. Alcohol. Liver diseases. Behaviors.

<sup>a</sup> paula.mendonca@estesl.ipl.pt

<sup>b</sup> anacm\_rocha@hotmail.com

<sup>c</sup> hannah\_ks@hotmail.com

<sup>d</sup> santo\_fm@hotmail.com

<sup>e</sup> francisco.costa@fcsh.unl.pt

<sup>f</sup> patricia\_doro@sapo.pt

346

### RELIABILITY OF A COMPREHENSIVE FITNESS TEST BATTERY IN PERSONS WITH FIBROMYALGIA

Francisco Dominguez-Muñoz<sup>1,a</sup>, Daniel Traviesu<sup>1</sup>, Pedro Olivares<sup>11</sup>, Héctor Corzo<sup>1</sup>, Miguel Hernandez-Mocholí<sup>1</sup> and Narcis Gusi<sup>1</sup>

<sup>1</sup>*Universidad da Extremadura. Cáceres, España*

<sup>11</sup>*Universidad Autónoma de Chile. Araucanía, Chile*

**Introduction:** Person with FM needs a comprehensive fitness test battery to assess a monitor the evolving functional capacity. The adequate assessment required the adequate reliability index of this test.

**Objective:** The objective of this study is to evaluate the reliability of Elay's revised fitness test battery in persons with fibromyalgia (FM).

**Methods:** One single investigator measured 31 women diagnosed with FM. Participants performed twice the Elay's battery (hand-grip, time up and go, 6 minutes walking test, seat and reach for senior and impaired persons) intersticed by a one-week test-retest method.

**Results:** Every single test was highly reliable (ICC>.90; SEM ranged from 0.8% to 7.2%; SRD ranged from 2.2% to 19.9%) in person with FM.

**Conclusions:** We conclude that the Elay's revised fitness test battery is feasible, safe and reliable in FM patients. The reliability indexes allow to clinically assess the functional changes in this population.

**Descriptors:** Fibromyalgia. Test. Retest. Reliability. Fitness.

<sup>a</sup> fjdominguez@unex.es

347

### TRANSLATION AND SPANISH CULTURAL ADAPTATION OF THE FIBROMYALGIA KNOWLEDGE QUESTIONNAIRE (FKQ)

Francisco Dominguez-Muñoz<sup>1,a</sup>, Judit Garcia-Matador<sup>1</sup>, Pedro Olivares<sup>1</sup>, Héctor Corzo<sup>1</sup>, Paloma Rohlf-Domínguez, Narcis Gusi<sup>1</sup>

<sup>1</sup>Universidad da Extremadura. Cáceres, Espanha

<sup>11</sup>Universidad Autónoma de Chile. Araucanía, Chile

**Introduction:** Fibromyalgia (FM) show a complex syndrome scenario that impact on the health related quality of life of patients. The level of knowledge is crucial to assess the self-management of patients but there is a lack of instruments. FM is a tool that evaluates knowledge about FM.

**Objective:** We aimed to translate and culturally adapt the Fibromyalgia Knowledge Questionnaire (FKQ) from the original Brazilian-Portuguese Version to Spanish.

**Methods:** We performed and evaluated the forward-back translation method and cultural adaptation to ensure the right comprehension by cognitive and rephrasing method. We also quantitatively assessed the level of understandability by item.

**Results:** The Spanish version of the FKQ was obtained. The interviewed participants indicated that the questionnaire was highly “clear and understandable”. Some adaptations were made for conceptual reasons.

**Conclusions:** We present the Spanish version of the FKQ, and its ease to use.

**Descriptors:** Chronic illness. Disease-specific knowledge. Chronic symptom. Quality of life.

<sup>a</sup> fjdominguez@unex.es

348

### EIGHT WEEKS OF VIGOROUS EXERCISE ARE ENOUGH FOR A SIGNIFICANT REDUCTION IN BLOOD PRESSURE

Pedro G. Morouço<sup>1,11,a</sup>, João Guerra<sup>11</sup>, Nuno Ângelo<sup>11</sup>, Rogério Salvador<sup>11</sup>

<sup>1</sup>Centro para o Desenvolvimento Rápido e Sustentado de Produto. Marinha Grande, Portugal

<sup>11</sup>Escola Superior de Educação e Ciências Sociais. Instituto Politécnico de Leiria. Leiria, Portugal

**Introduction:** Medical societies recommend increased physical activity to be part of antihypertensive therapies. However, the intensity and duration of the sessions that can induce significant reduction on blood pressure (BP) are to be determined.

**Objective:** The aim of the present study was to verify if 8 weeks of vigorous physical activity are enough to produce a significant reduction in BP of hypertensive men (i.e., BP $\geq$ 140/90 mmHg).

**Methods:** Fourteen men (41.8 $\pm$ 17.2 years of age; with overweight 27.9 $\pm$ 5.5 kg.m<sup>-2</sup>) participated in 3 high intensity training sessions per week, during 8 weeks. Training included 40 min of vigorous physical activity (20 min of strength training and 20 min of aerobic exercises) after a 10 min warm-up and followed by 10 min of recovery. BP was assessed (average of 3 measurements) before the training period, in the 4<sup>th</sup> week and in the 8<sup>th</sup> week, according to established recommendations.

**Results:** Baseline values of systolic (SBP) and diastolic (DBP) blood pressure were 145.5 $\pm$ 8.8 and 88.0 $\pm$ 2.4 mmHg, respectively. Four weeks were not enough to produce a significant reduction of SBP and DBP (-3.57 $\pm$ 1.58 and -3.10 $\pm$ 1.10 mmHg, respectively) but 8 weeks were (SBP: -8.38 $\pm$ 1.74 mmHg; p=0.001;  $\eta^2$ =0.718;  $\rho$ =0.994; and DBP: -4.64 $\pm$ 1.48 mmHg; p=0.034;  $\eta^2$ =0.430;  $\rho$ =0.656).

**Conclusions:** These results suggest that 8 weeks of vigorous physical activity are enough to reduce both systolic and diastolic blood pressure in hypertensive men. Considering that low physical activity is a major risk factor for cardiovascular disease and increased mortality, health related professionals should motivate hypertensive men to engage in vigorous physical activity programs.

**Descriptors:** Exercise. Strength. Aerobic. Systolic blood pressure. Diastolic blood pressure.

<sup>a</sup> pedro.morouco@ipleiria.pt



349

### MANAGEMENT OF FAMILY CAREGIVERS' EMOTIONS: A CHALLENGE IN PEDIATRIC INTENSIVE CARE NURSING

Hugo Martins<sup>a</sup>, Nuno Fernandes<sup>b</sup>

*Unidade de Investigação & Desenvolvimento em Enfermagem. Escola Superior de Enfermagem de Lisboa. Lisboa, Portugal*

**Introduction:** The emotional dimension of the person and its importance in healthcare is particularly relevant to nursing, since the nursing process is relational, steeped with emotions that emerge from human experiences. However, this emotional dimension is sometimes undervalued in practice because of its complexity. The integration of the emotional dimension of children's and their caregivers' experiences, acknowledging that critical disease has an intense impact on them, is of extreme importance; as so, family caregivers should be considered as nursing clients themselves and not just partners in care of their children.

**Objective:** This work aims at analyzing the emotional impact of the hospitalization of a critically ill child on family caregivers, as well as their needs and the nursing interventions that may be mobilized to minimize that impact.

**Methods:** A literature review (EBSCOhost Integrated Search and printed publications) of articles from 1988 to 2012 was performed, resulting in 32 articles in Portuguese, English and Spanish.

**Results:** Family caregivers experience the hospitalization of their child as negative and emotionally intense, associated with different needs and emotions through the several phases of hospitalization. Emotional management can help minimize their suffering and translates into actions/interactions in anticipatory and reactive moments, on four major areas: providing information, promoting parenting role, developing trust and providing support.

**Conclusions:** The hospital admission of a critical ill child affects family caregivers negatively. Nurses must assess their emotions and needs and develop therapeutic interventions to minimize the negative impact of their experience. Different moments of hospital stay are associated with different emotions, needs and interventions.

**Descriptors:** Family caregiver. Critically ill child. Emotion management. Nursing. Therapeutic interventions.

<sup>a</sup> martins.hgoncalves@gmail.com

<sup>b</sup> fernandes.npfs@gmail.com

350

### ASSESSMENT OF NUTRITIONAL STATUS OF ELDERLY PATIENTS WITH HIP FRACTURE

Cátia Gonçalves<sup>1,a</sup>, Catarina Guerreiro<sup>1</sup>, Elizabeth Silva<sup>11</sup>

*<sup>1</sup>Escola Superior de Tecnologia da Saúde de Lisboa. Lisboa, Portugal*

*<sup>11</sup>Hospital Nossa Senhora do Rosário. Centro Hospitalar Barreiro Montijo. Barreiro, Portugal*

**Introduction:** Malnutrition is common among elderly patients with hip fracture and is directly related to increased complications (morbidity, mortality). It has been demonstrated that nutritional status is a predictor of postoperative complications taking a decisive role in the clinical evolution of these patients.

**Objective:** The aim of this study is to assess the postoperative nutritional status and dietary intake of elderly patients with hip fracture.

**Methods:** Observational and descriptive study of the epidemiology of 45 patients with hip fracture. The nutritional status was assessed by the using the MNA and anthropometric parameters both performed during the first 48 hours following the surgery. Dietary intake was calculated for each patient on the third day after surgery and the day preceding the discharge through the food 24h recall. Dietary intake was compared with nutritional requirements.

**Results:** Thirty-six women and nine men were included with a mean age of 81 years. According to the MNA score, 31% of patients were malnourished, 49% were at risk of malnutrition and 20% had good nutritional status. Assessment of the dietary intake during the third day post-surgery revealed that only 6.8% of the patients achieved caloric requirements and 22.7% achieved protein requirements. At the time of discharge this percentage increased to 19.5% and 24.4% respectively. A negative relationship was found between protein intake and length of stay ( $r=-0.463$   $p=0.002$ ).

**Conclusions:** A high percentage of elderly patients with hip fracture are malnourished or at risk of malnutrition during hospitalization. Postoperative dietary intake is insufficient compared to the energy requirements.

**Descriptors:** Malnutrition. Nutritional status. Hip fracture. Dietary intake. Length of stay.

<sup>a</sup> catiafeg@gmail.com

351

### HEALTH PROMOTION IN HIGHER EDUCATION: RESILIENCE AND QUALITY OF LIFE

Maria João Amante<sup>a</sup>, Emília Martins<sup>b</sup>, Francisco Mendes<sup>c</sup>, Susana Fonseca<sup>d</sup>, Rosina Fernandes<sup>e</sup>, Paula Xavier<sup>f</sup>, Cátia Magalhães<sup>g</sup>

*Escola Superior de Educação. Instituto Politécnico de Viseu. Viseu, Portugal*

**Introduction:** The access to higher education could be a defining moment in the resolution of important developmental tasks (Ferreira & Ferreira, 2005). But at the same time, it may be associated with multiple stressors such as constant pressure to be successful, conflicts with peers and worries about the future (Dias, 2006). These stressors may also have consequences in health and quality of life. In this sense, resilience seems crucial to face this transition and even to prevent health problems in students.

**Objective:** This study aimed to characterize the resilience and quality of life in a sample of a university population in relation with socio-demographic variables and analyze how these variables relate to each other.

**Methods:** The sample included 176 college participants of both sexes (21% men; 79% women), aged between 17 and 52 years (22.3±6.5). Participants answered the Resilience Scale (Oliveira & Machado, 2011), the WHOQOL-Brief assessing quality of life (Canavarro et al, 2006), and a sociodemographic questionnaire.

**Results:** Descriptive and inferential analysis (Spearman,  $p \leq .05$ ) showed that only 15 % had a reduced resilience. Resilience revealed a positive correlation with quality of life ( $p \leq .01$ ), particularly in the dimensions of personal competence ( $\rho = .586$ ), self-discipline ( $\rho = .438$ ), autonomy ( $\rho = .153$ ), problem solving ( $\rho = .264$ ) and optimism ( $\rho = .175$ ).

**Conclusions:** A greater knowledge of personal resources, such as resilience, and its association with the quality of life during academic experience is essential for the development of intervention programs that promote personal and social development of students in higher education with repercussions on their health.

**Descriptors:** Health promotion. Resilience. Quality of life. Higher education. Students.

<sup>a</sup> majoa@esev.ipv.pt

<sup>b</sup> emiliamartins@esev.ipv.pt

<sup>c</sup> fmendes@esev.ipv.pt

<sup>d</sup> susanafonseca@esev.ipv.pt

<sup>e</sup> rosina@esev.ipv.pt

<sup>f</sup> paulaxavier@esev.ipv.pt

<sup>g</sup> cmagalhaes@esev.ipv.pt

352

### WELL-BEING AND ACADEMIC SUCCESS IN ELEMENTARY SCHOOL

Susana Fonseca<sup>a</sup>, Maria João Amante<sup>b</sup>, Margarida Santos<sup>c</sup>, Lia Araújo<sup>d</sup>, Paula Xavier<sup>e</sup>, Cátia Magalhães<sup>f</sup>

*Escola Superior de Educação. Instituto Politécnico de Viseu. Viseu, Portugal*

**Introduction:** The importance of well-being in children adaptation to the school environment had been pointed out in the last years. According to Lemos & Coelho (2010), well-being has been recognized in school contexts, either as an indicator of overall school adaptation of students, either as a relevant educational purpose in itself. The academic dimensions, as well as a set of behaviors, thoughts and emotions, with an emphasis in well-being, had been highlighted as factors that contribute to the (in)adaptation and school (in)success.

**Objective:** The study aimed to analyze the relationship between well-being and academic success in elementary school children.

**Methods:** The sample included 98 elementary school children of both sexes, aged between 9 and 10 years old. For data collection we used three questionnaires: socio-demographic questions; the Kid-KINDL 8-12 years and another one for parent perceptions' of academic success of their children. Descriptive and inferential analyses were conducted, with a  $p$  value  $\leq .05$ .

**Results:** A positive global well-being was found in 97% of the sample, with higher score in emotional well-being (92.7%) and lower in self-esteem (70.7%). The results showed that there was a significant relationship between well-being and academic success ( $\rho = .345$ ,  $p \leq .05$ ).

**Conclusions:** We concluded that children with general well-being, confident of their abilities and supported on their tasks, are more open to learn and have better results at school.

**Descriptors:** Academic Success. Elementary school. Well-being.

<sup>a</sup> susanafonseca@esev.ipv.pt

<sup>b</sup> majoa@esev.ipv.pt

<sup>c</sup> esev7698@esev.ipv.pt

<sup>d</sup> liajaraujo@esev.ipv.pt

<sup>e</sup> paulaxavier@esev.ipv.pt

<sup>f</sup> cmagalhaes@esev.ipv.pt

353

### HEALTH-RELATED QUALITY OF LIFE IN ELDERLY IN PRIMARY CARE

Claúdia Viana<sup>1,a</sup>, Conceição Rainho<sup>1,b</sup>, Isabel Barroso<sup>1,c</sup>, Maria João Monteiro<sup>1,d</sup>

<sup>1</sup>*Aggrupamento de Centros de Saúde Tâmega I. Baixo Tâmega, Amarante, Portugal*

<sup>11</sup>*Escola Superior de Enfermagem de Vila Real. Universidade de Trás-os-Montes e Alto Douro. Vila Real, Portugal*

**Introduction:** The aging process is multifactorial, natural, dynamic, progressive, universal and socio-demographic and health variables can affect the quality of life of elderly people.

**Objective:** To characterize the sociodemographic and health profile of the elderly people; assess perceptions about Health Related Quality of Life (HRQoL); analyze the relationship between the perception of HRQoL and socio-demographic and health variables.

**Methods:** Performed a descriptive correlational study in which participated seniors enrolled in UCSP, a health center in Northern Portugal. We used a questionnaire that was part of the COOP/WONCA scale, which evaluates HRQoL in five dimensions and whose total value may vary between 7 and 35; higher values indicate a lower perceived quality of life. The U Mann-Whitney test and Spearman correlation were used, with a statistical significant level of  $\alpha=0.05$ .

**Results:** In the study participated 213 seniors of which 124 (58.2%) are females. The mean age of the sample is 76.83 years. The average COOP/WONCA scale was 24,13. The analysis of the relationship between perception of quality life and socio-demographic and health variables showed that the perception of HRQoL was significantly higher in elderly people with younger age, male gender, more education, a spouse, no informal caregiver and no hospitalizations in last year.

**Conclusions:** In this sample the perceived quality of life was lower. The study identified socio-demographic and health variables related to perceived quality of life, which will aid in the effective health care of the studied individuals, thereby helping to maintain and improve their quality of life.

**Descriptors:** Quality of life. Elderly. COOP/WONCA scale.

<sup>a</sup> celisabeteviana@gmail.com

<sup>b</sup> crainho@utad.pt

<sup>c</sup> imbarroso@utad.pt

<sup>d</sup> mjmonteiro@utad.pt

354

### EFFECT OF LISTERINE® MOUTHRINSE AGAINST ORAL MICROORGANISMS

Rita Balhico<sup>a</sup>, Rita Nogueira<sup>b</sup>, Letícia de Bastos<sup>c</sup>, Ana Almeida<sup>d</sup>, Bela Ferreira<sup>e</sup>, Céu Leitão<sup>f</sup>, Fernando Bellém<sup>g</sup>, Renato Abreu<sup>h</sup>

*Escola Superior de Tecnologia da Saúde. Instituto Politécnico de Lisboa. Lisboa, Portugal*

**Introduction:** The oral bacterial plaque is the main cause for developing dental diseases such as dental caries and periodontitis. Brushing teeth and floss daily decrease the oral plaque but studies show that when a mouthrinse is used along with this hygiene, there is a high efficiency on the reduction of the bacterial plaque. The effect of rinsing with Listerine® mouthrinse was evaluated in the bacterial count of the supragingival plaque.

**Objective:** Verify the effect of rinsing twice a day for eight days with Listerine® on the reduction of the bacterial count of the supragingival plaque.

**Methods:** This was a prospective study in a single group with nineteen volunteers. Subjects were given a toothpaste and dental floss to use for eight days. After this period, bacterial plaque sampling was conducted and samples placed in Columbia agar with 5% sheep blood at 37°C in aerobic atmosphere. Colony Forming Units per milliliter were counted. Subjects then added to their oral hygiene the mouthrinse Listerine®, twice a day for eight days. Following another sampling and culture, Colony Forming Units per milliliter were counted. The values from both counts were evaluated with descriptive and inference statistic tests.

**Results:** A statistically significant difference ( $p \leq 0,05$ ) was observed between means of Colony Forming Units before and after rinsing with Listerine®. Mean percent reduction after Listerine® was 88,83% with reductions ranged from 27,17% to 98,73%.

**Conclusions:** Rinsing with Listerine® can significantly reduce the number of bacteria in the supragingival plaque.

**Descriptors:** Supragingival Plaque. Listerine®. Colony Forming Units per millilitre. Oral Hygiene.

<sup>a</sup> rita.balhico@gmail.com

<sup>b</sup> rita\_nogueira16@hotmail.com

<sup>c</sup> bastos\_leticia@hotmail.com

<sup>d</sup> ana.almeida@estesl.ipl.pt

<sup>e</sup> belacristina9@gmail.com

<sup>f</sup> mcleitao@estesl.ipl.pt

<sup>g</sup> fernando.bellem@estesl.ipl.pt

<sup>h</sup> renato.abreu@estesl.ipl.pt

355

### HOW DIFFERENT IS THIS BOY IN MY CLASS? ASKING PEERS OF CHILDREN WITH CEREBRAL PALSY

Isabel Catarina Martins<sup>a</sup>*Associação Portuguesa de Paralisia Cerebral. Portugal*

**Introduction:** Representations of teachers and parents regarding students with Special Educational Needs (SEN), in particular, cerebral palsy (CP), have been studied (since effects of their condition on self-esteem to implications on school results). As Inclusive School provides a venue where all children participate, responsibility for Education may not be just attributed to teachers and parents. The whole school should be co-responsible for it, including peers.

**Objective:** Our aim was to explore children and adolescents' perspectives concerning activity and participation of their peers with SEN, in order to contribute to the discussion about inclusion of children with CP.

**Methods:** We used descriptive, qualitative methodology recurring to semi-structured interviews for collecting data. Thirty children (4-14 yrs) were interviewed concerning concepts on diversity, participation and inclusion. Data were analysed using qualitative content analysis.

**Results:** Among other findings, we concluded that younger children regard difference as something natural and unquestionable ("we are all different but the twins", "do you think we were all equal at school?") assuming diversity as an inherent characteristic, and disability as any other feature like "having black eyes or curly hair." Older children present a dichotomous view, distinguishing between "normal" students and "others with disabilities and delays" and reveal disbelief in success abilities and achievement of their peers with CP.

**Conclusions:** It's important to discuss the results in the context of inclusive education and quality of life of individuals with CP that may begin with inclusive education, an Education for All and Every Child, in which context peer support spears to be an important resource.

**Descriptors:** Cerebral palsy. Peer support. Quality of life. Children's representations of disability.

<sup>a</sup> cat.martins.form@gmail.com

356

### STUDY OF DRUG ADDICTION AND PREGNANCY NEWBORN DEATH

Karla Cruz<sup>1,a</sup>, Juliana Borges<sup>1,b</sup>, Selma Nunes<sup>1,c</sup>, Geziel Sousa<sup>1,d</sup>, Francisco Pinto<sup>1,e</sup>, Raquel Mendes<sup>1,f</sup>, Ana de Carvalho<sup>1,g</sup><sup>1</sup>*Faculdade de Ensino e Cultura do Ceará. Fortaleza, Brasil*<sup>11</sup>*Universidade Estadual do Ceará. Fortaleza, Brasil*<sup>111</sup>*Universidade Federal do Ceará. Fortaleza, Brasil*

**Introduction:** Epidemiological studies have shown that infant mortality occurs in greater number in the neonatal component. The study of the factors involved with these deaths identifies the profile and the different variables related to the outcome.

**Objective:** The objective of this research was to analyze the neonatal mortality with the use of drugs during pregnancy, in Fortaleza, Ceará, Brazil, in the years 2009 and 2010.

**Methods:** The survey was conducted from the Health Information Systems, SINASC and SIM, and hospital records, followed the ethical provisions of Resolution 196/96 of the National Health Board on research involving humans, and using the technique of linkage for confirmation of the information. The study was case-control.

**Results:** The sample consisted of 153 cases (neonatal deaths) and 464 controls (live births surviving the neonatal period). The variables were analyzed in hierarchical blocks, from the distal to proximal level. Data were analyzed using STATA version 10. Primarily a descriptive analysis was performed, in sequence, the logistics for the preparation of the final model of risk factors for neonatal mortality regression was performed. The variables that remained significant for the outcome were: gestational age less than 37 weeks, Apgar score at 1. and 5. with less than seven minutes and congenital malformation rates.

**Conclusions:** The results indicate that prenatal care can avoid the risks presented. We suggest a better quality in the assistance and greater appreciation of the variable use of drugs during pregnancy, since this is a factor that should be investigated further in the search for more specific information.

**Descriptors:** Neonatal mortality. Risk factors. Drug addiction.

<sup>a</sup> karlathamysa@hotmail.com<sup>b</sup> julianaamoreira@hotmail.com<sup>c</sup> sellnunes@hotmail.com<sup>d</sup> gezielsousa@gmail.com<sup>e</sup> maia.pinto@yahoo.com.br<sup>f</sup> raquel\_mendes2003@yahoo.com.br<sup>g</sup> anazaizflores@hotmail.com

357

### SOCIAL SUPPORT OF MEN LIVING WITH HUMAN IMMUNODEFICIENCY VIRUS/AIDS

Ana Carvalho<sup>1,a</sup>, Samyla Pedrosa<sup>1,b</sup>, Gilmara da Cunha<sup>1,c</sup>, Elucir Gir<sup>1,d</sup>, Maria L. Fiuza<sup>1,e</sup>, Renata Reis<sup>1,f</sup>, Marli Galvão<sup>1,g</sup>

<sup>1</sup>Universidade Federal do Ceará. Fortaleza, Brasil

<sup>II</sup>Universidade de São Paulo. Ribeirão Preto, SP, Brasil

**Introduction:** Social support is an important condition for health promotion, treatment adherence, prevention and recovery from illness.

**Objective:** To assess social support among men living with human immunodeficiency virus (HIV)/AIDS.

**Methods:** Cross-sectional and quantitative study, developed between the January to June 2012 in the outpatient infectious disease of the University Hospital at Fortaleza, Ceará, Brazil. The sample was 146 men receiving antiretroviral therapy. Was applied to Scale Social Support for People Living with HIV/AIDS, which has 22 items, divided into two factors: emotional and instrumental. This project was approved by Ethics Committee of the University Hospital Walter Cantídio under Protocol 040.06.12.

**Results:** The mean age of patients was 39.75 years. Of the total, 92 were single (63.02%) and 87 had a family income between zero to three minimum wages (59.59%). Mean scores of emotional and instrumental social support were, respectively, 3.72 (Crombach's alpha: 0.86) and 3.68 (Crombach's alpha: 0.83), indicating satisfactory support primarily from friends, family members living in the same household or not, and partner. There was a low frequency of support received from neighbors, co-workers and health professionals.

**Conclusions:** For the instrumental and emotional support, the trust and bond established with the person living with HIV can interfere in the availability and satisfaction of the support received. Neighbors, co-workers and health professionals were the least likely to provide social support. Thus, there is a need to implement actions in specialized service to provide appropriate support to patients, because social support facilitates coping with the disease.

**Descriptors:** Social Support. Acquired Immunodeficiency Syndrome. HIV. Men. Health Promotion.

358

### PRESENCE OF PARENTS IN NEONATAL UNITS: FIRST STAGE OF THE KANGAROO METHOD

Karla Cruz<sup>1,a</sup>, Aline Cavalcante<sup>1,b</sup>, Rosineia Araujo<sup>1,c</sup>, Ysabely Pamplona<sup>1,d</sup>, Carla Viana<sup>1,e</sup>, Raquel Mendes<sup>1,f</sup>, Ana de Carvalho<sup>1,g</sup>

<sup>1</sup>Faculdade de Ensino e Cultura do Ceará. Fortaleza, Brasil

<sup>II</sup>Universidade de Fortaleza. Fortaleza, Brasil

<sup>III</sup>Universidade Católica de Santos. Santos, Brasil

<sup>IV</sup>Universidade Estadual do Ceará. Fortaleza, Brasil

<sup>V</sup>Universidade Federal do Ceará. Fortaleza, Brasil

**Introduction:** Birth is a unique moment when dreams, expectations and life goals of a couple are validating, and they are structuring their own family. Thus, the baby begins to exist for their parents long before its conception, therefore, is present in the fantasies and idealizations of each of them, from his childhood, from one-day form a family.

**Objective:** This study aimed to know the perception of parents about the importance of their presence in the recovery process of premature babies.

**Methods:** A descriptive study with a qualitative approach, performed in the Neonatal Intensive Care Unit (NICU) of Assis Chateaubriand Maternity School, in the city of Fortaleza, in the period from July to October 2007 and being submitted to the ethics committee.

**Results:** The analysis of the speeches were extracted categories: perception of parents about the importance of their presence in the NICU, parental knowledge about Kangaroo Mother Care method; difficulties of parents in affective bonding, perception of parents regarding the network social support and parental satisfaction with the service. We conduct educational workshops for parental guidance on the doubts and difficulties.

**Conclusions:** We conclude that separation causes damage to the baby and his parents, since the attachment relationship is shaken and without external interventions aimed at alleviating them.

**Descriptors:** Newborn. Professional-patient relationship. Nursing care.

<sup>a</sup> anazaiflores@hotmail.com

<sup>b</sup> samylacito@hotmail.com

<sup>c</sup> gilmaraholandaufc@yahoo.com.br

<sup>d</sup> egir@eerp.usp.br

<sup>e</sup> ltfiuzza@hotmail.com

<sup>f</sup> rkreis@eerp.usp.br

<sup>g</sup> marligalvao@gmail.com

<sup>a</sup> karlathamysa@hotmail.com

<sup>b</sup> linecmc@yahoo.com.br

<sup>c</sup> rosineia25@yahoo.com.br

<sup>d</sup> ysapontes@hotmail.com

<sup>e</sup> profdanieleviana@gmail.com

<sup>f</sup> raquel\_mendes2003@yahoo.com.br

<sup>g</sup> anazaiflores@hotmail.com

359

### THE RELATION BETWEEN FUNCTIONAL PERFORMANCE AND SATISFACTION WITH LIFE IN ELDERLY

Nelson Sousa<sup>1,a</sup>, Romeu Mendes<sup>1</sup>, Victor Monteiro<sup>1</sup>, Jorge Fernandes<sup>1</sup>

<sup>1</sup>*Centro de Investigação de Desporto, Saúde e Desenvolvimento Humano. Universidade de Trás-os-Montes e Alto Douro. Vila Real, Portugal*

<sup>1</sup>*Universidade de Évora. Évora, Portugal*

**Introduction:** It is increasingly common in elderly care institutions the development of recreational and social activities, with the intuited to promote health and well-being. However, most of the institutionalized elderly spent their time doing little or nothing, restricting their daily life activities.

**Objective:** The purpose of the present study was to determine the relationship between functional performance and self-perceived life satisfaction in elderly; and to understand the differences between institutionalized and non-institutionalized elderly from the northeast of Portugal.

**Methods:** A total of 183 elderly (105 women and 78 men) participated in this cross-sectional study. The sample was divided in institutionalized (n=85, 74.5±5.9 years, BMI=27.22±3.2 kg/m<sup>2</sup>) and non-institutionalized elderly (n=98, 73.6±5.5, BMI=28.9±3.3 kg/m<sup>2</sup>). Functional performance was assessed by the Timed Up & Go test (TUG) that is also a recommend tool for screening falls risk, and self-perceived life satisfaction by Satisfaction With Life Scale questionnaire (SWLS). Comparison of means and association between variables were performed by non-parametric tests.

**Results:** No significant associations were identified between TUG and SWLS. However, the non-institutionalized elderly showed a significantly superior performance on the TUG compared with the institutionalized elderly (8.0±1.6 vs. 11.0±2.4 seconds respectively, p<0.001). The non-institutionalized elderly also expressed significantly higher values in SWLS (p<0.001).

**Conclusions:** Non-institutionalized elderly are more fit, have lower tendencies to fall, and have greater life satisfaction compared to the institutionalized elderly. These results suggest that all interventions aimed to promote well-being of institutionalized elderly should consider increasing physical fitness.

**Descriptors:** Aging. BMI. Fitness. Life satisfaction. Institutions.

<sup>a</sup> nelsons@utad.pt

360

### COMMUNICATION OF BAD NEWS TO THE ELDERLY PATIENT/HIS FAMILY, IN CRITICAL SITUATION

Cátia Silva<sup>1,a</sup>, Patrícia Sousa<sup>1,b</sup>

<sup>1</sup>*Instituto de Ciências da Saúde. Universidade Católica Portuguesa. Portugal*

**Introduction:** The aged people become susceptible to diseases, especially chronic diseases that may worsen. In this setting, the communication of bad news is one of the most difficult and complex areas for nurses.

**Objective:** Reflect about the importance of the nurse role in the communication of bad news to the elderly patient/his family in critical situation.

**Methods:** This work has been done based on a reflexive methodology and bibliographic research with the fowling key words: communication; bad news; elderly patient/family; critical situation.

**Results:** According to Pereira (2004), bad news must be given in a gradual way and it should be adapted adapted at will, personality, understanding and need to know, manifested by the elderly patient/his family and their capabilities to participate actively in decisions. In 1994, Buckman has created an action protocol for breaking bad news. This protocol describes important considerations to help relieve the distress felt, not only, by the patients/his family who receive the news, but also, by the health care professionals who share it.

**Conclusions:** Nurses recognize that communicating bad news is one of the most difficult aspects of their performance, but they cannot avoid, so breaking bad news is seen as inherent to the technical profession that requires considerable skill and prudence.

**Descriptors:** Communication. Bad news. Elderly patient/family. Critical situation.

<sup>a</sup> catiasilva@gmail.com

<sup>b</sup> patriciacps@ics.lisboa.ucp.pt

361

### EXPLORING THE HEALTHCARE NEEDS OF PATIENTS WITH MILD CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Cristina Jácome<sup>I,II,a</sup>, Alda Marques<sup>II,III,b</sup>

<sup>I</sup>Centro de Investigação em Actividade Física, Saúde e Lazer. Faculdade de Desporto. Universidade do Porto. Portugal

<sup>II</sup>Escola de Ciências da Saúde. Universidade de Aveiro. Aveiro, Portugal

<sup>III</sup>Unidade de Investigação e Formação sobre Adultos e Idosos. Universidade do Porto. Porto, Portugal

**Introduction:** Pulmonary rehabilitation is a core component of the management of patients with chronic obstructive pulmonary disease (COPD), however, patients are not referred until they have advanced COPD. Nevertheless, it is unknown if patients with mild COPD are also symptomatic and experience restrictions in their daily life.

**Objective:** This study assessed symptoms, exercise tolerance and health-related quality of life (HRQL) in patients with mild COPD.

**Methods:** Outpatients diagnosed with mild COPD according to the Global initiative for chronic Obstructive Lung Disease were recruited from two primary care centers. Activities limitation resulting from dyspnea was assessed with the Modified British Medical Research Council questionnaire (score 0-4) and exercise tolerance with the 6-minute walking test. HRQL was measured with the St. George's Respiratory Questionnaire (SGRQ). The SGRQ assesses three domains: symptoms, activities and impact. For each domain/total questionnaire, score ranges from 0 (no impairment) to 100 (maximum impairment).

**Results:** Twenty-six patients ( $67.8 \pm 10.3$  yrs; forced expiratory volume in 1 second  $86.2 \pm 7.9\%$  predicted) participated. Participants experienced limitations in their daily life activities due to dyspnea (median 1, interquartile range 1-2). The mean 6-minute walking distance was  $432 \pm 75.9$  meters, representing  $72.5 \pm 9.7\%$  of the predicted value for older adults (Troosters, Gosselink & Decramer, 1999). Regarding HRQL, participants had a mean of  $46.3 \pm 20.2$  in SGRQ symptoms score,  $44 \pm 25.2$  in activities score,  $19.4 \pm 18$  in impact score and  $31.3 \pm 18.5$  in total score.

**Conclusions:** Patients with mild COPD are already experiencing dyspnea during daily life activities, exercise intolerance and impaired HRQL. Future studies should explore the potential of pulmonary rehabilitation in this group of patients.

**Descriptors:** Chronic obstructive pulmonary disease. Mild disease. Healthcare needs. Health-related quality of life. Pulmonary rehabilitation.

<sup>a</sup>cristinajacome@ua.pt

<sup>b</sup>amarques@ua.pt

362

### STUDENT SUPPORT SERVICE: PROMOTING WELL-BEING OF STUDENTS OF POLYTECHNIC INSTITUTE OF LEIRIA

Graça Maria Seco<sup>a</sup>, Luís Filipe<sup>b</sup>, Patrícia Pereira<sup>c</sup>, Sandra Alves<sup>d</sup>

Serviço de Apoio ao Estudante. Instituto Politécnico de Leiria. Leiria, Portugal

**Introduction:** The promotion of health, well-being and academic success of the Polytechnic Institute of Leiria's (PIL's) students as well as the development of competences that help them to deal with the challenges associated with the transition and adaptation to higher education and integration in working life are the main objectives of the Student Support Service (SSS).

**Objective:** Since 2007/2008, the SSS has been operating in the 5 Schools of PIL, in three principal axes: personal orientation, psychopedagogical, psychological and vocational support.

**Methods:** Apart from the initiatives aimed at students, training for teacher and other school staff has been taking place, in a perspective of promotion of well-being among the different people that compose the PIL community, having results in a better organizational climate. Besides the investigation developed, the Student Support Service has been organizing materials and support guides not only for students, but also for teachers.

**Results:** With this proposal of communication, we aim to summarize the main results accomplished in the context of the activities that have been being developed, not only when it comes to programs of competences development (that counted with the involvement of 1,000 students in the academic year of 12/13) and psychological support (with around 1800 appointments in 12/13), but also in the field of teachers' training (around 90 in 12/13).

**Conclusions:** Overall, our intention is to systematize SSS's most relevant results in its main intervention lines, having as goal a positive and successful adaptation of PIL's students and their well-being in general.

**Descriptors:** Higher Education; Transition; Well-being promotion; Academic Success; Personal Development.

<sup>a</sup>graca.seco@ipleiria.pt

<sup>b</sup>luis.filipe@ipleiria.pt

<sup>c</sup>patricia.pereira@ipleiria.pt

<sup>d</sup>sandra.alves@ipleiria.pt

363

### CHARACTERIZATION OF THE SUN-PROTECTION PRACTICES IN HIGHER EDUCATION STUDENTS

Sophia Vilas-Boas<sup>a</sup>, Sílvia Branco<sup>b</sup>, Xavier Costa<sup>c</sup>,  
Olívia R. Pereira<sup>d</sup>

*Departamento de Tecnologias de Diagnóstico Terapêutica. Escola Superior de Saúde. Instituto Politécnico de Bragança. Bragança, Portugal*

**Introduction:** The skin is a dynamic barrier with important organic functions. On the other hand, the excessive exposure to ultraviolet (UV) radiation without the use of adequate photo-protection is associated to health risks.

**Objective:** The main objective of this study was to analyze the habits of sun exposure and the sun-protective practices in students of the Polytechnic Institute of Bragança.

**Methods:** A cross-sectional study was performed through an application of a questionnaire to a 163 students, of both gender, aged between 18 and 29 years.

**Results:** The results showed that, during the week, 48.5% of the students were exposed to solar radiation for 1 to 2 hours daily and 38.7% for 3 to 6 hours. During the weekend, 25.8% of the students were exposed to solar radiation for 1 to 2 hours while 27.0% were exposed 3 to 6 hours. Concerning the time of the day of the sun exposure, it was concluded that in summer a large percentage of students (57.7%) were exposed between 12 p.m. and 16 p.m. The majority of students (82.8%) used sunscreen, while along the year only 34.8% used sunscreen. From all students, approximately half used a photo-protection factor between 30 a 50. Additionally, 71.8% of them suffered sunburns, from which approximately a half had more than five incidences.

**Conclusions:** Globally, this study showed that the students are excessively exposed to the sun, particularly in times associated to high UV radiation. Most of them use sunscreen, although just a few opt for those that offer a very high protection.

**Descriptors:** higher education students; sun-protection practices; sunscreen; sunburns.

<sup>a</sup>sophia.vb@hotmail.com

<sup>b</sup>b.silvia.prd@hotmail.com

<sup>c</sup>xavier.t.costa@ipb.pt

<sup>d</sup>oliviapereira@ipb.pt

364

### USE OF EMERGENCY CONTRACEPTION IN HIGHER EDUCATION STUDENTS

Joana Lima<sup>1,II,a</sup>, Sara Rocha<sup>1,b</sup>, Tatiana Carona<sup>1,c</sup>, Tânia Pires<sup>1,d</sup>, Olívia R. Pereira<sup>1</sup>

*<sup>1</sup>Departamento de Tecnologias de Diagnóstico Terapêutica. Escola Superior de Saúde. Instituto Politécnico de Bragança*

*<sup>1</sup>Serviços Farmacêuticos do Centro Hospitalar Tâmega e Sousa. Bragança, Portugal*

**Introduction:** The use of emergency contraception, used by women after sexual intercourse to avoid the unintended pregnancy, has been increasing in last decades.

**Objective:** The present study aimed to characterize the contraceptive behaviors, with emphasis to emergency contraception, in higher education female students.

**Methods:** Using a cross-sectional study, a questionnaire-based study was targeted to 130 students of the Polytechnic Institute of Bragança, with ages between 18 and 36 old.

**Results:** From these students, 75% were sexually active, with the majority of them using contraceptive methods during intercourse. Usually, contraceptive methods comprised masculine condom (35.4%), oral hormonal contraception (14.6%) or both methods (18.5%). Moreover, the use of emergency contraception was assumed by 23% of these students, with one fifth of them using this method for more than once. Thought the analysis of variables, it was found that there is a relationship between age and the start of sexual activity, the use of contraceptive methods during intercourse, and also in between age of the 1st intercourse and the usage of emergency contraceptive methods.

**Conclusions:** The high prevalence of emergency contraception use in these students indicated the trivialization of this type of oral contraception. Them, it is crucial to further disclosure and provision the preventive contraceptive methods once young population is not still aware of their benefits and excessively resort from emergency contraceptive methods.

**Descriptors:** Masculine condom; hormonal contraception; emergency contraception; higher education students.

<sup>a</sup>joana.machado.lima@gmail.com

<sup>b</sup>xara\_rocha@hotmail.com

<sup>c</sup>a23851@alunos.ipb.pt

<sup>d</sup>tania.pires@ipb.pt



365

### ANALYSIS OF POSTURAL HABITS IN PRIMARY SCHOOL CHILDREN IN A PRIVATE AND PUBLIC INSTITUTION

Andrea Ribeiro<sup>1,II,a</sup>, Ana Rita Pimenta<sup>1,b</sup>, Ana Rita Sant'Ana<sup>1,c</sup>, Marta Guterres<sup>1,d</sup>, Rafaela Lago<sup>1,e</sup>, Rita Marques<sup>1,f</sup>, Eduardo Duque<sup>1,g</sup>

<sup>1</sup>Instituto Superior de Saúde do Alto Ave. Póvoa Lanhoso, Portugal

<sup>II</sup>Faculdade de Ciências da Saúde. Universidade Fernando Pessoa. Porto, Portugal

**Introduction:** Postural changes are often found in children at school age. During this period, the posture undergoes a series of misfits and adaptations to changes in the body itself.

**Objective:** To identify, quantitatively, which postural habits are more common in children between six and ten years, characterizing the population in public and private education.

**Methods:** Application of a questionnaire assessing postural habits in 131 primary school students, with the participation of a private education institution, located in Braga and other Public Education in Guimarães, both from Braga district.

**Results:** There is a higher prevalence of back pain at some point, in male and a relation found with increasing age of the children. The transport of the school backpack showed up as the activity with the highest prevalence of back pain despite being properly carried out. Students of the 3<sup>rd</sup> year attending the public school have a lower incidence of back pain, compared to students in the 3<sup>rd</sup> year of the private school.

**Conclusions:** There are postural habits acquired in schools that may be related to changes in children postural development, influencing their postural pattern during growth, so it is fundamental to implement preventive-educational programs.

**Descriptors:** Postural Habits; Physiotherapy; Body; School; Health.

<sup>a</sup> andrear77@gmail.com

<sup>b</sup> anaritasantana\_26@hotmail.com

<sup>c</sup> rita\_\_pimenta@hotmail.com

<sup>d</sup> guterres\_marta@hotmail.com

<sup>e</sup> rafaella.lago@live.com.pt

<sup>f</sup> rita.gomes.marques.09@gmail.com

<sup>g</sup> ejduque@gmail.com

366

### CHARACTERIZATION OF THE FUNCTIONAL CAPACITY OF THE ELDERLY: EFFECTS OF AGE AND HEALTH STATUS

António Calha<sup>a</sup>

*Núcleo de Estudos para a Intervenção Social, Educação e Saúde. C31, Instituto Politécnico de Portalegre. Portalegre, Portugal*

**Introduction:** Limitations in performing activities of daily living is one of the main constraints that hinder the effectiveness of policies to promote active aging. Several researches have revealed the existence of a relationship between aging with physical changes and loss of functional capacity.

**Objective:** In this communication we seek to characterize the functional capacity of the Portuguese elderly using two indexes. On one hand, IDLA, index of daily living activities, (ranging from 0, minimum level of functional disability, to 5, maximum level) on the performance of five tasks: dressing, bathing, eating; walking across a room, getting out of bed. On the other hand, IDLIA (index of daily living instrumental activities) comprising five tasks: making telephone calls, taking medications, managing money, shopping and preparing meals.

**Methods:** The methodology consists of the analysis of the results obtained through the Survey of Health, Aging and Retirement in Europe (Wave 4) relating to individuals over 64 years of the Portuguese sample.

**Results:** The results obtained in IDLA (n=932, M=0.56) and IDLIA (n=932, M=0.42) showed a low level of difficulty of the elderly in performing tasks. Statistically significant differences regarding gender were identified by IDLA ( $t_{(930)}=-5.135^*$ ,  $p=0.000$ ), where women present (n=511, M=0.74) greater limitations than men (n=421, M=0.34). There results obtained by IDLIA are similar ( $t_{(930)}=-5.129$ ,  $p=0.000$ ) (women: M=0.58; men: M=0.22).

**Conclusions:** This analysis helped to further identify the coefficient of correlation between age and functional capacity, which is higher in IDLIA (r=0.362) than in IDLA (r=0.277). The health status has significant correlations with IDLA (r=0.253) and IDLIA (r=0.186).

**Descriptors:** aging; functional capacity; subjective health status; active aging; quality of life.

<sup>a</sup> antoniocalha@hotmail.com

367

### HAPPINESS AND SUBJECTIVE HEALTH STATUS AMONG OLDER ADULTS IN SOUTHERN EUROPE AND SCANDINAVIA

António Calha<sup>a</sup>

*Núcleo de Estudos para a Intervenção Social, Educação e Saúde. C3I, Instituto Politécnico de Portalegre. Portalegre, Portugal*

**Introduction:** European societies are facing social challenges arising from rapid demographic aging process. The emergence of a “graying society” has sparked the debate around the promotion of the living conditions of the elderly.

**Objective:** In this paper we analyze the level of happiness of the elderly as an important dimension of quality of life, correlating with the subjective assessment of health status. We take as reference the specificity of senior status in southern Europe (Portugal, Spain and Greece) and in Scandinavia (Denmark, Finland, Norway, Sweden). We seek to understand if there are different ways of experiencing old age in these societies, with a setting of distinct models of social protection.

**Methods:** The tool of inquiry (European Social Survey, round 5: 2010) consisted of a questionnaire administered to representative samples.

**Results:** The results show that the level of happiness (measured on a scale of 11 values, where 0 corresponds to the lowest level of happiness and 10 to the highest) is higher among the elderly in Scandinavia ( $n=475$ ,  $M=8.06$ ) when compared with the elderly in Southern Europe ( $n=1169$ ,  $M=6.74$ ), with a statistically significant difference ( $t_{(856)}=-12.9$ ,  $p<0.000$ ). The analysis reveals correlations between the level of happiness and the level of well-being, being stronger in Southern Europe ( $r=0.496$ ) than in Scandinavia ( $r=0.438$ ). Testing the relationship between happiness and health status reveals the existence of correlation between the variables, higher in Scandinavia ( $r=3.07$ ) than in Southern Europe ( $r=0.254$ ).

**Conclusions:** The general conclusion of the research points out to the existence of specific senior status in the analyzed countries.

**Descriptors:** aging; subjective health status; happiness; quality of life.

<sup>a</sup> antoniocalha@hotmail.com

368

### PHYSICAL ACTIVITY AND SLEEP – BASELINE RESULTS FROM AN INTERVENTION STUDY

Teresa Bento<sup>1,11,a</sup>, Pedro Gonçalves<sup>1,b</sup>

*<sup>1</sup>Escola Superior de Desporto de Rio Maior. Instituto Politécnico de Santarém. Santarém, Portugal*

*<sup>11</sup>Sports Sciences, Health and Human Development Centre. Universidade of Trás-os-Montes e Alto Douro. Vila Real, Portugal*

**Introduction:** Symptoms of disturbed sleep appear to be related to aging and gender and influences negatively on health. Regular physical activity has been indicated as beneficial to the quality of sleep, and an alternative to pharmacological treatment of sleeping disorders.

**Objective:** The aim of the present paper was to describe baseline data from the participants of the first wave of recruitment of an intervention study aimed at analyzing the effects of different types of exercise in adults with sleeping disorders.

**Methods:** A total of 112 individuals (mean age 33.25 years  $\pm 12.74$ ), completed the Pittsburgh Sleep Quality Index Questionnaire (PSQI), the Berlim Questionnaire, the Epworth Sleepiness Scale (ESS) and the International Physical Activity Questionnaire (IPAQ), before starting the intervention.

**Results:** Our results showed that only 11% of participants reported excessive daytime sleepiness ( $ESS>10$ ), around 15% revealed symptoms for sleep apnea and 22.5% were identified as having disturbed sleep ( $PSQI>5$ ). Finally, more than half of the individuals reported being active and demonstrated slightly better (but not statically significant) results in all tests scores.

**Conclusions:** Our preliminary results indicate that more active individuals reported less poor sleep quality, fewer symptoms for sleep apnea and less disturbed sleep as documented in the literature. However, enlarging the sample and implementing the program will provide more information regarding age and gender differences and the most effective type of exercise, fundamental to build the knowledge on the subject.

**Descriptors:** physical activity; exercise; sleep; intervention.

<sup>a</sup> teresabento@esdrm.ipsantarem.pt

<sup>b</sup> pedro.pt.fitness@gmail.com

369

### PHYSICAL ACTIVITY IN HEALTHY CHILDREN AND CHILDREN WITH ACUTE RESPIRATORY INFECTIONS

Ana Oliveira<sup>1,a</sup>, Cátia Pinho<sup>1,b</sup>, Alda Marques<sup>1,II,c</sup><sup>1</sup>*Escola Superior de Saúde. Universidade de Aveiro. Aveiro, Portugal*<sup>II</sup>*Unidade de Investigação e Formação sobre Adultos e Idosos. Portugal*

**Introduction:** Acute respiratory infections (ARI) are the most common cause of illness worldwide and account for over 1/3 of paediatric consultations in children under the age of five (Thompson et al, 2013). It is known that exercise has anti-inflammatory effects, and adults who exercise regularly experience approximately 21%-41% less risk of developing ARI than sedentary peers (Nieman et al, 2011). However, it is unknown if this association is also observed in children.

**Objective:** This study aimed to compare physical activity levels of healthy children and children with ARI, under the age of five.

**Methods:** Children were recruited from the paediatric department of one central hospital. Physical activity was assessed with a 5-question physical activity questionnaire (Telama et al, 1997). This instrument assesses physical activity within a “normal week” (not considering periods of disease) with a score-range of 5-20. Children’s physical activity was classified into 4 categories: the sedentary (5); low activity (6–10); moderate activity (11–15) and vigorous activity (16–20). The questionnaire was filled by children’s legal representative after written consent was obtained.

**Results:** Twenty-four children with ARI (3±0.6 years; 14 male) and seventeen healthy children (3.3±0.2 years; 11 male) participated. Children with ARI were significantly less active (median=7.5; Interquartile-range: 6; low activity) than their healthy peers (median=12; Interquartile-range: 4.5; moderate activity).

**Conclusions:** Similar to adults, children with higher levels of physical activity may be at lower risk of developing an ARI. Further studies are needed to establish the most appropriated types and levels of physical activity for children under the age of five.

**Descriptors:** Acute Respiratory Infections; Children; Physical Activity.

370

### FAMILY CARE AT EARLY COPD: IS THERE ANY RISK FOR CAREGIVERS’ MENTAL WELL-BEING?

Daniela Figueiredo<sup>1,II,a</sup>, Raquel Gabriel<sup>1,II,b</sup>, Cristina Jácome<sup>1,c</sup>, Alda Marques<sup>1,II,d</sup><sup>1</sup>*Escola Superior de Saúde. Universidade de Aveiro. Aveiro, Portugal*<sup>II</sup>*Unidade de Investigação e Formação sobre Adultos e Idosos. Portugal*

**Introduction:** Evidence shows that caring for a family member with advanced chronic obstructive pulmonary disease (COPD) is a stressful experience, often associated with caregivers’ poor mental health. Much less is known about the psychological well-being of family caregivers of patients with early COPD.

**Objective:** This study aimed to analyze life satisfaction, anxiety and depression symptoms among family caregivers of patients with early COPD.

**Methods:** A cross-sectional study was conducted with caregivers of patients with early COPD (grade 1 and 2 according to the Global Initiative for Chronic Obstructive Lung Disease). A questionnaire was used to collect socio-demographic data. The Hospital Anxiety and Depression Scale was used to assess anxiety and depression symptoms, scores ≥8 were considered clinically significant. Life satisfaction was measured with the Satisfaction With Life Scale (SWLS). Descriptive statistics and Spearman correlations were applied.

**Results:** A total of 142 caregivers have participated (58.9±12.9 years old; 70.4% female). Most were spouses (62.7%), caring for ≥4 years (54.2%). Clinically significant anxiety symptoms were present in 62% of family caregivers, depression symptoms in 28.9% and both in 24.6%. The mean SWLS global score was 16.1±5. Significant moderate correlations were found between SWLS global score and anxiety ( $r_s = -0.454$ ;  $p = 0.001$ ) and depression ( $r_s = -0.420$ ;  $p = 0.001$ ) symptoms.

**Conclusions:** Findings suggest that, even at early COPD, the caregiving experience might threat family caregivers’ psychological well-being. Interventions targeted to support caregivers earlier in the COPD course are recommended to prevent mental health decline.

**Descriptors:** family caregivers; early COPD; anxiety; depression; life satisfaction.

<sup>a</sup> alao@ua.pt<sup>b</sup> catiap@ua.pt<sup>c</sup> amarques@ua.pt<sup>a</sup> daniela.figueiredo@ua.pt<sup>b</sup> raquelgabriel@ua.pt<sup>c</sup> cristinajacome@ua.pt<sup>d</sup> amarques@ua.pt

371

### VIRTUAL COMMUNICATION AND RELATIONSHIP BETWEEN NURSE AND ELDERLY PERSON

Nafee Mohamed-Lehbib<sup>1,a</sup>, Francisco-José Hernández-Martínez<sup>1,b</sup>, Bienvenida Rodríguez-De-Vera<sup>1,c</sup>, Juan-Fernando Jiménez-Díaz<sup>1,d</sup>, Alexandre Rodrigues<sup>1,e</sup>, Francisco-José Santana-Pérez<sup>1,f</sup>, M<sup>a</sup> Del Pino Quintana-Montesdeoca<sup>1,g</sup>

<sup>1</sup>Universidad de Las Palmas de Gran Canaria. Las Palmas de Gran Canaria, Spain

<sup>2</sup>Escola de Enfermagem Cruz Vermelha. Oliveira de Azeméis, Portugal

**Introduction:** Accelerated aging of the European population and increasing levels of dependence involved substantial costs facing an economically uncertain future. Society is aging at an inexorable rate and resources for comprehensive care decreases considerably, relegating psychosocial aspects and social inclusion of older people in the background. In this regard, both the institutions and the professionals responsible for the care of elderly people should look for solutions to problems ahead. Technologies of information and communication offer endless possibilities to meet the needs and interests of society and its possibilities in the healthcare sector are endless.

**Objective:** Collect feedback from a group of people over 65 who are studying “Peritia et Doctrina” in a Spanish university, about the possibility of a virtual relationship between nurse and elderly patient, aimed to facilitate and enrich their relationship.

**Methods:** Descriptive qualitative study supported by a semi-structured interview.

**Results:** The study reveals a great interest from older people to learn about ICT and high predisposition toward a virtual contact with nurse, however they prefer direct contact. Most of them know the great possibilities offered by ICT and believe that they can facilitate the daily activities. They relate their experiences with ICT and recognize facilities they have had to contact with family and be closer to them, thanks to new technologies.

**Conclusions:** These students have excellent vision of ICT but regret not have used them before. They believe in virtual contact with the nurse either to consult or inform their health, without move, which is often difficult.

**Descriptors:** Older people; health; nurse; ICT; social inclusion.

<sup>a</sup> nafee.mohamed101@alu.ulpgc.es

<sup>b</sup> fjhernandez@denf.ulpgc.es

<sup>c</sup> brodriguez@denf.ulpgc.es

<sup>d</sup> jjimenez@denf.ulpgc.es

<sup>e</sup> rodriguesalexandr@gmail.com

<sup>f</sup> fsantana@dis.ulpgc.esmpino@dma.ulpgc.es

372

### A SYSTEMATIC REVIEW OF NURSING INTERVENTIONS ON ADAPTATION IN WOMEN WITH BREAST CANCER

Luis Miguel Ferreira<sup>1,a</sup>, Inês Cruz<sup>1,b</sup>, Célia Santos<sup>1,c</sup>, Filipe Pereira<sup>1,d</sup>, Bruno Magalhães<sup>1,e</sup>

<sup>1</sup>Escola Superior de Enfermagem do Porto. Porto, Portugal

<sup>2</sup>Escola Superior de Enfermagem de Santa Maria. Porto, Portugal

**Introduction:** The diagnosis of breast cancer and subsequent treatments impose requirements in the adaptive process, generally with a negative impact on the lives of these people. The development of appropriate nursing interventions can facilitate the process of physical and psychological adaptation.

**Objective:** Identify studies designed and developed by nurses on nursing interventions that influence the adaptation in women with breast cancer.

**Methods:** After formulated the initial question, a systematic review was performed in July 2012, covering Scopus, Web of Science and CINAHL databases. The inclusion criteria were: articles published between 2002 and 2012, RCTs, primary studies, and studies with interventions designed and developed by nurses. A total of 419 articles were identified. The selection of articles was performed independently by three of the authors. In conclusion, 5 articles were included in the review.

**Results:** The interventions are diversified but the domain of education and support is predominant; individual interventions prevails in detriment of groups; time diversified, ranging from a single period to 13 months; the implementations varies from application during chemotherapy treatment, after surgery, the follow-up phase, and along a period of time (13 months); telephone is a predominant resource in the implementation of programs.

**Conclusions:** We concluded that this studies do not provide evidence about the existence of uniform nursing intervention models for women with breast cancer. There are still few studies that both were designed and developed by nurses, emphasizing the need for greater investment in this professional group to identify and develop nursing interventions promoting the adaptation of women with breast cancer.

**Descriptors:** breast cancer; adaptation; nursing intervention; systematic review.

<sup>a</sup> lmferreira@esenf.pt

<sup>b</sup> inescruz@esenf.pt

<sup>c</sup> celiasantos@esenf.pt

<sup>d</sup> filipereira@esenf.pt

<sup>e</sup> bruno.magalhaes@netcabo.pt

373

### SELF-PERCEPTION OF DESIRABLE BEHAVIORS FOR A HEALTHY AGING IN ADULTS WITH CEREBRAL PALSY

Clara Cardoso<sup>a</sup>, Joaquim Alvarelhão<sup>b</sup>, Margarida Cerqueira<sup>c</sup>

*Escola Superior de Saúde. Universidade de Aveiro. Aveiro, Portugal*

**Introduction:** The increase of life expectancy in the population with Cerebral Palsy (CP) involves the need to deepen the knowledge of the aging process in this population.

**Objective:** Study the self-perception of desirable behaviors for healthy aging in adults with CP and relate it to functional levels and satisfaction with life.

**Methods:** In a sample of 42 people attending the services of Cerebral Palsy Association of Porto, aged between 19 and 57 years, without severe cognitive problems, the self-perception of desirable behaviors was measured by the ImPreVe Scale and life satisfaction by the Life Satisfaction Scale (LSI-A). Clinical information (CP type, Gross Motor Function, Bimanual Fine Motor Function, Communication Function) and demographic information was collected from the client file.

**Results:** Behaviors related to the dimensions of physical and mental health, nutrition, and social life were identified as the most important for a healthy aging process. Statistically differences were found between the level of gross motor function and identification of desirable behaviors in dimensions related to recreation and social roles (marriage and child). Life satisfaction is associated with the importance attributed to behaviors related with healthy aging.

**Conclusions:** Adults with CP express positive values about desirable behaviors for a healthy aging process. Concern should be addressed for those with limitations in gross motor function. Life satisfaction could be used as a predictor of the importance attributed to desirable behaviors for a healthy aging.

**Descriptors:** Cerebral Palsy, Healthy aging, Self-perception.

<sup>a</sup> claracardoso@ua.pt

<sup>b</sup> jalvarelhao@ua.pt

<sup>c</sup> mcerqueira@ua.pt

374

### EXPLORING LIFE SATISFACTION AND DEPRESSIVE SYMPTOMS IN OLDER PEOPLE RECEIVING FAMILY CARE

Raquel Gabriel<sup>l</sup>, Liliana Sousa<sup>l</sup>, Daniela Figueiredo<sup>ll</sup>

*<sup>l</sup>Secção Autónoma de Ciências da Saúde. Universidade de Aveiro. Aveiro, Portugal*

*<sup>ll</sup>Escola Superior de Saúde. Universidade de Aveiro. Aveiro, Portugal*

**Introduction:** Evidence shows that caring for an older dependent relative impact negatively on family caregiver's mental health. However, family care intrinsically involves two individuals in a close relationship, the caregiver and the care receiver, but little is known about the psychological well-being of the cared-for person.

**Objective:** This study aimed to explore the life satisfaction and depressive symptoms of older people receiving family care.

**Methods:** An exploratory study, with a cross-sectional design, was conducted with older people receiving family care. A questionnaire was used to collect sociodemographic data. Life satisfaction was measured with the Satisfaction With Life Scale (SWLS). The Geriatric Depression Scale was used to assess depressive symptoms. Descriptive and inferential analyses were performed.

**Results:** A total of 30 cared-for persons have participated, with mean age of 80.5±6.6 years old, mainly female (70%; n=21) and widows (73.3%; n=22). Most participants were cared by adult children (83.3%; n=25), who assisted them with at least two activities of daily living for ≥5 years (53.4%; n=16). The mean SWLS global score was 24.3±4.8. Depressive symptoms were present in 46.7% (n=14) of the participants. Life satisfaction was significantly lowest in participants cared by children than those cared by spouses (23.4±4.7 vs. 28.2±2.5; p=0.04). Depressive symptoms were significantly correlated with low life satisfaction ( $r_s = -0.590$ ; p=0.001).

**Conclusions:** Findings suggest that the psychological well-being of the cared-for persons might be influenced by the familial relationship, underscoring the need to develop supportive family-based interventions. This study contributes to a new perspective on family caregiving, however, more evidence is needed.

**Descriptors:** caregiving; care receiving, older people; life satisfaction; depressive symptoms.

<sup>a</sup> raquelgabriel@ua.pt

<sup>b</sup> lilianax@ua.pt

<sup>c</sup> daniela.figueiredo@ua.pt

375

### CARERS BURNOUT AND VALUES: IT'S RELATION WITH THE WELLBEING OF PEOPLE WITH DEMENTIA

Patrícia Paquete<sup>1,a</sup>, Maria Amália Botelho<sup>11,b</sup>, Ana Alexandre Fernandes<sup>111,c</sup>

<sup>1</sup>Centro de Estudos de Sociologia. Universidade Nova de Lisboa. Lisboa, Portugal

<sup>11</sup>Faculdade de Ciências Médicas de Lisboa. Universidade Nova de Lisboa. Lisboa, Portugal

<sup>111</sup>Instituto Superior de Ciências Sociais e Políticas. Universidade Técnica de Lisboa. Lisboa, Portugal

**Introduction:** The average life expectancy is increasing and dementia is more prevalent in the elderly population, particularly those who are living in nursing homes. There is a consensus that dementia care shouldn't be task-oriented but relation-centered. This focus implies a greater personal effort from the carer and promotes wellbeing of the person with dementia. In this way carer's personal features, like motivational values and burnout levels, are particularly relevant and its influence in the wellbeing of the person with dementia should be studied.

**Objective:** Characterization of the caregiver's burnout levels and predominant motivational values, and wellbeing level of residents with dementia. The relation between these variables was evaluated.

**Methods:** This horizontal study was conducted in Portuguese nursing homes with a convenience sample of 130 professionals and 50 residents with dementia that had low scores in cognition, self-care and behavior. An exploratory study of carer's burnout and motivational values using Maslach Burnout Inventory and Schwartz values survey and a socio demographic characterization form was performed. These data were correlated with the resident's wellbeing score drawn from an observational tool – Dementia Care Mapping (DCM).

**Results:** 26% of the carers had burnout risk. We found negative correlation between motivational value tradition and emotional exhaustion of the carers ( $p=.220$ ) and also a negative correlation between emotional exhaustion and people with dementia wellbeing ( $p=-.306$ ).

**Conclusions:** We found evidence of some influence of the type of predominant motivational values and levels of burnout of the caregivers in the wellbeing of people with dementia.

**Descriptors:** burnout; values; wellbeing; dementia; nursing homes.

<sup>a</sup> paq.patricia@gmail.com

<sup>b</sup> amalia.botelho@fcm.unl.pt

<sup>c</sup> ana.alexandre@iscsp.utl.pt

376

### RELATIONSHIP BETWEEN BALANCE AND FEAR OF FALLING IN ELDERLY PEOPLE

Liliana Chainho<sup>a</sup>, Joana Cordeiro<sup>b</sup>, Maria da Conceição Barbosa<sup>c</sup>, Teresa Santos<sup>d</sup>, Beatriz Fernandes<sup>e</sup>

Escola Superior de Tecnologia da Saúde de Lisboa. Lisboa, Portugal

**Introduction:** Balance is critical for functional independence. Ageing process is associated to changes that interfere with balance and increase the risk of falling. Beyond this risk it is important that elderly people are aware of it regarding daily activities.

**Objective:** To determine if there is an association between levels of balance and the fear of falling in elderly population of the municipality of Loures.

**Methods:** Cross-sectional analytical study. 32 volunteers participated in the study, 19 (59.4%) females and 13 (40.6%) males, aged  $74.5 \pm 7.7$  years (min=65, max=97). Falls Efficacy Scale (FES) was used to measure the degree of confidence in the performance of daily life activities and Berg Balance Scale (BBS) was used to assess balance.

**Results:** The results of our study showed that 21,9% of the participants had a score less than 46 in BBS, 34,4% between 46 and 53, and 43,8% between 54 and 56. In FES the scores ranged from 31 to 100, mean score  $87,84 \pm 16,53$ . For BBS and FES Pearson correlation is 0,657 with  $p$  value=0.00.

**Conclusions:** Risk of falling is present among the participants in our study. There is also a positive relationship between balance and confidence, indicating that as balance increases confidence in performing daily life activities also increases, suggesting that physiotherapy focused on balance training can contribute to enhance independence.

**Descriptors:** physical activity, ageing, balance, fear of falling.

<sup>a</sup> li\_chainho@hotmail.com

<sup>b</sup> joanamcordeiro@hotmail.com

<sup>c</sup> sao.cbarbosa@gmail.com

<sup>d</sup> teresa\_a\_santos@hotmail.com

<sup>e</sup> beatriz.fernandes@estesl.ipl.pt

377

### MENTAL HEALTH, STRENGTHS AND SOCIAL SUPPORT OF SINGLE MOTHERS

Mariana Lucas<sup>1,a</sup>, Sónia Guadalupe<sup>1,b</sup>, Sónia Simões<sup>1,c</sup>, Helena Espírito-Santo<sup>1,d</sup>, Mariana Marques<sup>1,IV,V,e</sup>

<sup>1</sup>Instituto Superior Miguel Torga. Coimbra, Portugal

<sup>II</sup>Departamento de Investigação & Desenvolvimento. Instituto Superior Miguel Torga. Centro de Estudos da População, Economia e Sociedade. Coimbra, Portugal

<sup>III</sup>Departamento de Investigação & Desenvolvimento. Instituto Superior Miguel Torga. Coimbra, Portugal

<sup>IV</sup>Departamento de Psicologia Médica. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>V</sup>Escola Superior de Desporto de Rio Maior. Instituto Politécnico de Santarém. Rio Maior, Portugal

**Introduction:** Research shows that motherhood and family functioning of single mother families depends on familial, social, and emotional aspects.

**Objective:** We intend to analyze the perception that female single parents, with scholar children, that benefit from family social services, have about their mental health and to examine its association with their perception of social support and family strengths.

**Methods:** Our sample is constituted by 43 single mothers, with an average age of 38 years old (SD=5.6), mostly with one child (63%), single or divorced (49% respectively), with medium or high education (42% and 47%, respectively) and living only with their child(ren) (72%). They completed the Mental Health Inventory (MHI-5) the Social Support Scale (EAS) and the Family Forces Questionnaire (QFF).

**Results:** Forty-two percent of women had a perception of distress but the majority (n=25; 58%) pointed psychological well-being (MHI-5 cutoff score of 52). MHI-5 correlated positively, significantly (p<0.01) and strongly with EAS (r=0.74), and moderately with QFF (r=0.40).

**Conclusions:** Although we observed a high and alarming percentage of distress perception, the majority of mothers revealed psychological well-being, which may indicate that the condition of single parenthood cannot be pointed as a factor associated with a higher vulnerability to psychological distress for most women. We also found that a perception of better mental health is associated with a better perception of social support and family strengths.

**Descriptors:** mental health; single mothers; family; strengths; social support.

<sup>a</sup> marianaclucas@msn.com

<sup>b</sup> guadalupe@ismt.pt

<sup>c</sup> soniasimoes@ismt.pt

<sup>d</sup> helenum@gmail.com

<sup>e</sup> mvpmarques@gmail.com

378

### THE STATE OF HEALTH OF TEACHERS EXPOSED TO NOISE IN THE SCHOOL CONTEXT

Dora Simões<sup>a</sup>, Carla Matos Silva<sup>1,b</sup>

<sup>1</sup>Escola Superior de Tecnologia da Saúde de Coimbra. Instituto Politécnico de Coimbra. Coimbra, Portugal

**Introduction:** Quality of life of workers at their workplace is essential for a good productivity, thereby it is crucial the assessment of working conditions.

**Objective:** This study aims to know the general state of health of teachers exposed to noise in the school context including their hearing and noise annoyance.

**Methods:** This study assessed fifth and sixth grade teachers (Group 1) and seventh to ninth grade teachers (Group 2). An anamnesis and a questionnaire about the most annoying noise in the school context were distributed. A Pure Tone Audiogram and a Tympanogram were executed. The MOS SF-36 scale and a short questionnaire about the consequences of noise were given. The noise in the school environment was also measured using a sound level meter and a dosimeter.

**Results:** The hearing thresholds were within the normal range. The health of the Group 1 was worse than the Group 2 (an average between 64,38 and 89,81 in Group 1 and 62,22 and 87 in Group 2) like the noise annoyance the averages of group 1 were always higher than the ones in Group 2. The most obvious consequence of the noise for 80% of the Group 1 was fatigue while for 77.8% of the Group 2 was irritation. In this study the noise measurements obtained for LA are between 81.6dB and 90.4dB of intensity.

**Conclusions:** It was evident that exist negative consequences of noise in teachers although there were no statistically significant results.

**Descriptors:** General State of Health; Annoyance; Noise; Hearing; Teachers.

<sup>a</sup> dorasofiasimoes@gmail.com

<sup>b</sup> carla@estescoimbra.pt

379

### SCHOOL, FAMILY SUPPORT, ILLNESS REPRESENTATIONS AND QUALITY OF LIFE IN TYPE 1 DIABETES

Ana Cristina Almeida<sup>1,a</sup>, M. Graça Pereira<sup>1,b</sup>, Engrácia Leandro<sup>1,c</sup>

<sup>1</sup>*Instituto Ciências Sociais. Universidade do Minho. Braga, Portugal*

<sup>2</sup>*Escola de Psicologia. Universidade do Minho. Braga, Portugal*

<sup>3</sup>*Universidade Católica Portuguesa. Braga, Portugal*

**Introduction:** Adolescents outcomes on type 1 diabetes, such as quality of life, are influenced by the quality of social support provided by family members and peers.

**Objective:** This study analyses the influence of school support, family support, and adolescent's illness representations on quality of life in adolescents with type 1 diabetes.

**Methods:** The sample included 100 adolescents with type 1 diabetes. Adolescents answered the instruments: School Support (SS) (Pereira & Almeida, 2009), Diabetes Family Behavior Support (DFBS), Brief Illness Perception Questionnaire (IPQ-Brief) and Diabetes Quality of Life (DQoL).

**Results:** School support and illness representations (consequences and emotional response) predicted adolescents' quality of life, explaining 47,6% of the results and school support mediated the relationship between family support (warmth-caring) and quality of life as well as between adolescents' illness personal control and quality of life. Family support (warmth-caring) mediated the relationship between adolescents' illness personal control and quality of life as well as between adolescents' illness coherence and quality of life.

**Conclusions:** Family, peers and school staff need to be included in intervention programs, so that social support from these different contexts may positively impact adolescents' quality of life.

**Descriptors:** Quality of life; School; Family; Illness Representations; Type 1 Diabetes.

380

### PROFESSIONAL IDENTITY AND THE PSYCHO-SOCIAL CONTRACT: THE IDEOLOGICAL LINK TO COMMITMENT IN HEALTH WORKERS

João Fontes da Costa<sup>1,a</sup>, Teresa Carla Oliveira<sup>1,b</sup>

<sup>1</sup>*Escola Superior de Tecnologia e Gestão de Oliveira do Hospital. Instituto Politécnico de Coimbra. Oliveira do Hospital, Portugal*

<sup>2</sup>*Faculdade de Economia. Universidade de Coimbra. Coimbra, Portugal*

**Introduction:** In addressing issues of career development this paper explores the relevance of professional identities in understanding social and psychological contracts. Institutional norms and practices are not operationally meaningful until the individual perceives them as important to her or his 'well-being'. Professional identity has an important role on perceiving the delivery of the psychological contract, mediated by a social contractualization dimension with a regulative/normative character.

**Objective:** To enhance the interrelation of identities and careers by exploring the degree to which there may be a match or mismatch between professional identities and values and organisational values, and thus between job-fit and aspired career-fit with implications for fulfilment or breach of psychological and social contracts.

**Methods:** The case study comprises 50 in-depth interviews analyzed using the grounded theory principles in a socio-cognitive perspective.

**Results:** Rather than concern to achieve boundaryless careers between organisations, there are professional identity boundaries that pharmacists do not want to cross in career moves. A fit between the organization's and the employee's views on professional identity and roles favours a deeper identification with the organization.

**Conclusions:** The findings have implications in macro policy making and governance in health care institutions in the sense that, if they wish to achieve reconciliation between the need for economic and social efficiency, they should care about the values of professionals rather than only on market value criteria. This synthesis of the concept of psychological contract with a wider interfacing of social contract theory probably is overdue and may merit evaluation in other professional contexts.

**Descriptors:** Professional Identity, Psychological Contract, Social Contract.

<sup>a</sup> ananevesalmeida@gmail.com

<sup>b</sup> gracep@psi.uminho.pt

<sup>c</sup> engleandro@braga.ucp.pt

<sup>a</sup> joao.costa@estgoh.ipc.pt

<sup>b</sup> tcarla@fe.uc.pt



381

### BUILDING INSTRUMENT TO ASSESS USER SATISFACTION IN COMMUNICATING WITH HEALTH PROFESSIONALS BASED ON THE CONSENSUS OF THE DELPHI METHOD

A.H. Santos<sup>I,a</sup>, R. Pimenta<sup>II,III,b</sup>, P. C. Santos<sup>II,IV,c</sup>, P. Moreira<sup>V,d</sup><sup>I</sup>Centro Hospitalar do Porto. Hospital de Santo António. Porto, Portugal<sup>II</sup>Escola Superior de Tecnologia de Saúde do Porto. Instituto Politécnico do Porto. Porto, Portugal<sup>III</sup>Centro de Estudos e Investigação em Saúde. Universidade de Coimbra. Coimbra, Portugal<sup>IV</sup>Centro de Investigação em Actividade Física, Saúde e Lazer. Faculdade de desporto. Universidade do Porto. Porto, Portugal<sup>V</sup>Escola Nacional de Saúde Pública. Universidade Nova de Lisboa. Lisboa, Portugal

**Introduction:** Recent research in user-health professionals communication have emphasized the need to develop new instruments to evaluate user satisfaction in communicating with health professionals.

**Objective:** To build a tool to assess user satisfaction in communicating with healthcare professionals given by consensus of a panel of experts in the field of health communication.

**Methods:** We developed a structured questionnaire online, resulting from the literature review, with dimensions of communication and items for each dimension, the computer platform of questionnaires - Survey Monkey. We used the modified Delphi method in 3 rounds, with a panel of 25 national experts. These were invited to modify and add dimensions of communication to the questionnaire and to evaluate the importance of each item using a scale of evaluation. We established as the minimum retention criteria for the next round a 70% consensus by the panel. We used Survey Monkey software platform for data collection and data analysis results.

**Results:** After three rounds, we got an instrument with six communicative dimensions (verbal communication, non-verbal communication, empathy, respect, problem solving and supporting material), and twenty-five specific items.

**Conclusions:** It is available a new tool to assist in the management and planning process necessary for improving the quality of services and health institutions.

**Descriptors:** New Instrument, user satisfaction, communication, healthcare professionals.

<sup>a</sup> anahrs@gmail.com<sup>b</sup> rep@estsp.ipp.pt<sup>c</sup> paulaclara.santos@gmail.com<sup>d</sup> pmoreira@ensp.unl.pt

382

### GLOBAL GERIATRIC EVALUATION OF THE ALGARVE POPULATION

Nídia Braz<sup>I,a</sup>, Sandra Pais<sup>I,b</sup>, Clara Cordeiro<sup>III,c</sup>, Giovanna Oliveira<sup>III,IV,d</sup>, Monserrat Conde<sup>I,e</sup><sup>I</sup>Escola Superior de Saúde e Centro de Estudos e Desenvolvimento em Saúde. Universidade do Algarve. Faro, Portugal<sup>II</sup>Centro de Estatística e Aplicações. Universidade de Lisboa. Lisboa, Portugal<sup>III</sup>Faculdade de Nutrição. Universidade Federal de Goiás. Goiás, Brazil<sup>IV</sup>Escola Superior de Saúde. Universidade do Algarve. Faro, Portugal

**Introduction:** The ageing of population challenges communities to adapt and evolve to accommodate the needs of people that live longer (mostly out of work, either healthy, fragile or with chronic disease). Population ageing in the Algarve is higher than in overall Portugal. Studies on health conditions, frailty risk factors and elderly specific needs are undeveloped in Portugal and unknown in the Algarve.

**Objective:** To prepare a tool for Global Geriatric Evaluation, to be used in the “Survey of Health and Ageing in the Region of Algarve – SHARA”, a commitment to “European Innovation Partnership on Active and Healthy Ageing”.

**Methods:** A preliminary version of the screening tool, which includes well-known instruments to measure health condition (EASY-care), risk of fall (Tinetti), physical activity (Baecke’s modified questionnaire), nutritional condition (MNA), cognitive and depressive status (MMSE, Yesavage geriatric depression scale), together with socio-demographic characteristics, was applied to an independent sample of subjects from a community centre – ARPI (“Associação de Reformados, Pensionistas e Idosos do Concelho de Faro”), with ages between 55 and 89.

**Results:** ARPI is mostly frequented by women, who have either risk of malnutrition or malnutrition incidence, a relevant risk of fall or are physically active. Those who live alone, show a higher risk of fall.

**Conclusions:** ARPI members are active, but with risk of malnutrition and fall, suggesting the relevance and importance of future interventions in these areas. The proposed screening tool showed to be adequate for SHARA study, suitable to provide wider information on frailty and other health conditions.

**Descriptors:** ageing; frailty; geriatric evaluation; screening tools.

<sup>a</sup> nbraz@ualg.pt<sup>b</sup> spais@ualg.pt<sup>c</sup> ccordei@ualg.pt<sup>d</sup> giovannaangela@gmail.com<sup>e</sup> mgconde@ualg.pt

383

### NOISE IN AN INTENSIVE CARE UNIT AS A FACTOR OF DISCOMFORT: A DESCRIPTIVE EXPLORATORY STUDY

Cláudia Oliveira<sup>a</sup>, Filipa Veludo<sup>b</sup>

*Instituto de Ciências da Saúde, Universidade Católica Portuguesa. Portugal*

**Introduction:** The term of comfort for health care is the immediate state of being strengthened in the four contexts of holistic human experience (Kolcaba, 2003). The noise is recognized as one of the most disturbing factors of the experience of comfort, with adverse effects on the health of patients.

**Objective:** Measuring the levels of noise that customers are subjected to in an intensive care unit; describing the noise levels during the morning, afternoon and night shifts; identifying sources of noise related to high levels of dB(A).

**Methods:** A descriptive exploratory study in a intensive care unit. We evaluated noise levels on three consecutive days for 15 minutes in each local, in a total of nine shifts. As instrument for data collection a sound level meter model 2240 was used.

**Results:** Noise levels evaluated ranged between 49.1 dB(A) on the night, and 72.3 dB(A) in the afternoon. In the morning, the maximum and minimum was 71.7 dB(A) and 59.2 dB(A); in the afternoon 72.3 dB(A) and 59.8 dB(A); on the night 62.9 dB(A) and 49.1 dB(A). The noise sources corresponding to higher levels were professionals' conversation [63.8 to 79.8 dB(A)]; pumps infusion alarms [80.2 to 82.4 dB(A)]; PRISMA and ECMO alarms [73.8 to 86.3 dB(A)]; mobile phones rings [66.8 to 76.1 dB(A)]; ventilator alarms [74.2 dB(A)]

**Conclusions:** According to the WHO (2002) the hospital level of noise should be between 40 dB(A) (daytime) and 30 dB(A) (night). In this study patients are subjected to high levels of noise.

**Descriptors:** Comfort; Intensive Care Unit; Noise.

384

### SLEEP AND QUALITY OF LIFE IN COLLEGE STUDENTS: COMPARISON BETWEEN SEXES

Anaïs Reis<sup>1,a</sup>, Leonor Miranda<sup>1,II,b</sup>, Ilídio Pereira<sup>III,c</sup>, José Oliveira<sup>II,d</sup>

*<sup>I</sup>Terapia ocupacional. Escola Superior de Tecnologia da Saúde do Porto. Porto Portugal*

*<sup>II</sup>Centro de Investigação em Actividade Física, Saúde e Lazer. Faculdade de Desporto. Universidade do Porto. Porto, Portugal*

*<sup>III</sup>Biomatemática, Bioestatística e Bioinformática. Escola Superior de Tecnologia da Saúde do Porto. Porto, Portugal*

**Introduction:** College students are undergoing major academic and psychosocial pressures and show preference for evening activities. Due to the increasing enrollment in higher education and the propensity for sleep problems could jeopardize the health, academic performance and quality of life, the goal was to analyze the relationship between perceptions of quality of sleep (QS) and the perception of quality of life (QoL) among college students, comparing sexes.

**Methods:** This sample (n=119), composed of mostly male college students (59.7%) with a mean age of 20 ( $\pm 2.2$ ) years. Were applied: the index of the Pittsburgh Sleep Quality and World Health Organization Quality of Life. A descriptive and inferential statistics ( $\alpha=0.05$ ) analysis was performed in PASW Statistics18.

**Results:** The score of QS is slightly lower in females ( $4.3 \pm 2.2$ ) compared to males ( $4.2 \pm 2.4$ ;  $p > 0.05$ ). The score of males in QoL domains of psychological health ( $71.7 \pm 13.2$ ;  $p = 0.708$ ) and environment ( $76.0 \pm 14.0$ ;  $p = 0.276$ ) has slightly higher average values compared to females ( $71.2 \pm 9.1$ ;  $p = 0.708$  and  $73.4 \pm 10.6$ ;  $p = 0.276$ ) respectively. There was an association between the QS and the domains of QoL in males for physical health ( $r = -0.34$ ,  $p = 0.004$ ), psychological ( $r = -0.34$ ,  $p = 0.003$ ) and social relations ( $r = -0.32$ ,  $p = 0.007$ ), and female for physical health domains ( $r = -0.34$ ,  $p = 0.020$ ) and social relationships ( $r = -0.31$ ;  $p = 0.033$ ).

**Conclusions:** These results suggest that a better perception of QS is related to a better perception of QoL, with some gender differences, seeming to emphasize the need and importance of primary prevention to thereby improving academic performance and QoL.

**Descriptors:** sleep; college students; quality of life; quality of sleep; gender differences.

<sup>a</sup> claudiajs.oliveira@gmail.com

<sup>b</sup> fveludo@ics.lisboa.ucp.pt

<sup>a</sup> anaisreis\_89@hotmail.com

<sup>b</sup> lmiranda21@gmail.com

<sup>c</sup> isousap@gmail.com

<sup>d</sup> joliveira@fade.up.pt

385

### RELATIONSHIP BETWEEN MOTOR COORDINATION AND PHYSICAL FITNESS OF PREPUBERTAL CHILDREN

Leonardo G. O. Luz<sup>1,II,a</sup>, Bruno Cleiton Macedo do Carmo<sup>I</sup>, Manuel J. Coelho-e-Silva<sup>II</sup>

<sup>I</sup>Universidade Federal de Alagoas. Alagoas, Brazil

<sup>II</sup>Faculdade de Ciências do Desporto e Educação Física. Universidade de Coimbra. Coimbra, Portugal

**Introduction:** Health benefits of physical activity (PA) and physical fitness (PF) are reasonably well established, tracking studies of PA and PF in childhood have not ordinarily considered the role of motor coordination (MC). Moreover, there are few studies about the relationship that MC presents with PA and PF.

**Objective:** The study was aimed to investigate the relationship between MC and PF of prepubertal girls.

**Methods:** The cross-sectional sample included 41 females aged 8 years old (8,5±0,3 years) from schools of Arapiraca, Alagoas, Brazil. The subjects completed the morphological measurements, the Körperkoordinationstest für Kinder (KTK) and different fitness tests. Percentage of predicted adult height (PPAH) was used to assess the maturity status. Subjects were classified as on time when the percentages of predicted mature height were expressed on z-scores for girls in the University of California at Berkeley Guidance Study. Spearman correlation were calculated to evaluate the correlation between fitness tests and motor coordination performance (p<0,05).

**Results:** The MC did not show up strongly correlated with any PF tests. The more correlated with MC fitness tests were horizontal jump (rs=0.497) and aerobic performance (rs=0.441). Proof of agility battery of fitness tests proved to be inversely correlated with the MC (rs=-0.493).

**Conclusions:** The results denote that there is no strong correlation between PF and MC of prepubertal girls. Such findings reinforce the idea that the development of MC requires specific activities and not simply engaging in physical activities.

**Descriptors:** children, motor coordination, health.

<sup>a</sup> ltluz@ig.com.br

386

### PSYCHOMETRIC STUDY OF THE ADOLESCENT SOCIAL COMPARISON SCALE-REVISED

Ana Xavier<sup>I,a</sup>, Marina Cunha<sup>II,b</sup>, José Pinto-Gouveia<sup>I,c</sup>, Filipa Medeiros<sup>II,d</sup>

<sup>I</sup>Centro de Investigação do Núcleo de Investigação e Intervenção Cognitivo-Comportamental. Faculdade de Psicologia e Ciências da Educação. Universidade de Coimbra. Coimbra, Portugal

<sup>II</sup>Instituto Superior Miguel Torga. Coimbra, Portugal

**Introduction:** Social relationships are of crucial importance for our well-being. However, social relationships can be competitive for social place. This may be a source of stress, particularly in adolescents because they seek to develop peer relationships, fit in and be attractive to others. Consequently, they begin to compare themselves to others in a variety of domains and with a sense of vulnerability to rejection if that comparison is unfavourable. In turn, this may lead to the development of psychopathology and health problems. The Adolescent Social Comparison Scale-Revised (Irons & Gilbert, 2005) assesses global comparisons that individuals make about themselves in relation to their friends.

**Objective:** This study aims to adapt the Adolescent Social Comparison Scale-Revised (ASCS-R) and explore its psychometric properties for Portuguese adolescents.

**Methods:** Participants were 450 adolescents (220 boys and 230 girls) aged between 12 and 18 years old (M=14.38, SD=1.75), in 7<sup>th</sup> to 12<sup>th</sup> grades from schools in Coimbra, Portugal.

**Results:** The Portuguese version of the ASCS-R show a single structure composed by 8 items. High scores indicate a more positive social comparison. This 8-items scale demonstrates an adequate item reliability and a good internal consistency ( $\alpha=.81$ ). In this sample, there are significant gender differences, with boys reporting more positive social comparison in relation to group peers than girls.

**Conclusions:** Our findings contribute to the assessment and research on social rank, suggesting that the ASCS-R is an economic, valid and reliable measure to assess social comparison in adolescents.

**Descriptors:** Social Comparison; Portuguese version; Assessment; Adolescence.

<sup>a</sup> ana.mj.xavier@gmail.com

<sup>b</sup> marina\_cunha@ismt.pt

<sup>c</sup> jpgouveia@fpce.uc.pt

<sup>d</sup> filipamedeiros23@gmail.com

387

**MOBBING/PSYCHOLOGICAL AGGRESSION IN NURSING PROFESSION**Ana Lúcia da Silva João<sup>a</sup>*Hospital Distrital de Santarém. Santarém, Portugal*

**Introduction:** Mobbing is characterized by repetitive hostile behaviour and unethical conduct on behalf of a manager or work colleague towards other co-workers for a long period of time.

**Objective:** This research project aims to assess the existence, frequency and intensity of mobbing in the population of Portuguese Nurses, as well as its impact on the emotional well-being, interpersonal relationships and job satisfaction.

**Methods:** The study carried out was quantitative, correlational and transversal. A questionnaire was used as the form to collect data. The same questionnaire was delivered in 11 institutions in Portugal, which were chosen randomly and then placed on a website. The total sample is composed of 3227 nurses from various health institutions in Portugal. SPSS 17 was used for the statistical data treatment.

**Results and Conclusions:** From the results obtained, it was observed that on average each nurse suffers 11 aggressive behaviour conducts in the work place. The types of aggression suffered with greater intensity by the victims are communication blockage (0,95) and being discredited at work (0,48). The frequency of the aggressive behaviour is mainly several times a month and several times a week. When confronted about the motive of having suffered psychological harm, the victims mentioned the following as the main causes: envy or jealousy, not yielding or being influenced by blackmailing or subservience and being innovative or entrepreneurial in the new work methods or perspectives. Almost half of the victims of mobbing (48,14%) state that they had health problems as a result of the psychological aggression suffered in the work place.

**Descriptors:** Mobbing; Psychological Aggression; Interpersonal Relationships; Nursing Health; Labour Welfare.

388

**QUALITY OF LIFE IN OLDER PEOPLE AND HOSPITALIZATION**Gorete Santos<sup>l</sup>, Liliana Sousa<sup>ll</sup>*Centro Hospitalar Baixo Vouga. Aveiro, Portugal**<sup>ll</sup>Universidade de Aveiro. Aveiro, Portugal*

**Introduction:** In an aging society, some topics are becoming more relevant such as Quality of Life (QOL) and health of older people. The QOL consists of several dimensions, and health is a domain with a lot of influence on QOL. Hospitalization is an event of high anxiety mainly for older persons, due to its association with health status deterioration and decrease of the QOL.

**Objective:** this study examines older persons QOL at the hospitalization admission, considering the influence of socio-demographic, pathology and hospitalization duration variables.

**Methods:** the sample comprises 250 participants ( $\geq 65$  years old), 50.4% females, with a mean age of 79.2 years (SD=7.6). The Elderly Assessment System (EASYcare) was administered.

**Results:** main results show that: the problematic areas are mental health/wellness, accommodation/finance and mobility, 27.6% of the participants are dependent in ADL and IDLA; 38.5 are dependent in IADL and independent in ADL; 39.6% are independent. The dependent tend to be widowers, not practicing physical activity, presenting breathing limitations, feeling lonely and depressed; the independent tend to be more satisfied with their housing conditions, managing autonomously their finances, with high school levels and younger.

**Conclusions:** results reinforce the idea that the adopted lifestyles, socio-demographic conditions and individual characteristics are important factors in the perception of QOL, as well as the experience of hospitalization.

**Descriptors:** Aging; Quality of Life; Hospitalization.

<sup>a</sup> alsjoao@hotmail.com

389

### EFFECTS OF AN EXERCISE PROGRAM ON PHYSICAL FITNESS IN PATIENTS WITH TYPE 2 DIABETES\*

Romeu Mendes<sup>1,a</sup>, Nelson Sousa<sup>1</sup>, José Luís Themudo-Barata<sup>1,III</sup>, Vítor Machado Reis<sup>1</sup>

<sup>1</sup>Research Center in Sport Sciences. Health Sciences and Human Development. Universidade de Trás-os-Montes e Alto Douro. Vila Real, Portugal

<sup>II</sup>Universidade da Beira Interior. Covilhã, Portugal

<sup>III</sup>Centro Hospitalar Cova da Beira. Covilhã, Portugal

**Introduction:** Patients with type 2 diabetes have a greater decline in physical fitness with major influence on their mobility and quality of life.

**Objective:** To analyze the effects of Diabetes em Movimento® a community-based supervised exercise program on physical fitness in patients with type 2 diabetes.

**Methods:** Forty-three individuals with type 2 diabetes (21 men and 22 women; age 62.51±5.92 years old) underwent a community-based exercise program, with nine months duration, combining aerobic, resistance, agility and flexibility exercise. Group exercise sessions were held three times per week on non-consecutive days, lasting 70 minutes and were supervised by exercise professionals. Physical fitness was assessed before and after the exercise program application through 6-minute walk test (aerobic fitness), 30-second chair stand test (lower limb strength), timed up-and-go test (agility) and chair sit-and-reach test (lumbar and lower limb flexibility).

**Results:** Significant improvements were observed ( $p < 0.001$ ) in the performance of all physical fitness tests used: 6-minute walk test, 660.05±74.86 vs. 714.15±93.48 m; 30-second chair stand test, 16.68±3.21 vs. 21.49±3.54 reps; timed up-and-go test, 6.15±0.98 vs. 5.27±0.76 s; and chair sit-and-reach test, -6.89±11.83 vs. 0.20±11.55 cm.

**Conclusions:** Community-based exercise programs like Diabetes em Movimento® are effective interventions to improve physical fitness in patients with type 2 diabetes.

**Descriptors:** Physical Activity; Exercise; Physical Fitness; Quality of Life; Type 2 Diabetes.

\*Funding and registration: *Diabetes em Movimento® Trial* was funded by *Portuguese Foundation for Science and Technology* (reference SFRH/BD/47733/2008) and is registered in *Current Controlled Trials* (reference ISRCTN09240628).

<sup>a</sup>rmendes@utad.pt

390

### SPECIFIC SCHOOLING CARE FOR CHILDREN WITH DISABILITIES FROM A NURSING PERSPECTIVE

Melissa J. A. Felizardo<sup>1,a</sup>, Luiz Fernando de Matos Xavier<sup>1,II,b</sup>, Lana E. S. Santos<sup>1,c</sup>, Denis S. Moreira<sup>1,d</sup>, Claudia Gomes<sup>1,e</sup>

<sup>1</sup>Escola de Enfermagem. Universidade Federal de Alfenas. Minas Gerais, Brazil

<sup>II</sup>CAPES Science without Borders program in Institute of Technology Tralee. Tralee, Ireland

**Introduction:** Inclusive education or the inclusion of children with disabilities in regular classes has proved to be challenging for school communities. Research from early childhood educators suggests the education process requires more cohesive development and implementation of best practice policy in order to optimize the growth and development of the infant. Subsequently, this research deals with disability childcare in child education institutions.

**Objective:** To critique childhood education, specifically examining the care of children with disabilities.

**Methods:** This is an exploratory study with a qualitative, descriptive approach. This was conducted using semi-structured individual interviews with 14 public service infant educators from Alfenas, MG, Brazil. For data analysis, we used Content Analysis, Thematic Analysis method proposed by Bardin. This work was approved by the Research Ethics Committee of Federal University of Alfenas, with the report number 213 835.

**Results and Conclusions:** Professional and parental collaboration within and outside schools was observed to be vital. Results show family participation enables and enhances childhood educators' objectives through interactive feedback, significantly benefiting children with disabilities development. In some schools strategic, conscientious qualified care to students was noted. However, in other educational institutions professional training and adaptation was distinctly lacking. This raises concerns regarding the monitoring of children with disabilities. This specialized care appears similar to that provided to children without special needs. Consequently this study analyses reflective practice by public service, early childhood educators in Brazil.

**Descriptors:** Nursing, Care, Early Childhood Education, Children with Disabilities.

<sup>a</sup>melissajoice@gmail.com

<sup>b</sup>lf\_xavier@hotmail.com

<sup>c</sup>lana.santos@unifal-mg.edu.br

<sup>d</sup>denisunifal@unifal-mg.edu.br

<sup>e</sup>cg.unifal@gmail.com

391

### QUALITY OF LIFE, CONCERNS AND THERAPEUTIC NEEDS IN PARENTS OF CHILDREN WITH SPECIAL NEEDS

Ana Bernardo<sup>1,a</sup>, Margarida Santos<sup>1,II,b</sup>

<sup>1</sup>*Escola Superior de Tecnologia da Saúde de Lisboa. Lisboa, Portugal*

<sup>II</sup>*Faculdade de Psicologia de Lisboa. Lisboa, Portugal*

**Introduction:** Parents of children with (SN) share with other parents the challenges and worries of parenting but they face an extra burden that stems from the child's medical condition. Additionally these parents must deal with their own feelings of anguish and loss. Family centered care highlights the importance for professionals to understand parental needs and worries.

**Objective:** To explore and to relate parental quality of life; dimensions of parental stress; concerns and therapeutic needs, in parents of children with SN. Thirty parents (80% mothers) of children with diverse developmental disorders participated.

**Methods:** We use WHOQOL-bref; Parent's Evaluation of Developmental Status (PEDS); Illness experience questionnaire (IEQ). Statistical Package for Social Sciences 21 was used for statistical descriptive and correlational analyses

**Results:** Parents showed medium/low levels of quality of life. The lowest scores were obtained in the environmental domain. Parental stress was associated with parental evaluation of their child's level of dysfunctionality and with parents' perception of the child's condition impact on the family. Parents revealed worries related to the child's behavior, autonomy, language development, family isolation and lack of social support. Correlations were found between quality of life with child's characteristics and also with parent's characteristics.

**Conclusions:** The results led to the identification of determinants of parental quality of life and to understand relations between these determinants. Parental perceptions and child characteristics emerged as key factors to be included in health professional's efforts to promote parent's involvement.

**Descriptors:** Quality of life, Parenting, Chronic illness, Parental concerns.

392

### BURNOUT AMONG NURSES

Maria da Conceição Alves Rainho Soares Pereira<sup>1,a</sup>, Graça Maria Ferreira Pimenta<sup>II,b</sup>, Isabel Maria Antunes Rodrigues da Costa Barroso<sup>1,c</sup>, Maria João Filomena Santos Pinto Monteiro<sup>1,d</sup>

<sup>1</sup>*Escola Superior de Enfermagem de Vila Real. Universidade de Trás-os-Montes e Alto Douro. Vila Real, Portugal*

<sup>II</sup>*Escola Superior de Enfermagem do Porto. Porto, Portugal*

**Introduction:** Nursing is considered a risk profession with high levels of burnout, which is the process of response to chronic occupational stress. It presents negative consequences in individual, professional, familiar and social areas.

**Objective:** Describe the level of Portuguese nurses' burnout.

**Methods:** We developed a cross-sectional study; the aim of study was to analyze the level of burnout, and its dimensions, in nurses. For the information's collected, we used a self-applied structured survey that included the Nursing Burnout Questionnaire (NBQ), whose scale varies from 1 to 4 points.

**Results:** The sample of 316 nurses, aged between 23 and 59 years, with an average age of 38.4 years, work at a hospital in North of Portugal. Professional experience ranged from 0 to 37 years, with an average of 14.9 and (SD=8.5). The nurses had a mean score of burnout 2.3 (SD=0.4). The mean score of the three dimensions of burnout: emotional exhaustion was 2.4 (SD=0.6), depersonalization averaged was 1.9 (SD=0.5) and the average of lack of personal accomplishment was 1.8 (SD=0.5).

**Conclusions:** In this sample, weighted averages of the values of the syndrome of burnout and emotional exhaustion were above the midpoint, whose value is (2) in the measurement scale. The results showed moderate average values, but nurses must be aware of the demand of their profession. Taking into account the results of the study, a proposal was developed, containing recommendations of health promotion for nurses and prevention of psychosocial risks at work.

**Descriptors:** Burnout, Nurses, Health Promotion.

<sup>a</sup>terapeuta\_carolina@hotmail.com

<sup>b</sup>margarida.santos@estesl.ipl.pt

<sup>a</sup>crainho@utad.pt

<sup>b</sup>gpimenta@esenf.pt

<sup>c</sup>imbarroso@utad.pt

<sup>d</sup>mjmonteiro@utad.pt

393

### INVENTORY OF BULLYING IN NURSING STUDENTS: FINAL RESULTS

Célia Leitão<sup>1,a</sup>, Luis Sá<sup>1,b</sup><sup>1</sup>Hospital CUF Infante Santo. Lisboa, Portugal<sup>2</sup>Catholic University of Portugal. Institute of Health Sciences. Center for Interdisciplinary Research in Health. Lisboa, Portugal

**Introduction:** In the clinical setting, nursing students are exposed to similar working conditions and stressors as their supervisors. These stress conditions can lead to bullying phenomena.

**Objective:** We tested the validity of an instrument designed to evaluate bullying in nursing students, based on a quantitative cross-sectional study.

**Methods:** Sample consisted of 87 nursing students in the last year of graduation, with a mean age 23,08±2,03 (87,4% female). Data was collected by a self-completion questionnaire consisting of four parts: (1) sociodemographic characterization, (2) a version of the "Inventory of Bullying in Nursing Students" (IBEE-91 items), (3) assessment of attitudes towards bullying and (4) General Health Questionnaire (GHQ-28 items). The IBEE items were then reduced to a shorter version of 28 questions by factor analysis, which were tested (internal consistency) and reached a Cronbach's alpha ( $\alpha$ ) of 0,942, similar to the score 0,943  $\alpha$  obtained by GHQ-28. Subsequently data from both the IBEE and GHQ were correlated (Pearson's  $r=0,47$ ;  $p<0,001$ ).

**Results:** According to the criteria of bullying by Mikkelsen & Einarsen (2001), we have found 44,8% of bullying prevalence using the first criterion (less stringent), 21,2% using the second criterion and 16,3% according to the third criterion (the most demanding).

**Conclusions:** The short version of the IBEE is a useful tool to monitor bullying in nursing students. The results show us that nursing students in clinical teaching context are exposed to the same stressors professionals.

**Descriptors:** Bullying. Inventory of bullying. Nursing students.

394

### QUALITY OF LIFE IN THE ELDERLY: A COMPARATIVE STUDY BETWEEN TWO DIFFERENT CARE GIVING SERVICES

Cezarina Santinho Maurício<sup>a</sup>, Maria Odília Abreu<sup>b</sup>, Luísa Pimentel<sup>c</sup>, Graça Seco<sup>d</sup>

Escola Superior de Educação e Ciências Sociais. Polytechnic Institute of Leiria. Leiria, Portugal

**Introduction:** Recent data reveals the Portuguese population as the 7<sup>th</sup> most elderly globally. With increasing average life expectancy a key challenge facing countries with aging populations will be to preserve or ensure the Quality of Life (QoL) over the additional lifetime the population are increasingly living. This research has adopted QoL as defined by WHO.

**Objective:** The main purpose of this study is to assess the QoL of the elderly who attend care giving services by comparing the various domains of QoL in two groups.

**Methods:** This is an exploratory comparative study using the WHOQOL-Bref validated instrument to assess QoL (Canavarro, Vaz Serra, Simões, Pereira, Gameiro, Quartilho, Rijo, Carona & Paredes, 2006). WHOQOL-Bref has 26 items (four domains: physical, psychological, social and environmental), with a 5 Likert scale response. The sample (n=30) has 53,3% women and 46,7% men, an average age of 80 years (std deviation 7,47), 50% attending home help services and 50% attending day care centers.

**Results and conclusions:** The results show that 46,7% answer with "good" to QoL item and 43,3% say they are "satisfied" with their health. In this sample there are no associations between most sociodemographic variables and WHOQOL-Bref domains. There is a slight difference between the two groups attending different services concerning all WHOQOL-Bref domains showing that the elderly attending home help reveal a higher QoL perception. Although the small sample invalidates generalizations, it can be said that the elderly reveal a satisfactory QoL perception. For further conclusions a replica study with a bigger sample is necessary.

**Descriptors:** Quality of life. Elderly. Caregiving services. WHOQOL-BREF.

<sup>a</sup> celia.alvesleita@gmail.com<sup>b</sup> lsa@porto.ucp.pt<sup>a</sup> cezarina.mauricio@ipleiria.pt<sup>b</sup> odilia.abreu@ipleiria.pt<sup>c</sup> luisa.pimentel@ipleiria.pt<sup>d</sup> gracia.seco@ipleiria.pt

395

### QUALITY OF LIFE IN PEDIATRIC CANCER: ILLNESS PERCEPTIONS OF CHILDREN AND PARENTS

Marta Fonseca<sup>1,a</sup>, Elisabeth Spitz<sup>11,b</sup><sup>1</sup>*Escola Superior de Educação e Ciências Sociais do Instituto Politécnico de Leiria. Leiria, Portugal*<sup>11</sup>*Université de Lorraine. Nancy, France*

**Introduction:** Research stresses the need to identify factors that impact adjustment of paediatric cancer patients. Recently, research has focussed on the impact of illness perceptions on Quality of Life (QoL).

**Objective:** The present communication aims to analyse the impact of children's with cancer illness perceptions, as well as those of their parents', on children's QoL.

**Methods:** The Brief Illness Perception Questionnaire (Broadbent et al, 2006) was administered to 39 children with cancer, aged from 8 to 12 years old, and to their parents (n=39). Children also completed the Child Quality of Life Systemic Inventory (Missotten et al, 2008).

**Results:** Results highlighted that the perception dimension of illness impact, which comprises four initial dimensions of the Brief - IPQ (consequences, identity, concern and emotional representation), is a significant QoL predictor. QoL were predicted by children's ( $\beta=.64$ ;  $p<.05$ ) and parents' ( $\beta=.30$ ;  $p<.05$ ) illness impact perceptions. Children and parents reporting a less threatening view about the consequences of cancer in their lives reveal a better QoL.

**Conclusions:** Through the analysis of the influence of children's and parents' illness perceptions on QoL, findings provide information to design interventions to promote QoL among paediatric cancer patients.

**Descriptors:** Oncology. Paediatric cancer. Quality of life. Parents. Illness perceptions.

396

### AGING AND MILD HEARING LOSS

Ana Rios<sup>a</sup>, Diana Santos<sup>b</sup>, Inês Maduro<sup>c</sup>, Mafalda Faro<sup>d</sup>, Mariana Araújo<sup>e</sup>, Sofia Borba<sup>f</sup>, Margarida Serrano<sup>g</sup>*Coimbra Health School (ESTeS) – Polytechnic Institute of Coimbra. Coimbra, Portugal*

**Introduction:** Presbycusis results in a decreased ability to hear high-pitched sounds as the individual ages. This fact is aggravated in the presence of noise. The difficulty hearing in noise is often not a matter of sound, but of perception/intelligibility. The SPIN test (Speech Perception in Noise) is a test that evaluates the speech perception/intelligibility in noise, through the presentation of several phrases in the presence of competing message simultaneously, allows evaluating the discrimination of speech recognition in unfavorable environments.

**Objective:** To evaluate the differences in intelligibility among elderly in noisy and quiet environments.

**Methods:** The SPIN test was conducted to individuals over 65 years and who had mild hearing loss. The phrases were presented in random order, two in quiet and two in noise.

**Results:** There were no statistically significant differences between the intelligibility in noise and silence, on both the intelligibility was below 90%. This agrees with the opinion of the elderly because only 22% reported difficulties to understand in noise. Emphasize that 66.7% of the elderly have permanent tinnitus.

**Conclusions:** It is concluded that more studies are needed in which older people present other degrees of hearing loss and where signal to noise ratio is more unfavorable so it can simulate environments of many day-to-day life of the elderly. However, an early audiological intervention is fundamental to the quality of life, in which communication strategies are taught to the elderly, even in mild hearing loss, so it does not degrade and can even improve.

**Descriptors:** SPIN test. Intelligibility. Elderly. Presbycusis. Quality of life.

<sup>a</sup> marta.fonseca@ipleiria.pt<sup>b</sup> elisa.spitz@univ-lorraine.fr<sup>a</sup> catarina.catarinarios@gmail.com<sup>b</sup> diip\_santos@hotmail.com<sup>c</sup> maduro.ines@gmail.com<sup>d</sup> mafaldafaro@hotmail.com<sup>e</sup> mariana\_msda@hotmail.com<sup>f</sup> sofiaborba91@hotmail.com<sup>g</sup> mserrano@estescoimbra.pt



397

### QUALITY OF LIFE AFTER LIVER TRANSPLANT IN FAMILIAL AMYLOIDOTIC POLYNEUROPATHY PATIENTS

Sónia Novais<sup>1,a</sup>, Líliliana Mota<sup>1,b</sup><sup>1</sup>*Instituto de Ciências da Saúde. Universidade Católica Portuguesa. Portugal*<sup>11</sup>*Instituto de Ciências Biomédicas Abel Salazar, Universidade do Porto. Porto, Portugal*

**Introduction:** Familial amyloidotic polyneuropathy (FAP) is a Portuguese endemic neurodegenerative disease that spread worldwide. The onset of symptoms starts in the second decade of life and carries a high degree of disability. It is a chronic disease, with one treatment available, the liver transplantation.

**Objective:** The objective of this study is to conduct an integrative review to explore the current knowledge about the perceived quality of life after a liver transplantation in FAP patients.

**Methods:** We conducted a literature review. A literature search was performed in online scientific databases, using the terms: “Amyloid Neuropathies, Familial/diagnosis” OR “Amyloid Neuropathies, Familial/therapy”. We defined as inclusion criteria studies on populations that include patients with FAP after liver transplantation. The articles found were reviewed independently by the two authors of this study.

**Results:** The evaluation of quality of life in patients with PAF after liver transplantation was the topic discussed in five articles. The studies found try to compare the assessment of quality of life among patients with FAP and other patients after liver transplantation. The studies were mostly carried out in Portugal and used quantitative methodology.

**Conclusions:** The main result of the studies shows a lower perception of improved quality of life, in FAP patients as compared with other transplanted. This result is attributed to two hypotheses. One relates to the timing of liver transplantation because of FAP patients are transplanted early or with symptoms that are stabilized, having no improvement in their clinical condition. Another hypothesis relates to the need to manage a complex therapeutic regimen after liver transplantation.

**Descriptors:** Familial amyloid polyneuropathy. Liver transplantation. Quality of life.

<sup>a</sup>snovais@gmail.com<sup>b</sup>saxoenfermeira@gmail.com

398

### EARLY EXPERIENCES WITH CAREGIVERS, SCHOOL BULLYING AND NEGATIVE AFFECT IN ADOLESCENCE\*

Ana Xavier<sup>1,a</sup>, Marina Cunha<sup>1,11,b</sup>, José Pinto-Gouveia<sup>1,111,c</sup><sup>1</sup>*Cognitive and Behavioural Centre for Research and Intervention. Faculty of Psychology and Education Sciences. University of Coimbra. Coimbra, Portugal*<sup>11</sup>*Instituto Superior Miguel Torga. Coimbra, Portugal*<sup>111</sup>*Faculty of Psychology and Education Sciences. University of Coimbra. Coimbra, Portugal*

**Introduction:** School bullying is a world-wide behavioural problem that affects adolescents’ physical and mental health. Early experiences of warmth and safeness and, in contrast, of threat and submissiveness may have a distinctive impact on psychopathology.

**Objective:** This study aims to examine the nature of school bullying experiences, in terms of its prevalence and occurrence. Additionally, groups of bullying victimization, perpetration and perpetrating victims were compared in relation to early experiences with caregivers (warmth and safeness versus threat and submissiveness), positive and negative affect.

**Methods:** The sample consists of 867 adolescents, 381 of which are boys (43.9%) and 486 are girls (56%), aged between 12 and 19 years old (M=15.32, SD=1.66), in 7<sup>th</sup> to 12<sup>th</sup> grades from schools in Coimbra, Portugal. Participants completed self-report questionnaires that included early memories of warmth and safeness (EMWSS-A), early experiences of perceived threat and subordination (ELES-A) and positive and negative affect (PANAS).

**Results:** Results show that 16.8% of adolescents reported having been a victim of school bullying, 2.7% stated having bullied others and 4.3% classified themselves as both bullies and victims. There are significant gender differences in the three groups involved in school bullying, especially for the victims group with a ratio of 1 boy for 2 girls. Results from MANOVA analyses revealed that perpetrating victims reported higher levels of perceived threat and subordination with their parents and negative affect when compared to the bully group.

**Conclusions:** This study adds to the research on school bullying and vulnerabilities to emotional problems.

**Descriptors:** Early experiences. School Bullying. Negative affect. Adolescence.

\*This research has been supported by the first author Ph.D. Grant (SFRH/BD/77375/2011), sponsored by Portuguese Foundation for Science and Technology.

<sup>a</sup>ana.mj.xavier@gmail.com<sup>b</sup>marina\_cunha@ismt.pt<sup>c</sup>jpgouveia@fpce.uc.pt

399

### RELATIONSHIP BETWEEN LEISURE ACTIVITIES AND COGNITIVE PERFORMANCE IN OLDER ADULTS

Giovana Sposito<sup>1,a</sup>, Mônica Sanches Yassuda<sup>1,b</sup>, Anita Liberalesso Neri<sup>1,c</sup>

<sup>1</sup>*Faculdade de Ciências Médicas. Universidade Estadual de Campinas. Campinas-São Paulo, Brasil*

<sup>11</sup>*Escola de Artes, Ciências e Humanidades. Universidade de São Paulo. São Paulo, Brasil*

**Introduction:** Active aging has been associated with successful aging, suggesting that engagement in leisure activities (LA) may be related to the preservation of cognitive function.

**Objective:** This study aimed to investigate the relationship between the engagement in LA and cognitive performance in elderly community residents.

**Methods:** 2,549 elderly people without cognitive impairment suggestive of dementia participated in the study. The data presented belong to the population-based study of Fragility Profile in Elderly Brazilians (FIBRA-Unicamp). Cognitive performance was assessed using the Mini Mental State Examination (MMSE). Data on sociodemographic characteristics and health status were collected and self-reported social, physical and mental LA were evaluated using the Minnesota Leisure Time Activity Questionnaire (MLTAQ). Correlations and a Stepwise univariate linear regression analysis were conducted to investigate the influence of these variables on cognitive performance.

**Results:** All correlations were significant ( $p < 0.005$ ). However, they were greater between the MMSE and the variables: years of education, household incomes and engagement in intellectual LA. These variables were also significant predictors of the MMSE score: years of education ( $\beta = 0.66$ ,  $p < 0.001$ ,  $R^2 = 0.4277$ ), household income ( $\beta = 0.45$ ,  $p < 0.001$ ,  $R^2 = 0.1478$ ) and engagement in intellectual LA ( $\beta = 760.96$ ,  $p < 0.001$ ,  $R^2 = 0.1472$ ).

**Conclusions:** Findings suggest that older adults with higher education, higher socioeconomic status and those with greater engagement in intellectual activities present better results on the MMSE. Perhaps, these factors may also exert a protective role in cognitive function during aging.

**Descriptors:** Successful aging. Active aging. Leisure activity. Cognitive function. Elderly.

<sup>a</sup> giovanasposito@gmail.com

<sup>b</sup> yassuda@usp.br

<sup>c</sup> anitalbn@uol.com.br

400

### STRUCTURAL APPROACH TO THE QUALITY OF LIFE OF TEENAGERS

Ramon Missias Moreira<sup>1,a</sup>, Jules Ramon Brito Teixeira<sup>1,b</sup>, Eduardo Nagib Boery<sup>1,c</sup>, Zenilda Nogueira Sales<sup>1,d</sup>, Rita Narriman Silva de Oliveira Boery<sup>1,e</sup>, Anderson Reis de Sousa<sup>1,f</sup>

<sup>1</sup>*Universidade Estadual do Sudoeste da Bahia. Jequié, Bahia, Brasil*

<sup>11</sup>*Faculdade Nobre. Feira de Santana, Bahia, Brasil*

**Introduction:** The stage of adolescence is characterized by several changes in the body, the way of being, thinking and acting teenager. Being marked by biological, social and behavioral changes, which significantly affect eating habits, social relations, family, cultural and spiritual, and, in a way, of unpleasantness with his own self.

**Objective:** This study aimed to describe the contents and comparatively analyze the structure of social representations of teenagers about quality of life.

**Methods:** This is a descriptive, quantitative, with the benchmark structural approach to social representations. Informants were 316 adolescents from three public schools in Jequié, Bahia, Brazil. Was used for data collection Summoning Technique Free Word through inducing term "Quality of Life", whose evocations were processed by Evoc 2003, generating the Table of Four Houses.

**Results:** The results reveal the core terms healthy eating, physical activity, money and sex in the 1st periphery words absence of disease, condoms, liberty, marijuana, housing, work and live well, the 2nd periphery evocations difficulty, family, peace and power, and the contrasting elements were well-being and soccer.

**Conclusions:** It was understood that adolescents associate quality of life to sports and other healthy behaviors, being influenced by the desires and curiosities of adolescence.

**Descriptors:** Social Perception. Quality of life. Teenager.

<sup>a</sup> ramonefisica@hotmail.com

<sup>b</sup> julesramon@gmail.com

<sup>c</sup> eboery@ig.com.br

<sup>d</sup> zenysalles@gmail.com

<sup>e</sup> rboery@hotmail.com

<sup>f</sup> son.reis@hotmail.com

401

## UNCONVENTIONAL THERAPEUTIC MODALITIES IN NURSING PRACTICE

Maria Santos<sup>a</sup>

*Escola Superior de Saúde de Santarém. Santarém, Portugal*

**Introduction:** The practice of unconventional therapeutic modalities by nurses was brought to us and questioned by students, following clinical learning. The answer, legitimately expected, led us to the scientific study of this reality.

**Objective:** to understand the integration process of these therapeutic modalities in nursing practice - outlining the following dimensions: the identification of therapeutic modalities that nurses use in their practice; the meanings they attribute to it; the strategies they develop in their use; the assessment done by nurses and patients regarding its effectiveness.

**Method:** Used was Grounded Theory, as viewed by Kathy Charmaz. The techniques of data collection were intensive interviews and participant observation. The investigation was performed in a hospital context, and it involved 25 nurses that worked in 9 public hospitals and 17 patients of an oncologic unity pain.

**Results:** Nurses use environmental, manipulative, mental-cognitive, energetic and relationship-related modalities. The physical, social and legal/normative environments condition the practice of these modalities. Of the modes of action, we highlight: the importance they attach to the ethical aspects; the hiding of these practices from the other health team members; the disassembling and recombination of various techniques used.

**Conclusions:** The nurses identify a high conceptual coherence of unconventional therapeutic modalities with nursing. They complain teaching these therapeutic modalities as an integral part of nurse training. They assess its results as having high therapeutic interest, which is widely supported by users, through physiological, behavioral and well-being indicators of results.

**Descriptors:** Unconventional therapeutic modalities. Nursing practice.

<sup>a</sup> marirene\_mps@hotmail.com

402

## KNOWLEDGE OF HIV AMONGST RESIDENTS OF THE UNIVERSITY OF ÉVORA CAMPUS

Maria Chora<sup>1,a</sup>, Ana Frias<sup>1,b</sup>, Margarida Sim-Sim<sup>1,c</sup>, Edgar Palminhas<sup>1,d</sup>, Vitória Casas-Novas<sup>1,e</sup>, Ermelinda Caldeira<sup>1,f</sup>

*<sup>1</sup>Universidade de Évora. Évora, Portugal*

*<sup>2</sup>Administração Regional de Saúde do Alentejo. Évora, Portugal*

**Introduction:** In Portugal the wider casuistry of HIV infection in the year of 2012 lies on the asymptomatic carriers and on the average age of 41 (DGS, 2013). If, sometimes, manifestations take a long time until the clinical diagnosis happens (Boyer & Kegeles, 1991), the contamination can be located in the youth years. To implement prevention campaigns it is necessary to know the recipients. University students' knowledge of HIV is satisfactory (Jahanfar, Lye, & Ramstpal, 2009; Sutton et al, 2011) but such subject was not yet studied in the residents of the University of Évora Campus.

**Objective:** Describe the knowledge of HIV infection amongst students that live in university residences.

**Methods:** This is a descriptive, quantitative and cross-sectional study. Convenient sample of 200 subjects, with a mean age of 21.77 years old (DP=2.24), being 66.5% of them girls. The applied questionnaire inquired about sociodemographic aspects, degree and knowledge of HIV through a scale (Zimet, 1998).

**Results:** The level of knowledge is high (M=18.17; DP=2.26). Bachelor degree students have a wider knowledge than master/PhD students and other degrees (having significant contrasts especially with these other degrees). Subjects who have a constant partner and who simultaneously have intercourse with others are the ones that possess a weaker knowledge of HIV.

**Conclusions:** Sexual education taught during compulsory education, mass media campaigns and health promotion campaigns can help justify the score obtained from the sample. However, it will be necessary to find strategies that tie knowledge to safe behaviors.

**Descriptors:** HIV. University students. Sexual behavior. HIV knowledge.

<sup>a</sup> anafrias@uevora.pt

<sup>b</sup> mafcc@uevora.pt

<sup>c</sup> msimsim@uevora.pt

<sup>d</sup> edgar.palminhas@arsalentejo.min-saude.pt

<sup>e</sup> mvcn@uevora.pt

<sup>f</sup> ecaldeira@uevora.pt

403

### (IN)DEPENDENCE FROM A GENDER PERSPECTIVE: A STUDY OF ELDERLY PEOPLE WITH SOCIAL CARE SERVICES

Lara Carolino<sup>1,a</sup>, Fernanda Daniel<sup>1,iii,b</sup>, Sónia Guadalupe<sup>1,c</sup>, Laura Lemos<sup>1,d</sup>, Henrique Testa-Vicente<sup>1,e</sup>, Helena Espírito-Santo<sup>1,f</sup>, Alexandre Silva<sup>1,g</sup>

<sup>1</sup>Instituto Superior Miguel Torga. Porto, Portugal

<sup>ii</sup>Departamento de Investigação & Desenvolvimento. Instituto Superior Miguel Torga. Porto, Portugal

<sup>iii</sup>Centro de Estudos e Investigação em Saúde. Universidade de Coimbra. Coimbra, Portugal

**Introduction:** Literature reviews report an association between the increase of elderly population and the need for health care. Simultaneously it is recognized that there are differences in the way men and women experience the process of aging (Baltes, 1997; WHO, 2002).

**Objective:** To assess (in)dependence of elderly people with social care services from a gender perspective.

**Methods:** The current study has a cross-sectional design. Participants were men and women (N=106) and inclusion criteria were age equal or higher than 65 years old (M=82.47; SD=±8.95) and the absence of cognitive impairment. The Portuguese version of the EasyCare Standart 2010 was used for data collection. Preliminary checks were conducted to ensure that there was no violation of ANCOVA assumptions.

**Results:** Independence differences for gender were analyzed controlling for age with one-way analysis of covariance. It was concluded that there are significant differences on the level of independence between genders ( $F_{ANCOVA} = (1,44); 6,732; p=0,013$ ).

**Conclusions:** Although women live longer they present higher scores of dependence level leading to a need of higher care and support. Since quality of life depends on the roles that we play throughout the course of our life, we suggest social and health strategies that ensure the empowerment of citizens in order for them to benefit from a better quality of life regardless of gender.

**Descriptors:** Quality of life. Gender. Aging. Social Care Services.

<sup>a</sup>laracarolino@gmail.com

<sup>b</sup>fernanda-daniel@ismt.pt

<sup>c</sup>soniaguadalupe@gmail.com

<sup>d</sup>laurastlemos@gmail.com

<sup>e</sup>henrique.t.vicente@gmail.com

<sup>f</sup>helenum@gmail.com

<sup>g</sup>alexmfgs@gmail.com

404

### ASSOCIATION BETWEEN PSYCHOSOCIAL ASPECTS OF WORK AND QUALITY OF LIFE OF MOTORCYCLE TAXI DRIVERS

Jules Ramon Brito Teixeira<sup>1,a</sup>, Ramon Missias Moreira<sup>1,b</sup>, Eduardo Nagib Boery<sup>1,c</sup>, Fernanda Carneiro Mussi<sup>1,d</sup>, Rita Narriman Silva de Oliveira Boery<sup>1,e</sup>, Zenilda Nogueira Sales<sup>1,f</sup>, Anderson Reis de Sousa<sup>1,g</sup>

<sup>1</sup>Universidade Estadual do Sudoeste da Bahia. Jequié, Bahia, Brasil

<sup>ii</sup>Universidade Federal da Bahia. Salvador, Bahia, Brasil

<sup>iii</sup>Faculdade Nobre. Feira de Santana, Bahia, Brasil

**Introduction:** The motorcycle taxi drivers are workers constantly submitted to several conditions of life and work that can negatively affect their quality of life and ability to work.

**Objective:** Thus, this study aimed to evaluate the quality of life of motorcycle taxi drivers and their relationship to the psychosocial aspects of the work.

**Methods:** This is an epidemiological, cross-sectional, descriptive and exploratory study, realized with 400 motorcycle taxi drivers of the city of Jequié, Bahia, Brazil. Was used a form containing socio-demographic data, the WHOQOL-BREF and the Job Content Questionnaire. The data obtained from the interviews were tested for normality of distribution using the Kolmogorov-Smirnov test. To compare the results between groups were used Mann-Whitney/Wilcoxon (two groups) and Kruskal-Wallis (more than two groups) tests, with a significance level of 5%.

**Results:** The results evidenced that motorcycle taxi drivers with high decision latitude had better perception of quality of life in the psychological domain; those with high psychological demands presented better perception of quality of life in the social relationships and environment domains; those with high strain and active job showed better perception of quality of life in the social relationships and environment domains.

**Conclusions:** Thus, the psychosocial work environment and especially the decision latitude are important determinants of the perception of quality of life of motorcycle taxi drivers.

**Descriptors:** Quality of Life. Workers. Occupational health. Occupational diseases. Working conditions.

<sup>a</sup>julesramon@gmail.com

<sup>b</sup>ramonefisica@hotmail.com

<sup>c</sup>eboery@ig.com.br

<sup>d</sup>femussi@uol.com.br

<sup>e</sup>rboery@hotmail.com

<sup>f</sup>zenysalles@gmail.com

<sup>g</sup>son.reis@hotmail.com

405

**PERSONAL SOCIAL NETWORKS OF ELDERLY AND MENTAL HEALTH: PRELIMINARY RESULTS**Sónia Guadalupe<sup>1,a</sup>, Henrique Testa Vicente<sup>1,b</sup>, Fernanda Daniel<sup>1,11,c</sup>, Catarina Santos<sup>111,d</sup>*<sup>1</sup>Departamento de Investigação & Desenvolvimento. Instituto Superior Miguel Torga. Centro de Estudos da População, Economia e Sociedade. Porto, Portugal**<sup>11</sup>Centro de Estudos e Investigação em Saúde. Universidade de Coimbra. Coimbra, Portugal**<sup>111</sup>Instituto Superior Miguel Torga. Porto, Portugal*

**Introduction:** Literature shows that social networks and social support are determinant to maintain and improve mental health. In the last stages of the life cycle we verify several restrictions on social networks dynamics, having impact on the quality of life and mental health of elderly people.

**Objective:** This study aims to analyze the association between structural and functional characteristics of personal social networks and mental health perception.

**Methods:** A sample of 317 elder (64% women; with an average of 77 years old [SD±7.57]; 67% living in their community) completed the Mental Health Inventory (MHI-5; Ribeiro, 2001) and the Personal Social Network Analysis Tool (Guadalupe, 2009).

**Results:** The structural characteristics (size, composition and density) are very similar between those who perceived distress (n=124; 39%) and those who perceived psychological well-being (n=193; 61%). But we registered significant differences between these groups in most functional characteristics, with subjects who perceived better mental health having a perception of better instrumental and informational support (U=9781.0; p=0.006; U=9060.0; p<0.001), better companionship support (U=9230.5; p<0.001), better access to new social ties (U=8859.5; p<0.001), more satisfaction with the social network (U=9023.0; p<0.001), and more reciprocal relations (U=8931.5; p<0.001).

**Conclusions:** Our research shows that mental health is associated with the functional dimension of personal social networks of the elderly, and it is not related with its structural dimension.

**Descriptors:** Personal social networks. Mental health. Elderly. Social support.

<sup>a</sup> guadalupe@ismt.pt<sup>b</sup> henrique.t.vicente@gmail.com<sup>c</sup> fernanda-daniel@ismt.pt<sup>d</sup> katarina\_santos23@hotmail.com

406

**NOMINATION AND IDENTIFICATION OF THE SIX BASIC EMOTIONS BY ELDERLY PEOPLE**Paula Correia<sup>a</sup>, Filipa Henriques<sup>b</sup>, Aldora Quintal<sup>c</sup>, Olinda Roldão<sup>d</sup>*Escola Superior Saúde Egas Moniz. Almada, Portugal*

**Introduction:** Emotions play a crucial role in biopsychosocial triad. The ability to recognize emotions allows us to deal with situations in a more effective and adaptive manner, enabling the individual's adaptation to their surroundings, facilitating and determining the quality of interpersonal relationships. Aging and inherent greater isolation turn this emotional capacity in a central person's life aspect.

**Objective:** The present study aims to determine the ability of naming and identification the six basic emotions by elderly people.

**Methods:** A sample of 120 patients, 51 males and 69 females, were evaluated by Basic Facial Expressions battery (BEF - B).

**Results:** The results demonstrate that happy is the emotion better and more quickly identified and named in opposition to the anger that had the worst performance. There was also a positive relationship between age and response latency with statistical significance as well as significant differences in the capacity of naming and identification as in latency in relation to gender, with the female to produce a significantly higher performance.

**Conclusions:** We conclude that females are significantly more effective in emotional recognition and that age is a significant variable in determining performance of emotional recognition in the elderly that requires adaptation of the interlocutors.

**Descriptors:** Basic Emotions. Elderly. Gender and Age.

<sup>a</sup> paulacgcorreia@sapo.pt<sup>b</sup> filipa\_cfb@hotmail.com<sup>c</sup> aldoraquintal64@gmail.com<sup>d</sup> olinda\_roldao@hotmail.com

407

### A GENERIC AND A MODULAR APPROACH TO CHILDREN'S QUALITY OF LIFE SELF-ASSESSMENT

Marta Fonseca<sup>1,a</sup>, Elisabeth Spitz<sup>11,b</sup><sup>1</sup>*Escola Superior de Educação e Ciências Sociais. Instituto Politécnico de Leiria. Leiria, Portugal*<sup>11</sup>*Université Lorraine. Nancy, France*

**Introduction:** Quality of life (QoL) in children with chronic illness becomes an important evaluation criterion. Children's QoL evaluation has specific methodological aspects.

**Objective:** The objectives of the present communication are to present: the generic and the cancer module of the Portuguese version of the Child Quality of Life Systemic Inventory (CQLSI); the first psychometric properties of the CQLSI generic Portuguese version.

**Methods:** The generic version of the CQLSI was administered to 120 Portuguese children, aged from 8 to 12 years old. This tool is based on an innovative conceptual and methodological approach to QoL self-assessment, namely by being interactive and playful, having a psychometry which operates several scores, by allowing an analysis of each domain of life and by having the possibility of becoming modular.

**Results:** Internal consistency of the four scores of the CQLSI (State, Goal, Rank and Gap) is satisfactory; all scores have their own specificity.

**Conclusions:** Results demonstrate the interest and applicability of the Portuguese version of the generic CQLSI. The integration of tools such as CQLSI in clinical trials to obtain from the child judgements on different domains of life may become a possibility to allow making proposals for interventions to promote children's QoL.

**Descriptors:** Quality of life. Self-assessment. Children. Chronic illness. Cancer.

408

### QUALITY OF LIFE OF THE ELDERLY WITH HIP ARTHROPLASTY: COMPARISON BETWEEN TWO INSTRUMENTS

Mariana Kátia Rampazo Lacativa<sup>a</sup>, Maria José D'Elboux<sup>b</sup>*Faculty of Nursing. State University of Campinas. Campinas, SP, Brasil*

**Introduction:** In assessing the health-related quality of life (HRQOL) in patients with total hip arthroplasty (THA), several instruments have been used, although few aren't specific to the elderly population.

**Objective:** The objective of this study was to compare two assessment instruments of health-related quality of life (HRQOL), an generic and other specific, in elderly patients undergoing the total hip arthroplasty (THA) surgery.

**Methods:** Cross-sectional study with 88 elderly patients, aged 60 years or over, in outpatient, undergoing primary THA. The Cronbach's alpha, ceiling and floor effects of the generic instrument The Medical Study 36-item Short-Form Health Survey (SF-36) and the specific Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) were evaluated.

**Results:** Scores on both assessment instruments of HRQOL showed that the issues of physical nature affect the quality of life of these seniors more. The WOMAC showed a ceiling effect in the pain and stiffness dimensions and only the functional capacity and pain dimensions of the SF-36 not shown the ceiling effect. The SF-36 presented also a floor effect in the dimensions: physical aspects and emotional aspects. The results revealed that those tools have some limitations in this elderly group with THA. The reliability of the tools was considered satisfactory in the two instruments of HRQOL evaluation.

**Conclusions:** The WOMAC and SF-36 instruments are adequate to evaluate the HRQOL of this population, but some regards must be considered when used in elderly patients with THA.

**Descriptors:** Hip replacement. Arthroplasty. Hip joint. Aged. Quality of life.

<sup>a</sup> marta.fonseca@ipleiria.pt<sup>b</sup> elisa.spitz@univ-lorraine.fr<sup>a</sup> marianarampazo@yahoo.com.br<sup>b</sup> mariadio@uol.com.br

409

### THE VOICE AS SYMBOLIC ACTIVITY IN THE ELDERLY

Aldora Quintal<sup>I,II,a</sup>, Paula Correia<sup>I,II,III,b</sup>, Joana Costa<sup>I,c</sup>, Ana Paula Martins<sup>I,IV,d</sup>

<sup>I</sup>Escola Superior de Saúde Egas Moniz. Almada, Portugal

<sup>II</sup>Serviço de Otorrinolaringologia. Hospital Garcia de Orta. Almada, Portugal

<sup>III</sup>Grupo de Investigação em Voz. Instituto Superior de Ciências da Saúde. Universidade Católica Portuguesa, Lisboa, Portugal

<sup>IV</sup>Serviço de Medicina Física e de Reabilitação. Hospital Garcia de Orta. Almada, Portugal

**Introduction:** Voice is an intrinsic and natural dimension resource that plays a role in a person's life and follows the natural process of aging. Impact is variable and an indicator of health and well-being. Being aware of the importance of the voice in the bio-psycho-social relationship of the elderly had as

**Objective:** to know the semantic dimensions that organize ideas, emotions and images in relation to the importance of the voice and the feelings generated from its possible loss in the elderly.

**Methods:** A qualitative and quantitative study of crossover design, consisting of 60 patients of both sexes, over the age of 65 years. We used a socio demographic questionnaire and a structured interview script, based on the technique of free recall, order and evocation axiom of importance. Appealed to the Theory of Social Representations, together with the Central Nucleus Theory and (SPSS.19) for data analysis.

**Results:** The inducers terms "importance of Voice" and "feeling of a possible loss of voice" got 187 evocations each, which allowed us a representational system with several categories. The core of the representation is centered on the importance of communication and the use of voice needs to express sadness and malaise feelings that best demonstrate your loss.

**Conclusions:** Elderly assumes the voice as an essential element that gives effective communication. This evidence points to the need for intervention programs in more holistic presbyphonia.

**Descriptors:** Social representations. Voice. Feelings. Elderly.

410

### QUALITY OF LIFE: PERSPECTIVE OF PORTUGUESE SENIORS

Ana Paula Martins<sup>a</sup>

*Escola Superior de Saúde de Beja. Beja, Portugal*

**Introduction:** At present, most of the quality of life (QoL) of senior researchers shares the view that consists of both objectively measurable conditions and subjective aspects of good life. WHO defined it as an individual's understanding of his/her life situation with respect to his/her values and cultural context, as well as in relation to his/her goals, expectations and concerns.

**Objective:** The aim of this study is to analyze the influence of the age, meaningful activities, housing context (among others) in the quality of the living standards of the elderly.

**Methods:** A sample of 463 older adults, from several Portuguese regions, responded to a questionnaire of QoL. The Portuguese version of the WHOQOL-BREF (developed by the WHO) was the evaluation tool for the quality of life standards as well as socio-demographic and clinical characterization form.

**Results:** The results showed that QoL not depend by gender. The age, social network, participate in leisure activities (meaningful activities) and higher level of schooling has a strong impact on a higher perception of QoL. There are no significant differences with regard to the QoL among the elderly who attend Adult Day Center and those who do not attend but the elderly residing in familiar surroundings and attending the Adults Day Center have better quality of life than those who do not attend.

**Conclusions:** The results illustrate the complexity of facts influencing QoL and allowed the need for awareness about this theme in order to plan appropriate intervention.

**Descriptors:** Quality of life. Elderly. Social network. Meaningful activities.

<sup>a</sup> aldoraquintal64@gmail.com

<sup>b</sup> paulacgcorreia@sapo.pt

<sup>c</sup> joana.costa.26@hotmail.com

<sup>d</sup> anapmartins@sapo.pt

<sup>a</sup> anapmartins@sapo.pt

411

**EXPERIENCING ANXIETY: CLINICAL INDICATORS IN NURSING DIAGNOSIS**Sara Oliveira<sup>a</sup>, Carolina Ponte<sup>b</sup>, Filipa Veludo<sup>c</sup>*Institute of Health Sciences. Catholic University of Portugal. Lisboa, Portugal*

**Introduction:** Anxiety is an emotion with no known cause (ICN, 1999). Half the suffering associated with health-illness situations is primarily due to anxiety (WHO, 2000). In Portugal, its prevalence has increased (INE, 2006). Timely diagnosis, the recognition of clinical indicators, is imperative in Nursing care (NANDA-I, 2012).

**Objective:** Identifying clinical indicators for anxiety, available in the Literature.

**Methods:** Literature Review (29-10-2013) in CINAHL Plus with Full Text, MEDLINE with Full Text, MedicLatina, PsycARTICLES, Psychology and Behavioral Sciences Collection, SPORTDiscus with Full Text, Academic Search Complete, PsycBOOKS, with the health descriptors: Anxiety (TI Title) AND Nurs\* (AB Abstract) AND Patient\* (AB Abstract), making up to 154 articles. Inclusion criteria: full text; in English/Spanish/Portuguese; published between 2003-2013. Exclusion criteria: articles related to nursing students; we excluded 101 articles after reading the titles, 26 after reading the abstracts, 7 after reading the full texts, which left a sample of 20 studies for analysis.

**Results:** The USA is the country with higher publishing output (35%). The year with higher publishing volume was 2005 (20%). We have identified 57 clinical indicators, e.g., Worry/Preoccupation (8%), Fear/Sense of dread (6%), Sweating/Chills or hot flushes/Feeling sweaty/Increased perspiration (5%), Chest pain/Pain/Neck and back pain/Headaches/Minor aches (5%), increased heart rate/Tachycardia/Elevated heart rate (5%), Sleep disturbances/Insomnia or hypersomnia/Sleeplessness/Difficulty staying asleep (4%).

**Conclusions:** The assessment of clinical indicators of anxiety is important for the nurse's clinical judgment at the time of diagnosis. The subjectivity and diversity underlying these clinical indicators add to the need for a thorough research on this subject.

**Descriptors:** Anxiety. Clinical indicators. Nursing diagnosis.

412

**CARING PATIENTS WITH IMPAIRED VERBAL COMMUNICATION: NURSING DIAGNOSIS**José Fernandes<sup>a</sup>, Sara Próspero<sup>b</sup>, Filipa Veludo<sup>c</sup>, Liliana Braguez<sup>d</sup>*Institute of Health Sciences. The Catholic University of Portugal. Lisboa, Portugal*

**Introduction:** Impaired verbal communication is expressed by difficulty or inability in oral expression, inability to express needs verbally (Saraiva, 2010). Diagnose accuracy implies the recognition and domain of the clinical indicators that inducing nurses in diagnosis directed to the real needs of the patients (NANDA-I, 2012).

**Objective:** Identify the clinical indicators, available in the literature, which nurses can recognize in patients with the nursing diagnosis of impaired verbal communication.

**Methods:** Literature Review (05/10/2013): EBSCO and University Library João Paulo II (CUP-HIS). Inclusion criteria: full text available; temporal frieze 1995-2012; articles with signs and symptoms of impaired verbal communication; Exclusion criteria: articles that discussing communication in pediatric settings or medicine in general. We identified 266 articles, 134 excluded after reading the title; 99 after the abstract and 16 after the full text. 17 articles were included in the study.

**Results:** Countries with the highest publications: United States (41%), Portugal (29%). Year largest publication: 2011 (29%). We identified 22 clinical indicators: anxiety (12.5); fear, unable to speak and unable to express themselves (9.6%), difficulty in expressing themselves (7.69%), pain (6.73%), depression and influence of physical space (4.80%); feelings such as frustration (8.65%), anxiety (1,92%) and despair (0.96%); confusion, sadness, insecurity and anguish (1.92%); presence of ventilatory prosthesis (6.73%); difficulty speaking (2,88%) and rage (2,88%); isolation, restlessness, sickness, comfort and dyspnea (0,96%).

**Conclusion:** The research on the recognition of clinical indicators that nurses use in the diagnosis of impaired verbal communication is still diminished, evidencing the need to increase these studies.

**Descriptors:** Communication; Nursing Diagnosis; Clinical Indicators.

<sup>a</sup> sara.oliveira.bolembr@gmail.com<sup>b</sup> carolfilipa@gmail.com<sup>c</sup> fveludo@ics.lisboa.ucp.pt<sup>a</sup> josefernandes14@gmail.com<sup>b</sup> sara\_prospero@hotmail.com<sup>c</sup> fveludo@ics.lisboa.ucp.pt<sup>d</sup> lilianabraguez@ics.lisboa.ucp.pt



413

### TEACHERS' PERCEPTIONS ABOUT HEALTH PROMOTION IN PRE-SCHOOL: EXPLORATORY STUDY

Parente, C.<sup>I,a</sup>, Arieira, J.<sup>II,b</sup>, Santos, L.<sup>III,c</sup><sup>I</sup>*Gabinete de Atendimento à Família. Viana do Castelo, Portugal*<sup>II</sup>*Agrupamento Escolas Monserrate. Monserrate, Portugal*<sup>III</sup>*Escola Superior de Saúde. Instituto Politécnico de Viana do Castelo. Viana do Castelo, Portugal*

**Introduction:** Researchers and health professionals know the relevance of the role of families and education institutions since early childhood on the prevention for HIV infections and other STD's. As primary socialising agents they promote citizenship education and contribute to the well being and children's quality of life. Therefore, we are currently developing the "Cotton Candy Project", a health promotion project in pre-school with a special focus in sexual education.

**Objective:** To analyze pre-school teacher's perceptions on the concepts of sexuality, health promoting habits and gender equality, promoting self reflexion and group debate.

**Methods:** Eight pre-school teachers participated in the study. A focus group qualitative methodology was used. Data was collected using a content analysis method of the pre-school teacher's speeches along seven debate sessions.

**Results:** The analysed speeches showed general categories: Health and care of the body; Family/Citizenship; the exploration of the body as a pleasure source; Health/diseases; bonding and protection factors; and values, rights and responsibilities.

**Conclusions:** The results showed that the social and educational speeches reflect a system of traditional cultural values connected with sexuality on early childhood that justify a more passive attitude from the teachers. After the focus group intervention, participants acknowledged their empowered role in prevention, contributing to a closer family-school relationship and children's positive development.

**Descriptors:** health promotion; teachers' perceptions; pre-school.

<sup>a</sup> caps@gaf.pt<sup>b</sup> joanarieira@hotmail.com<sup>c</sup> luisasantos@ess.ipvc.pt

414

### CARDIOGENIC SHOCK CLINICAL INDICATORS IN NURSING DIAGNOSIS

Filipa Costa<sup>a</sup>, Lino Mamede<sup>b</sup>, Filipa Veludo<sup>c</sup>*Institute of Health Sciences. Catholic University of Portugal. Lisboa, Portugal*

**Introduction:** The cardiogenic shock keeps on registering high levels of mortality, 30% to 90%, (Elias, 1999). Therefore a precocious diagnosis is essential to start the treatment and reduce the complications.

**Objective:** The aim is to identify the clinical indicators that may assist nursing diagnosis of cardiogenic shock.

**Methods:** Literature review (16<sup>th</sup> December 2013): EBSCO (CINAHL; MEDLINE; NHS, Economic Evaluation Database; Cochrane Central Register of Controlled Trials; Cochrane Database of Systematic Reviews; Cochrane Methodology Register; MedicLatina). Descriptors: TI Shock AND TI Cardiogenic AND AB (diagnos\* OR nurs\*), obtained 197 articles. Inclusion criteria: full text issued from 2000 up to 2013, available in any language on a free basis; articles listing the signs and symptoms of cardiogenic shock without any age restriction. As exclusion criteria: articles covering therapeutic interventions, medication, adjacent pathologies and treatments made. 146 articles were excluded after reading titles; 31 after abstracts and 1 after fulltext. 19 articles was included in study.

**Results:** The year 2011 stands out with 26% of publications, the United Kingdom reaching 32% of issues. 23 clinical indicators of cardiogenic shock were identified: hypotension (89%); hypoperfusion (53%); tachycardia (47%); oliguria and cold extremities (42% each); hypoxia (26%); metabolic acidosis, hypovolemia, cyanosis, pale, clammy and depression neurologic status (21% each); dyspnoea (16%); bradycardia, edema (11%). The remaining indicators reveal a percentage under 10%.

**Conclusions:** The dissemination of evidence that promotes the nursing clinical judgment is critical in helping the real needs of patients. The accuracy of diagnosis affects interventions and sensitive outcomes to the practice of nursing (NANDA-I, 2012).

**Descriptors:** Cardiogenic Shock; Nursing Diagnosis; Clinical Indicators.

<sup>a</sup> pipa\_s\_costa@hotmail.com<sup>b</sup> lino.mamede@gmail.com<sup>c</sup> fveludo@ics.lisboa.ucp.pt

415

**THE IMPACT OF INFERTILITY ON COUPLES' DYADIC ADJUSTMENT AND INTIMACY**Ana Galhardo<sup>1,11,a</sup>, José Pinto-Gouveia<sup>11,b</sup><sup>1</sup>*Instituto Superior Miguel Torga. Coimbra, Portugal*<sup>11</sup>*Faculty of Psychology and Educational Sciences. University of Coimbra. Coimbra, Portugal***Introduction:** Infertility has been described as a stressful condition with couples stating that it corresponds to a very demanding life crisis.**Objective:** The current study sought out to contribute to a better understanding of the impact of infertility on intimacy and dyadic adjustment, comparing three groups of couples.**Methods:** Participants were 147 infertile couples pursuing infertility treatment (IG) in public and private infertility centers; 120 fertile couples (FG) collected as a snow-ball sample; 59 infertile couples applying for adoption (AG) in social services. Standardized measures of intimacy and dyadic adjustment were completed. The couple was used as unit of analysis.**Results:** A direct group effect occurred on intimacy (interdependence) with the AG presenting higher scores, followed by the IG and by the FG. Concerning dyadic adjustment a significant direct group effect was found. AG couples showed the highest scores and the IG and the FG did not differ. No gender or group X gender effects were found regarding any of the studied variables.**Conclusions:** AG and IG presented higher levels of intimacy when compared with FG which may suggest that infertility can lead to greater cohesion within the couple. Therefore couples tend to view infertility as something that brought them together and/or have strengthened their relationship. It is worth of note that the AG showed significant higher dyadic adjustment when compared with the other two groups. These couples may already have dealt with several difficulties throughout their marriages, dealt with the grief of a biological child, and may have developed a stronger marital relationship.**Descriptors:** Intimacy; Dyadic adjustment; Infertility; Fertility; Adoption.

416

**RELIGIOSITY AND SPIRITUALITY IN OLDER PERSONS: A CHALLENGE FOR NURSING PRACTICE**Maria de Lurdes Almeida<sup>a</sup>*Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal***Introduction:** Nurses face complex situations in the provision of care to patients, requiring them to apply a body of knowledge to respond in a most creative and appropriate way to the different and specific problems when caring for older people.**Objective:** Thus, and having in mind that spirituality is an essential human need, we believe that it is necessary to understand the meaning of spirituality for patients, as well as describe the importance assigned to religiosity/spirituality by older people.**Method:** A case study was conducted, using a qualitative phenomenographic approach. The data collection methods used were semi-structured interviews and focus groups. The inclusion criteria were: age over 75 years, no cognitive impairment and accepting to participate in the study.**Results:** The meaning of religiosity and spirituality, identified by older people as synonyms, are a specific form of religious phenomena. Based on data analysis, it can be concluded that: religiosity gives strength and comfort to older people, and helps them to cope with loneliness. Religiosity/spirituality are facilitating factors of adapting to losses, changes and transformations. They can be protective and empower the person to cope with and overcome losses, as well as be a reason to continue to live.**Conclusions:** Understanding how older people experience religiosity / spirituality enables nurses to reflect on the impact of including this type of topic in nursing care for the promotion of well-being and adaptation to aging.**Descriptors:** Religiosity; spirituality; older people.<sup>a</sup> anagalhardo@ismt.pt<sup>b</sup> jpgouveia@fpce.uc.pt<sup>a</sup> mlurdes@esenfc.pt

417

### QUALITY OF LIFE IN PRE-LINGUAL DEAF CHILDREN

Marionescu Purcaru<sup>a</sup>, Priscilla Mayara Estrela Barbosa<sup>b</sup>, Mirna Albuquerque Frota<sup>c</sup>, Camila Santos do Couto<sup>d</sup>, Kamila Ferreira Lima<sup>e</sup>, João Henrique Freitas Colares<sup>f</sup>, Rosendo Freitas de Amorim<sup>g</sup>

*Universidade de Fortaleza. Fortaleza, CE, Brasil*

**Introduction:** Deafness is one of the most prevalent and common disability in childhood. Measuring the Quality of Life (QOL) in people with disabilities have been well accepted in the Health area.

**Objective:** Analyze the QOL in self-perceived pre-lingual deaf children; Identify most affected QOL domains in pre-lingual deaf children; Describe the perception that hearing parents have regarding about QOL of their deaf children.

**Methods:** Descriptive study, with multimethodological approach. Conducted in two institutions of reference in special education for the deaf in Brazil. The instruments of data collection were: (i) Sociodemographic Form, (ii) AUQEI - Assessment Questionnaire Quality of Life in Children and Adolescents and (iii) semi-structured interview. Participated in the survey 52 pre lingual deaf children. The obtained data were analyzed using the statistical program SPSS (Statistical Package for the Social Sciences) version 20.0.

**Results:** It was revealed that 67.7% of children had impaired QOL indices, with the sum of scores below 48, which is the cutoff point. The domain AUQEI, with higher sum of scores, was related to the leisure and domain considered was the most damaged of autonomy. The two categories deriving from AUQEI Qualitative children's responses were: Socialization, Play & Gifts. The interview with hearing parents produced categories: Strategies conducting the conquest of QOL, Stigma and Prejudice.

**Conclusions:** Children perceived barriers in achieving their full welfare. The view that parents have for their children was close to what the children reported.

**Descriptors:** Deafness, Quality of Life, Child Health, Disabled People.

<sup>a</sup> marion.p@bol.com.br

<sup>b</sup> priscilla.estrela2011@gmail.com

<sup>c</sup> mirnafrota@unifor.br

<sup>d</sup> cmlcouth@gmail.com

<sup>e</sup> limakamila@yahoo.com.br

<sup>f</sup> jhfcolares@hotmail.com

<sup>g</sup> rosendo@unifor.br

418

### LIFE QUALITY OF INDIVIDUALS IN RADIOTHERAPIC TREATMENT LODGED AT A HOSTEL

Marieli Cristina Ribeiro<sup>l,a</sup>, Olvani Martins da Silva<sup>l,II,b</sup>, Ivete Maroso Krauzer<sup>l,II,c</sup>, Rosana Amora Ascari<sup>l,II,d</sup>, Camila Trevisan Saldanha<sup>l,e</sup>

*<sup>l</sup>Centro de Educação Superior do Oeste. Universidade do Estado de Santa Catarina. Florianópolis, SC, Brasil*

*<sup>II</sup>Universidade Federal do Rio Grande do Sul. Porto Alegre, RS, Brasil*

**Introduction:** Radiotherapy is efficient when treating cancer, however its effects are various and meaningful ones.

**Objective:** to evaluate the life quality of individuals in radiotherapeutic treatment lodged in a hostel in the west region of Santa Catarina.

**Methodology:** a cross-sectional study, with 20 patients from August to October 2013, using the Medical Outcomes Study 36 - Item Short-Form Health Survey, Brazilian version, which presented great reliability through Cronbach's alpha. Patients having cancer of any kind, over 18 years old, of both sexes and presenting listening and verbalization abilities were included. Patients under exclusive chemotherapy treatment and impaired ones were excluded. Data was analyzed by descriptive analytic statistics, calculating the scores obtained in each phase of the scales, pondering the data, going on to calculation of Raw Scale, and after calculating the domains. The research was in accordance to Resolution 466/2012 of the Health National Council, being approved under the assent no. 346,246 from August 1, 2013.

**Results:** the domains with more impairment were Limitations in Physical Aspects (PAL) and Limitations in Emotional Aspects (EAL). The others obtained a good score of life quality; it was also observed that patients who undergo only radiotherapy present more impairment in emotional aspect related to the ones who have radiotherapy coadjuvant to chemotherapy.

**Conclusions:** the life quality of patients lodged in a hostel presents impairment in physical and emotional aspects.

**Descriptors:** Neoplasia; Radiotherapy, Life quality; Chronic Illness; Shelter.

<sup>a</sup> marieli\_mcr@hotmail.com

<sup>b</sup> olvanims@hotmail.com

<sup>c</sup> ivetemaroso@hotmail.com

<sup>d</sup> rosana.ascari@hotmail.com

<sup>e</sup> camila.udesc@hotmail.com

419

### PHYSICAL EXERCISE PROGRAMME FOR INSTITUTIONALIZED ELDERLY: IMPROVING QUALITY OF LIFE

Eugénia Mendes<sup>a</sup>, André Novo<sup>b</sup>, Leonel Preto<sup>c</sup>, Cláudia Alves<sup>d</sup>

*School of Health. Polytechnic Institute of Bragança. Bragança, Portugal*

**Introduction:** Physical activity is important for healthy ageing and may help maintain good function in older age. Institutionalization is often due to functional decline and institutions frequently do not provide activities to maintain or regain functionality. Exercise therapy is an important component of rehabilitation programmes for elderly and helps to reduce pain, improve joint stability, functional ability, muscle strength and endurance, and aerobic capacity; preventing bone loss and fractures, and improving or maintaining quality of life.

**Objective:** To investigate if a physical exercise programme improves quality of life in a group of institutionalized elderly.

**Methods:** A quasi-experimental study was conducted using the Portuguese version of the Short Form-36 health survey (SF-36v2) to assess quality of life before and after a 2 months physical exercise programme.

**Results:** A total of 20 elderly (50% women) aged 76,1±8,7 years and 18,3±13,3 months of institutionalization, participated in a 2 months of physical exercise programme. Results show that scores of SF-36v2 after the programme had significantly increased in physical (35,4±6,4 vs 37,6±5,7;  $z=-3,397$ ;  $p=0,001$ ) and mental (47,7±5,1 vs 51,4±3,9;  $z=-3,506$ ;  $p=0,00$ ) components. They also increase significantly in the SF-36v2 subscales physical functioning ( $p=0,000$ ), bodily pain ( $p=0,002$ ), vitality ( $p=0,000$ ), social functioning ( $p=0,003$ ), general health ( $p=0,048$ ) and mental health ( $p=0,001$ ).

**Conclusions:** Physical exercise programmes can contribute to a self-perception of wellbeing leading to autonomy and confidence in performing daily living activities. Increase quality of life in elderly institutionalized population is a very important step towards independent life.

**Descriptors:** Elderly; Institutionalization; Physical exercise; Quality of life.

<sup>a</sup> maria.mendes@ipb.pt

<sup>b</sup> andre@ipb.pt

<sup>c</sup> leonelpreto@ipb.pt

<sup>d</sup> claudia\_alves@live.com.pt

420

### PERCEPTIONS OF SONS ABOUT CLOSE RELATIONSHIPS, LIFE SATISFACTION AND PARENT'S MARITAL SATISFACTION

Soraia Brito<sup>a</sup>, Joana Sequeira<sup>b</sup>

*Instituto Superior Miguel Torga. Coimbra, Portugal*

**Introduction:** The family has a strong influence in the interactions that they have with the others because the international family standards tend to repeat themselves over generations. Romantic relationships have been studied from the perspective of linking relationships and binding patterns of repetition tend to repeat from generation to generation. On the other hand, has found an association between secure attachment to the loving couple and higher levels of relational satisfaction and consequently a greater perception of life satisfaction.

**Objective:** This study examines the general perceptions of university students about their parent's marital relationship, their romantic relationships and life satisfaction.

**Methods:** The research protocol for this study comprised The Questionnaire about Parent's Marital Relationship, the Life Satisfaction scale, the Questionnaire on Experiences in Close Relationships and a sociodemographic questionnaire.

**Results:** Men and participants from intact families reported a better perception of parent's marital relationship; participants in a romantic relationship and from intact families had greater life satisfaction and participants between 25 and 58 years old perceived more avoidance in their relationships.

**Conclusions:** Participants have a positive perceptions of parent's marital relationship are satisfied with life, however they perceive anxiety and avoidance in their romantic relationships. We also conclude that there is no correlation between the perception of parent's marital relationship and their experiences in close relationships and perception of life satisfaction.

**Descriptors:** Parent's marital relationship; life satisfaction; avoidance; anxiety; close relationships.

<sup>a</sup> soraia\_raquel15@hotmail.com

421

### NURSING CARE FOR PATIENTS WITH A STOMA: A QUASI-EXPERIMENTAL STUDY

Clementina Sousa<sup>I,II,a</sup>, Celia Santos<sup>III,b</sup>, Arminda Maciel Vieira<sup>I,c</sup>

<sup>I</sup>*Instituto Politécnico de Viana do Castelo. Escola Superior de Saúde. Viana do Castelo, Portugal*

<sup>II</sup>*Instituto de Ciências da Saúde. Universidade Católica Portuguesa. Porto, Portugal*

<sup>III</sup>*Escola Superior de Enfermagem do Porto. Porto, Portugal*

**Introduction:** An ostomy represents a potential threat to all aspects of individual life. So, the patients need to incorporate and manage these changes in their daily life. Scientific literature shows that specific nursing interventions influence positively the quality of life (QoL) of those living with a stoma.

**Objective:** To evaluate the effect of a nursing intervention program (NIP) in patient's QoL with elimination ostomy.

**Methods:** Using a quasi-experimental design, patients were enrolled into two groups. A sample of 93 participants: 62 receiving the NIP (intervention group=IG); 31 receiving standard nursing care (control group=CG). Data was gathered from both groups at the 1<sup>st</sup> (T1) and 6<sup>th</sup> (T2) postsurgical months, using the Stoma Quality of Life Index (SQLI).

**Results:** In T1, both groups were similar on all SQLI domains, except in the subscales help and advice ( $t=2,08$ ;  $p=0,04$ ) with higher average in the intervention group (IG=83,08/CG=74,0) and positive adaptation ( $t=1,76$ ;  $p=0,05$ ) with higher average in the control group (IG=34,3/CG=42,7). At T2, statistically significant changes were observed between the overall SQLI of both groups ( $p<0,000$ ) with higher average in IG (IG=107,5/CG=86,1) except the domains: pain, food and help. Analyzing the intra-group results, between T1 and T2, very significant statistically differences were shown in the IG ( $p<0,000$ ) in all fields, excepting sexual activity. In the CG, only in psychological well-being, physical well-being and sexual activity, significant differences were observed ( $p<0,05$ ).

**Conclusions:** Although these results may be preliminary, these findings suggest that specific nursing interventions play an important role in enhancing QoL of patients with a stoma.

**Descriptors:** nursing interventions; program; patients; stoma; quality of life.

422

### RESILIENCE IN ADOLESCENTS AND THEIR PERCEPTION OF THE PARENTING STYLES

Mónica Silva<sup>a</sup>, Joana Sequeira<sup>b</sup>

*Instituto Superior Miguel Torga. Porto, Portugal*

**Introduction:** During adolescence many changes occur in parent-child relationships.

**Objective:** The aim of this research is to explore the relations between the perception of resilience in adolescents, parent-child communication and parenting styles.

**Methods:** An sociodemographic questionnaire, the Parental Rearing Style Questionnaire for Adolescents (EMBU-A), Perception Scale of Parenting Communication (COMPA – children version 10-16) and the Resilience Scale from Wagnild and Young, brazilian adaptation. Instruments were applied to 135 adolescents within 12-15 years old were applied to the participants.

**Results:** Results of parenting practices showed no significant differences between gender. Though, younger adolescents and those who have never lost a scholar year have a better perception of parental support. Older adolescents perceived more rejection as well as those who have lost a scholar year. Moreover, this kind of adolescents have more negative perceptions about patterns of communication with their parents. On the other hand, the younger sons and those who have never lost a scholar year, have a positive perception of the communication. Despite being statistically insignificant, girls have higher levels of resilience. The younger adolescents and those who have never lost a scholar year, have high scores in the resilience scale, comparing to older ones and those who have lost a scholar year.

**Conclusions:** It can be concluded that families where children perceive more emotional support, communication affective expressions, meta communication and availability for communication between parent-child are families where adolescent perceives himself as resilient.

**Descriptors:** parenting styles; communication; resilience; adolescence.

<sup>a</sup> clementinasousa@ess.ipvcc.pt

<sup>b</sup> celiasantos@esep.pt

<sup>c</sup> armindavieira@ess.ipvcc.pt

<sup>a</sup> monicascsilva@gmail.com

<sup>b</sup> joanasequeira@esdrm.ipsantarem.pt

423

### BETTER QUALITY OF LIFE DETERMINANTS. A CORRELATIONAL STUDY IN A DRUG ADDICTS COMMUNITY

Paulo Seabra<sup>I,III,a</sup>, José Amendoeira<sup>II,III,b</sup>, Luís Sá<sup>I,III,c</sup><sup>I</sup>Health Sciences Institute. Portuguese Catholic University. Lisboa, Portugal<sup>II</sup>Health School of Polytechnic Institute of Santarem. Santarém, Portugal<sup>III</sup>Center for Interdisciplinary Research in Health. Portuguese Catholic University. Lisboa, Portugal

**Introduction:** In the drug addicts community, we can observe social and family life difficulties, emotional distress and other indicators that can be related to a lower life quality (QoL) measured by “Drug addicts in a methadone program quality of life scale” (Pacheco et al., 2005). The physical and psychological comorbidities are responsible for increasing the drug using consequences.

**Objective:** Identify the factors that contribute to a better QoL.

**Methods:** Descriptive, cross-sectional and correlational study was conducted between February and December 2012. Social, demographic and clinical data was observed and correlated with their QoL. A systematic random sample of 180 opiate addicts, integrated in a three methadone maintenance programs from Lisbon district, accepted to answer after informed consent.

**Results:** A significant positive QoL was found ( $\bar{X}$  = 78.7%). The variables that significantly contribute to a better QoL: fewer reentries ( $r = -.159$ ;  $p = .033$ ); better mental health ( $r = .382$ ;  $p < .001$ ); conjugal relationship ( $t = -2.187$ ;  $p = .030$ ), being employed ( $F = 6.038$ ;  $p = .001$ ), living by salary ( $F = 11.835$ ;  $p < .001$ ), no comorbidities ( $t = -2.452$ ;  $p = .018$ ). Variables that contribute to a significantly lower QoL: Benzodiazepine consumption ( $t = 2.388$ ;  $p = .018$ ) and still use IV consumption ( $t = -2.373$ ;  $p = .019$ ).

**Conclusions:** The stability obtained when integrated in a methadone maintenance program, provides better QoL. Being employed, living with a salary and maintaining a conjugal relationship, are the most evident social stability factors. The absence of physical or mental comorbidities, lack of benzodiazepines consumption and no IV consumption, are the complementary factors to a good QoL. The substance dependence consequences affect significantly QoL.

**Descriptors:** Quality of Life; Mental health; Determinants; drug addiction; substance related disorders.

<sup>a</sup> pauloseabra@ics.lisboa.ucp.pt<sup>b</sup> jose.amendoeira@essaude.ipsantarem.pt<sup>c</sup> lsa@porto.ucp.pt

424

### FAMILY QUALITY OF LIFE IN FAMILIES OF PEOPLE WITH INTELLECTUAL DISABILITIES: A NEW CONCEPT

Raquel Correia<sup>I,II,a</sup>, Maria João Seabra Santos<sup>II,b</sup><sup>I</sup>Associação Portuguesa de Pais e Amigos do Cidadão Deficiente Mental. Castelo Branco, Portugal<sup>II</sup>Faculdade de Psicologia e Ciências da Educação. Universidade de Coimbra. Coimbra, Portugal

**Introduction:** Quality of life (QoL) is a worldwide concept that has been studied in many areas, including in health. Given the importance that has been accorded to families, researchers begin to analyze QoL in a family level, particularly in families with members who have intellectual disabilities (ID). Family quality of life (FQoL) has demonstrated much potential in terms of evaluation and intervention with these families.

**Objective:** The present work intends to demonstrate the importance of knowing and understanding the quality of life in a family unit level in the ID.

**Methods:** The empirical studies which analyze FQoL in families with members who have an ID were reviewed, as a starting point for future studies.

**Results:** From a total of 32 studies, 15 essentially used the Family Quality of Life Scale-2006 (FQOLS-2006), 11 used the Beach Center FQoL Survey and 6 used other methods to evaluate FQoL. These studies emphasize the multi-dimensional nature of FQoL evaluated through its domains, as well as some individual and family variables that appear to have some influence on FQoL.

**Conclusions:** FQoL has the potential to gather research, policy and practice and offer a positive and comprehensive framework for assessing families of persons with ID. Future studies should be supported by a more robust theoretical base and more diverse methodologies, and should aim to search for FQoL specificities for the various elements that make up the family, and throughout the family's life cycle.

**Descriptors:** quality of life; family quality of life; intellectual disabilities; families; empirical studies.

<sup>a</sup> raquel.a.correia@gmail.com<sup>b</sup> seabramj@fpce.uc.pt

425

### WELL-BEING IN VERY OLD AGE: VALUATION OF LIFE AND HEALTH AT ONE CENTURY OF LIFE

Lia Araújo<sup>1,a</sup>, Oscar Ribeiro<sup>1,b</sup>, Daniela Brandão<sup>1,c</sup>, Natália Duarte<sup>1,d</sup>, Sara Alves<sup>1,e</sup>, Laetitia Teixeira<sup>1,f</sup>, Maria Constança Paul<sup>1,g</sup>, Maria João Azevedo<sup>1,h</sup>

<sup>1</sup>Unidade de Investigação e Formação sobre Adultos e Idosos. Instituto de Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto, Portugal

<sup>11</sup>Instituto Superior de Serviço Social do Porto. Porto, Portugal

**Introduction:** Centenarians due to their very advanced age have to face with demanding accumulative conditions, which may constitute a serious challenge to their well-being and valuation of life (VOL), which includes judgments with regard to one's desired length of life (Lawton et al, 1999).

**Objective:** To assess levels of VOL in centenarians and to identify VOL's association with objective and subjective health measures.

**Methods:** 35 individuals with 100 and more years old from the Oporto Centenarian Study (PT100) who were able to respond to a complete assessment protocol were considered for this analysis. The mean age of the sample was 101.23 (SD 1.57); 80% women, 77% widowed and 71% living in the community. The Positive Valuation of Life Scale (Lawton et al, 2001; Araújo et al, submitted), the OARS (Fillenbaum & Smyer, 1981; Rodrigues, 2007) and a sociodemographic questionnaire were used for data collection. Descriptive and inferential analyses were conducted.

**Results:** Mean VOL score was 27.30 (SD=6.45) with higher scores in items related with hope and purpose. There were statistically significant differences only for subjective health: centenarians with a positive self-perception of health had higher valuation of life (28.3±5.8) than those with negative (19.7±6.6).

**Conclusions:** Since VOL excluded physical health content, it was expected to exhibit no correlation, confirming the capacity of centenarians to minimize life circumstances on their subjective states (Rott et al, 2006). Further investigation should look for factors that may determine whether centenarians see life as being worthwhile or not.

**Descriptors:** Centenarians; Valuation of Life; Health.

<sup>a</sup> lijaraujo@esev.ipv.pt

<sup>b</sup> oribeiro@ua.pt

<sup>c</sup> nataliascduarte@gmail.com

<sup>d</sup> danielafsbrandao@gmail.com

<sup>e</sup> ssafalves@gmail.com

<sup>f</sup> laetitiaeteixeira@gmail.com

<sup>g</sup> paul@icbas.up.pt

<sup>h</sup> maria.joao.tinoco@gmail.com

426

### MATERNAL POSTPARTUM QUALITY OF LIFE QUESTIONNAIRE - MAPP-QOL: VALIDATION OF THE PORTUGUESE VERSION IN FIRST-TIME MOTHERS

IsabelMendes<sup>1,a</sup>, Zaida Azeredo<sup>1,b</sup>, Rogério Rodrigues<sup>1,c</sup>

<sup>1</sup>Instituto Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto. Portugal

<sup>11</sup>Escola Superior de Enfermagem de Coimbra, Coimbra, Portugal

**Introduction:** The postpartum period is a time of tremendous physical, emotional, and social changes, which impact quality of life (QOL). Hill et al (2006) developed a new instrument (MAPP-QOL) to measure maternal quality of life during the early postpartum period.

**Objective:** to validate the Portuguese version of maternal postpartum quality of life Questionnaire in first-time mothers (Hill et al, 2006). This instrument is considered one of the most adequate tools for the multidimensional assessment of the quality of life of postpartum women.

**Methods:** The methodology for the validation of MAPP-QOL was developed in four steps: translation, back translation, comparing the two versions and evidence of the validity of the new version. The MAPP-QOL is a self-administered, paper-and-pencil tool that measure mothers' perceptions of QOL during the early postpartum period Likert type scale consisting of 41 items with five dimensions: psychological/baby; socioeconomic; relational/spouse-partner; relational/family-friends; and health & functioning. The sample is constituted by 278 first-time mothers (non-probabilistic sample, with the following inclusion criteria: vaginal delivery, unique new-born term, without pathologies associated to pregnancy, low risk pregnancy, partner co-habitation), allowing with this sample the global psychometric study of the instrument.

**Results and Conclusion:** We point out results that show validity and reliability of the Portuguese version of the MAPP-QOL as a very suitable tool for assessing the quality of life of postpartum women. Pertinent results emerge from the validation study that identify real needs and allocation of services to this reproductive health care specific group with implications in their quality of life.

**Descriptors:** Quality of life; postpartum; first-time mothers.

<sup>a</sup> isabelmendes@esenfc.pt

<sup>b</sup> zaida.azeredo@gmail.com

<sup>c</sup> rogerio@esenfc.pt

427

### FIRST-TIME PARENTS: QUALITY OF LIFE AND ADJUSTMENT TO THE PARENTAL ROLE IN POSTPARTUM PERIOD

IsabelMendes<sup>1,a</sup>, Zaida Azeredo<sup>1,b</sup>, RogérioRodrigues<sup>11,c</sup>

<sup>1</sup>*Instituto Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto. Portugal*

<sup>11</sup>*Escola Superior de Enfermagem de Coimbra, Coimbra, Portugal*

**Introduction:** Postpartum period is a time of transition, of adjustments to the parental role. This transition calls for changes in role relationships, especially in the first-time parents.

**Objective:** Identify needs of the first time parents related to the adjustment to the parental role in their quality of life.

**Methods:** Descriptive phenomenological qualitative study. Inform consent was obtained during the hospitalization after childbirth. Saturation of data was obtained with a group of 25 first-time fathers, using unstructured interviews in the parent's home place.

**Results:** Two essentials structures emerged from the meaning units of the experiences of the first-time parents adjustment to the postpartum, the first described a positive experience and the second one a negative experience. From the positive key constituents we highlighted: getting to know the baby; the sense of responsibility to the parental role; the sense of family; the greater cooperation and union of the couple. As negative key constituents: insecurity in baby care; experiencing parenthood with emotional vulnerability that is labelled as a period of lack of time to take care of oneself; less time for the couple and less social activity.

**Conclusions:** This phenomenological study provides a deep understanding of the needs of first-time parents with the essentials structures of the process of paternal adjustment and their quality of life in the period of the post-partum, and generates implications to improve it, specially the postpartum home visit, support groups in the Health Centres, and a maternity postpartum phone line as suggested by the participants.

**Descriptors:** Quality of life; Parental Role; First-time parents

428

### PSYCHOMETRIC STUDIES OF THE OTHER AS SHAMER SCALE FOR ADOLESCENTS - BRIEF VERSION (OASB-A)

Marina Cunha<sup>111,a</sup>, Ana Xavier<sup>11,b</sup>, Sónia Cherpe<sup>11,c</sup>, José Pinto-Gouveia<sup>1,d</sup>

<sup>1</sup>*Centro de Investigação do Núcleo de Estudos e Intervenção Cognitivo-Comportamental Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra. Coimbra. Portugal*

<sup>11</sup>*Instituto Superior Miguel Torga. Coimbra. Portugal*

**Introduction:** Several studies have shown that emotion of shame plays a key role in understanding human functioning, particularly in mental health. In adolescence, it may be especially important to assess shaming experiences because shame becomes intense in this age group, decreasing into middle adulthood, and is negatively related to psychological well-being throughout life. Shaming experiences have been found to play a crucial role in adolescents' health and well-being. The Others As Shamer (OAS) is an 18-item scale that measures external shame (i.e., global judgments of how people think others view them).

**Objective:** This study aims to explore the psychometric properties and factor structure of the brief version of the Other As Shamer for Adolescents (OASB-A).

**Methods:** The sample consisted of 834 adolescents, with ages ranging from 12 to 18 years old ( $M=15.42$ ,  $SD=1.77$ ), in the 7<sup>th</sup>-12<sup>th</sup> grades ( $M=9.54$ ,  $SD=1.63$ ) from schools of Coimbra, Portugal. A set of self-report instruments, including the OASB-A and measures of traumatic shame memories (IES-R), anxiety and depression (DASS-21), was administered.

**Results:** Similar to the adult version, the OASB-A, composed by 8 items, showed a single component structure (explaining 67% of total variance), an excellent internal consistency ( $\alpha=.92$ ), an adequate temporal stability ( $r=.73$ ), and correlations with other study variables in the expected direction.

**Conclusions:** Overall, these findings suggest that the OASB-A is a reliable and valid measure for the assessment of external shame feelings in adolescents.

**Descriptors:** External shame; OAS brief version; Adolescence; Psychometric analysis.

<sup>a</sup> isabelmendes@esenfc.pt

<sup>b</sup> zaida.azeredo@gmail.com

<sup>c</sup> rogerio@esenfc.pt

<sup>a</sup> marina\_cunha@ismt.pt

<sup>b</sup> ana.mj.xavier@gmail.com

<sup>c</sup> soniacheppe@fpce.uc.pt

<sup>d</sup> jpgouveia@fpce.uc.pt



429

### ANALYSIS AMONG ELDERLY INSTITUTIONALIZED AND NON-INSTITUTIONALIZED IN A CITY OF BRAZIL

Raiana Soares de Sousa Silva<sup>1,a</sup>, Juliana Evaristo Sousa<sup>1,b</sup>, João Henrique Araújo de Andrade<sup>1,c</sup>, Michelle Vicente Torres<sup>1,d</sup>, Reginaldo Santos e Silva Júnior<sup>1,e</sup>, Solange Santos da Paz<sup>1,f</sup>, Janaína Maria Medeiros Macêdo Menezes<sup>1,g</sup>

<sup>1</sup>Universidade Federal do Piauí. Teresina, PI, Brasil

<sup>2</sup>Universidade do Estado da Bahia. Bahia, Brasil

<sup>3</sup>Faculdade Santo Agostinho. Montes Claros, MG, Brasil

**Introduction:** During aging, various diseases may affect the elderly, in order to interfere with their health functional capacity. Such diseases require a multidisciplinary action together, aiming to attend the needs of each elderly, in order to provide the maintenance and improvement of their functional capacity. Functional disability in the elderly may interfere with their independence as much as in performing Activities of Daily Living and may affect their quality of life.

**Objective:** To compare the level of quality of life among elderly institutionalized and non-institutionalized in Teresina, Piauí, Brazil.

**Methods:** We conducted a cross sectional analytical and descriptive study with a quantitative approach, in which the data were obtained through the application of a questionnaire, and information were compared among a group of elderly institutionalized and non-institutionalized group. The study was conducted in two long-term institutions of Teresina and households in the South Zone of Teresina, with survey participants characterized according to socio-demographic factors.

**Results:** A significant difference between the group of elderly institutionalized and non-institutionalized in domains: physical, psychological, social and environmental relationships, resulting in an overall score of WHOQOL-BREF, respectively, 165.23% and 199.22% with a highly significant difference between the groups. This data is classified as alarming given the fact that the physical integrity of the elderly is one of the factors that greatly contributes to their autonomy and thereby maintaining their levels of quality of life.

**Conclusions:** We concluded that institutionalized elderly had lower quality of life compared to non institutionalized individuals.

**Descriptors:** health of the elderly; quality of life; daily activities; social conditions and health; institutionalized and non-institutionalized elderly.

<sup>a</sup> raiana\_sousa@hotmail.com

<sup>b</sup> ju\_evaristo@hotmail.com

<sup>c</sup> henrick\_andrade@hotmail.com

<sup>d</sup> michellevicento@yahoo.com.br

<sup>e</sup> rsesj-1@hotmail.com

<sup>f</sup> egnalos.fsa@hotmail.com

<sup>g</sup> janainamenezes14@hotmail.com

430

### THE FAMILY OF A HOSPITALIZED ADULT IN ICU: TRANSITIONS IN QUALITY OF LIFE AND WELL-BEING

Anabela Mendes<sup>1,a</sup>, Margarida Vieira<sup>1,b</sup>

<sup>1</sup>Escola Superior de Enfermagem de Lisboa. Lisboa, Portugal

<sup>2</sup>Universidade Católica Portuguesa. Lisboa, Portugal

**Introduction:** The situation of hospitalization of an adult member in ICU has significant consequences in family's everyday life. It is decisive in their quality-of-life and well-being by the changes associated with the transition process health-disease with repercussions on structure, development and function dimensions.

**Objective:** To analyze how the experience of ICU hospitalization disrupts family client according Meleis transitions theory and Calgary Model of family assessment.

**Methods:** Qualitative study. Data collection through open interview to family members of adult person who was hospitalized in ICU. The content analysis of the interviews enabled the desired assessment. The Software used to qualitative data analysis was Nvivo8.

**Results:** The experience of ICU hospitalization compel family to restructure its organization with the assumption of new roles that gradually ensure its function and the structure of new "subsystems" and break other existing. The developed "bond" and "communication" allow "expressiveness". The interaction with nurses let them to identify needs and limitations in "cognitive", "behavioral" and "emotional" domains and, in partnership, structuring interventions. The relationship with nurses supports family in "instrumental function" and "expressive function". The measurement of indicators of process and outcomes in health-disease transition is essential and decisive.

**Conclusions:** The "context" requested to family a capability of response that have significantly impacted on their quality-of-life. The strategies developed, supported on "personal skills" of each member and "health system", as nurses, were assumed as "facilitators" and promoters of wellness in daily life. The measurement of capacity, "resources" and family's strategies by nurses was crucial.

**Descriptors:** Family; Transition; Intensive care; Nursing care.

<sup>a</sup> anabelapmendes@esel.pt

<sup>b</sup> mmvieira@porto.ucp.pt

431

### SYSTEMATIZATION OF THE CARE SYSTEM NURSING FOR TYPE II DIABETES MELLITUS: STUDY OF CASE

João Henrique Araújo Andrade<sup>1,a</sup>, Juarez Henrique Teixeira Gonçalves<sup>1,b</sup>, Janaina Medeiros Macêdo Menêzes<sup>11,c</sup>, Cassia Regina Santana Souza<sup>1,d</sup>, Raiana Soares de Sousa Silva<sup>111,e</sup>

<sup>1</sup>Universidade do Estado da Bahia. Salvador, Brasil

<sup>11</sup>Universidade Federal dos Vales do Jequitinhonha e Mucuri. Minas Gerais, Brasil

<sup>111</sup>Universidade Federal do Piauí. Teresina, PI, Brasil

**Introduction:** Type II Diabetes Mellitus (noninsulin-dependent) is mainly due to insulin resistance associated with lower hormone secretion. In Brazil, the Public Health System has an specialized sector to take care of these patients, where several nurse care can be implanted, including diagnosis and interventions that are necessary so these patients can have a better life quality.

**Objective:** Increase the knowledge about this pathology and apply the nurse assistance systematization, prioritizing the holistic medical care to patients with diabetic foot.

**Methods:** A qualitative, descriptive study was realized as a case study, realized in 2012 during the internship of the collective health discipline of the Bachelor in Nursing course from the State University of Bahia. The data collection was made through interviews and physic exam, that supported the construction of the nursing diagnosis and interventions.

**Results:** Nursing acts monitoring blood glucose levels, hyperglycemia, edema, signs of infection, promoting an adequate diet and self-care, helping the stroll ambulation, among others.

**Conclusions:** From the necessity of case studies rises the desire to understand complex social phenomena. With the study it was able to understand the pathologic aspects of the mentioned disease, attend systematic assistance, preserving the holistic characteristics and offering a better life quality to the diabetic patient.

**Descriptors:** Diabetes Mellitus; SAE; Care; Nursing; Public Health.

<sup>a</sup> henrick\_andrade@hotmail.com

<sup>b</sup> juarezhenrique8@gmail.com

<sup>c</sup> janainamenezes14@hotmail.com

<sup>d</sup> cassia\_regina.ss@hotmail.com

<sup>e</sup> raiana\_sousa@hotmail.com

432

### CHANGE IN FUNCTIONAL STATUS AND BODY COMPOSITION IN INSTITUTIONALIZED ELDERLY

André Novo<sup>a</sup>, Leonel Preto<sup>b</sup>, Ana Santos<sup>c</sup>, Eugénia Mendes<sup>d</sup>

*Escola Superior de Saúde. Instituto Politecnico de Bragança. Bragança. Portugal*

**Introduction:** The decrease on muscular strength, flexibility and balance are widely recognized as the main causes of disability in older people. A better knowledge of these variables can help to plan programs for active aging.

**Objective:** To assess physical functioning, body composition and fear of falling and analyze these dimensions on the aging process.

**Methods:** This is a longitudinal descriptive-correlational study. The sample comprise 51 institutionalized elderly followed for two years. The data collection took place between 2011 May and June (first evaluation) and 2013 April and May (2nd) using a sociodemographic and clinical questionnaire, the Falls Efficacy Scale (FES), the Rikli & Jones protocol, hand dynamometry and bioelectrical impedance for body composition.

**Results:** Results show significant differences in fear of falling and in all components of physical fitness (agility, flexibility, muscular strength and balance) between the two moments of evaluation. In physical functioning, we highlight the moderate negative correlation between lower extremities muscle strength and the results of the Up and Go test. Was observed a significant decline in functional capacity of the elderly over the two years in analysis.

**Conclusions:** The results suggest significant changes in two years, especially in the variables related to muscular function and flexibility. The results do not reflect significant changes in body composition between assessments, however, point to a reduction in bone mass and total muscle mass.

**Descriptors:** Aging; functionality; fear of falling; body composition.

<sup>a</sup> andre@ipb.pt

<sup>b</sup> leonelpreto@ipb.pt

<sup>c</sup> analuisagoncalvesnog@gmail.com

<sup>d</sup> maria.mendes@ipb.pt

433

### BLOW GUN TRAINING ENHANCES THE VENTILATORY CAPACITY IN PATIENTS WITH DOWN SYNDROME: A PILOT STUDY

Marisa Barroso<sup>I,II,a</sup>, Rogério Salvador<sup>II</sup>, Ana Barros<sup>II</sup>, Raquel Soeiro<sup>II</sup>, Ana Marcelino<sup>II</sup>, Daniela Nogueira<sup>II</sup>, Pedro G. Morouço<sup>I,II,III</sup>

<sup>I</sup>Centro de Investigação em Motricidade Humana

<sup>II</sup>Escola Superior de Ciências Sociais e da Educação. Instituto Politécnico de Leiria. Leiria. Portugal

<sup>III</sup>Centro para o desenvolvimento Rápido e Sustentado de Produto. Instituto Politécnico. Leiria, Portugal

**Introduction:** There are over fifteen thousand people with Down syndrome in Portugal. The worst performance of their respiratory muscles aggravates the expiratory effort, leading to a diminished aerial flow.

**Objective:** To verify if the blow gun training induces a higher expiratory intensity, in patients with Down syndrome.

**Methods:** Four participants (17 to 56 years of age) engaged in a 5 weeks period of training, with 2 sessions per week. In each session, after a standard warm-up, each participant performed 4 series of 10 shots 3 m from the target. Forced expiratory intensity was recorded via a portable spirometer (Datospir Peak-10, Sibelman) at the beginning and at the end of each session. Prior to analysis, the results of the first and the fifth week were averaged. Shapiro-Wilk and Levene tests were conducted before inferential procedures.

**Results:** The intensity of the air flow in the fifth week ( $215.9 \pm 81.3$  l/min) was significantly higher than in the first week ( $177.7 \pm 79.1$  l/min;  $t=5.188$ ;  $p=0.014$ ). Plus, a very strong correlation between measurements was observed ( $r=0.983$ ;  $p=0.017$ ).

**Conclusions:** This pilot study showed that 5 weeks of such a captivating activity, enhanced the ventilatory capacity of Down syndrome patients. Taking into consideration that the elastic recoil of the lung and the resistance of the intra-thoracic airways are of great importance for the prevention of cardio-respiratory infections, the proposed training can be a methodology to increase the quality of life and well-being of this population.

**Descriptors:** trisomy 21; expiratory intensity; quality of life; well-being.

<sup>a</sup>marisa.barroso@ipleiria.pt

434

### INTERGENERATIONAL RELATIONS – GRANDPARENTS AND GRANDCHILDREN’S: A WELL-BEING FACTOR?

Sónia Maria Aniceto Morgado<sup>I,II,III,a</sup>, Anabela Vitorino<sup>I,II,b</sup>

<sup>I</sup>Escola Superior de Desporto de Rio Maior. Instituto Politécnico de Santarém. Santarém, Portugal

<sup>II</sup>Unidade de Investigação do Instituto Politécnico de Santarém. Instituto Politécnico de Santarém. Santarém, Portugal

<sup>III</sup>Centro Investigação em Qualidade de Vida. Instituto Politécnico de Santarém. Santarém, Portugal

**Introduction:** The purpose of the present study was to build upon the concept of well-being and analyze the interaction between grandparents and grandchildren, and their contribution in life by having a pleasant life – hedonic well-being, meaningful life – eudaimonic well-being, and social life – social well-being.

**Objective:** Measuring the intergenerational relations by assessing the interaction between grandparents and grandchildren is one way to demonstrate the need for affections in order to accomplish well-being and improve health.

**Methods:** In this exploratory study the approach used, to examine the relation mentioned above, was a questionnaire survey, composed by two basic questions, with 15 different characteristics.

**Results:** In 218 respondents (58,7% females, 41,3% males), a pleasant, meaningful and social life, is a reflex of a more integrated context of usefulness, as there is an active participation on family in aspects such as sharing practical knowledge of life, daily life questions, improving writing, reading and feeling useful and valued. These questions prevail above others and present differences in face of health condition ( $p\text{-value}=0,000$ ), but none in gender ( $p\text{-value}=0,061$ ).

**Conclusions:** Although a great deal of research in the well-being field is done, exists a lack of evidence of the importance of the intergenerational relations. The analysis points out that importance, and it should be an argument to improve the conditions for well-being, alongside with economic and social factors.

**Descriptors:** intergenerational relations; satisfaction; positive affections; well-being; integration.

<sup>a</sup>soniamamorgado@esdrm.ipsantarem.pt

<sup>b</sup>anabelav@esdrm.ipsantarem.pt

435

**POLYPHARMACY IN THE ELDERLY: THERAPY ADHERENCE**Isabel C Pinto<sup>1,a</sup>, Maria I Ribeiro<sup>1,b</sup>, I. Geraldo<sup>1,c</sup>, S. Novo<sup>1,d</sup>, M. Reis<sup>1,e</sup>, D. Rocha<sup>1,f</sup><sup>1</sup>*Departamento de Tecnologias de Diagnóstico Terapêutica. Centro de Investigação e Intervenção no Idoso. Escola Superior de Saúde do Instituto Politécnico de Bragança. Bragança, Portugal*<sup>2</sup>*Centro de Estudos Transdisciplinares para o Desenvolvimento. Universidade de Trás-os-Montes e Alto Douro. Unidade de Investigação para o Desenvolvimento do Interior. Instituto Politécnico da Guarda. Instituto Politécnico de Bragança. Bragança, Portugal*<sup>3</sup>*Escola Superior de Saúde. Instituto Politécnico de Bragança. Bragança, Portugal*

**Introduction:** The elderly population has been growing significantly, leading to an increased prevalence of chronic diseases and consequent taking medication. Polypharmacy is the chronic and simultaneous use of different drugs by the same individual, and the elderly are the more susceptible. The complex therapies of elderly can lead to therapy non-adherence, increasing several health risks.

**Objective:** This study aimed to estimate the prevalence of polymedicated elderly, evaluate therapy adherence and associated factors, and check the differences among non-institutionalized elderly and users of day centers.

**Methods:** This cross-sectional study was based on a questionnaire, validated for the Portuguese population based on the Morisky scale, applied to 200 non-institutionalized elderly and 68 under day centers, of interior and coastal counties of northern Portugal. It was considered as poly-medicated seniors taking  $\geq 4$  drugs. To assess therapy adherence, those whose average adherence levels were  $\geq 3.5$ , were called adherent.

**Results:** The sample was predominantly polymedicated (59%) and shows high therapy adherence (95%), the average number of different drugs daily ingested was about seven. Elderly of coastal, show superior levels of therapy adherence than those of interior county ( $p=0.007$ ). Only the economic difficulties are related to non-adherence ( $p=0.022$ ). No statistically significant differences were found between non-institutionalized elderly and users of day centers.

**Conclusions:** This study shows that a large proportion of elderly were polymedicated, managing an average of almost 7 drugs daily. The majority adhered to the therapy prescribed, and only the area of residence and economic difficulties were related to levels of therapy adherence.

**Descriptors:** Polypharmacy; Therapy adherence; Polymedicated elderly; Non-institutionalized elderly; Users of day centers.

<sup>a</sup> isabel.pinto@ipb.pt<sup>b</sup> xilote@ipb.pt<sup>c</sup> a23836@alunos.ipb.pt<sup>d</sup> a23846@alunos.ipb.pt<sup>e</sup> a23843@alunos.ipb.pt<sup>f</sup> a23724@alunos.ipb.pt

436

**OPTIMISM, RESILIENCE AND FAMILY IMPACT IN PARENTS OF DISABLED CHILD**J. Mateus<sup>1,a</sup>, S. Simões<sup>1,b</sup>, H. Espírito-Santo<sup>1,c</sup>, L. Lemos<sup>1,d</sup>, S. Guadalupe<sup>1,e</sup>, D. Guerreiro<sup>1,f</sup>, M. Marques<sup>1,III,IV,V,g</sup><sup>1</sup>*Instituto Superior Miguel Torga. Coimbra, Portugal*<sup>2</sup>*Centro de Acolhimento João Paulo II. Coimbra, Portugal*<sup>3</sup>*Instituto Politécnico de Leiria. Leiria, Portugal*<sup>4</sup>*Escola Superior de Desporto de Rio Maior. Rio Maior, Portugal*<sup>5</sup>*Serviço de Psicologia Médica. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal*

**Objective:** Families with a disabled child face challenges requiring reorganization/s. However, some families positively adapt to the condition. Our aims were to verify parent's resilience and optimism impact in objective/subjective overburden associated with the fact of having a disabled child; explore associations between sociodemographic variables and both overburdens; explore overburden predictors.

**Methods:** 80 parents of children (1 month-6 years old) followed by the Local Early Intervention Team for Children of Leiria District (mean age=36,0; SD=5,87) filled in a sociodemographic questionnaire, Life Orientation Test, Global Assessment Scale of Resilience, Family Impact Scale (assessing objective overburden) and Depression, Anxiety and Stress Scale (assessing subjective overburden).

**Results:** Mothers showed lower resilience and optimism levels and higher subjective overburden (depression, anxiety and stress) levels versus fathers. Since there were no differences in objective overburden by gender, we explored this overburden (family impact) association with resilience and optimism in the total sample (mothers and fathers). We found no associations. Regarding mothers, higher resilience and optimism levels were associated with depression, anxiety and stress lower levels. In men, the number of children predicts depression and father's age predict anxiety. In women, help to take care of the child and optimism predict stress.

**Conclusions:** Mothers experience more psychopathology and lower levels in the positive constructs, versus father, following the literature. Parent's resilience and optimism does not influence objective overburden, contrary to the expected. Mother's optimism seems to protect against stress. Early interventions must prioritize family's needs/concerns and reinforce protective aspects (resilience/optimism) promoting well-being.

**Descriptors:** disability, family overburden, optimism and resilience.

<sup>a</sup> joana.mateus.pinto@gmail.com<sup>b</sup> soniasimoes76@gmail.com<sup>c</sup> helenium@me.com<sup>d</sup> laurastlemos@gmail.com<sup>e</sup> soniaguadalupe@gmail.com<sup>f</sup> daniela\_mmg@hotmail.com<sup>g</sup> mvpmarques@gmail.com

437

### MEDICINES OUT OF USE AND WASTE OF MEDICINES IN A NORTHERN CITY OF PORTUGAL

Isabel C. Pinto<sup>1,a</sup>, L.M. Nascimento<sup>1,b</sup>, M. Guilherme<sup>11,c</sup>, A. Magalhães<sup>111,d</sup>, E. Santos<sup>11,e</sup>, R. Vasques<sup>11,f</sup>

<sup>1</sup>Departamento de Tecnologias de Diagnóstico e Terapêutica. *Escola Superior de Saúde. Instituto Politécnico de Bragança. Portugal*

<sup>11</sup>*Estudantes da escolar Superior de Saúde. Instituto Politécnico de Bragança. Portugal*

**Introduction:** Nowadays, it's important to understand waste of medicines, destination of medicines out of use and knowledge that people have about it, since the lack of information can lead to serious consequences for public health and environment.

**Objective:** This study aims to determine the proportion of waste of medicines in population of a northern city of Portugal and related factors and verify the knowledge and behavior about the destination of medicines out of use, like the Valormed.

**Methods:** This cross-sectional and study used a questionnaire applied to 148 users of a Health Center of Bragança. Most were female (67.6%), aged over 45 (60.1%), with residence in rural environment (78.4%).

**Results:** The proportion of waste medicines was relatively low, 60.8% alleged always finish the medication packaging. There is thus a proportion waste of 39.2%. The reason for not finishing the medication packaging was because they feel better (53.4%) or inadequate size of packages (16.2%). However, 75.0% said always check the expiration date. 31.1% of individuals lay medicines out of use to trash, 29.1% deliver in pharmacies and 27.7% keep at home. The majority (72.3%) did not know the existence of Valormed in pharmacies, as correct destination for medicines out of use.

**Conclusions:** The proportion of waste of medicines was about 39%, probably due to feeling better, not checking expiration date and inadequate size of packages. More than half of subjects lay medicines out of use into trash or take them to pharmacy, although the majority did not know Valormed.

**Descriptors:** Bragança; Medicines out of use; Users of a Health Center; Valormed; Waste of medicines.

<sup>a</sup> isabel.pinto@ipb.pt

<sup>b</sup> luis.miguel@ipb.pt

<sup>c</sup> a21775@alunos.ipb.pt

<sup>d</sup> a18840@alunos.ipb.pt

<sup>e</sup> a21768@alunos.ipb.pt

<sup>f</sup> a21786@alunos.ipb.pt

438

### PASSION AND SATISFACTION WITH LIFE IN DISABLED ATHLETES

Anabela Vitorino<sup>1,11,a</sup>, Diogo Monteiro<sup>11b</sup>, João Moutão<sup>1,11,111,c</sup>, Rafaela Pinto<sup>1,d</sup>, Sónia Morgado<sup>1,11,111,e</sup>, Teresa Bento<sup>1,11,111,f</sup>, Luís Cid<sup>1,11,111,g</sup>

<sup>1</sup>*Escola Superior de Desporto de Rio Maior. Instituto Politécnico de Santarém*

<sup>11</sup>*Unidade de Investigação do Instituto Politécnico de Santarém. Santarém, Portugal*

<sup>111</sup>*Centro de Investigação em Desporto, Saúde e Desenvolvimento Humano, Rio Maior. Instituto Politécnico de Santarém. Portugal*

<sup>111</sup>*Centro de Investigação em Qualidade de Vida. Portugal*

**Introduction:** Passion is a psychological construct that can be conceptualized as a strong will towards an activity that individuals are related to and that they find important. Based on the new dualistic approach on passion for sports, there are two types of passion: harmonious passion – positively associated with general positive affects; and obsessive passion, related to general negative effects.

**Objective:** The aim of this study was to analyze the relationship between the passion that elite athletes feel for their sportive modality and satisfaction with life on the context of adapted sport.

**Methods:** The instruments used were the Passion Scale and Satisfaction with Life Scale (portuguese versions), applied on 21 Paralympic athletes (2 males; 19 females), of the modalities of swimming (n=4), athletics (n=10) and bocia (n=7), with a competitive experience between 4 and 29 years (15.81 ± 6.70 years), and ages ranged from 20 to 59 years (36.95 ± 8.70). Disabilities included: physical (n=4), visual (n=10), cerebral palsy (n=5) and les autres (n=2).

**Results:** The kind of passion that athletes feel for the modality is particularly harmonious, relating this positively and significantly with satisfaction with life (rho=.542, p<.05). Obsessive passion was also positively correlated with satisfaction with life, but not significantly, which can be explained by the strong correlation between the two types of passion (rho=.674, p<.01).

**Conclusions:** Our results seem to show that when athletes develop an harmonious passion for the modality they practice, that leads to positive effects over their well-being, particularly to a greater life with satisfaction.

**Descriptors:** Passion, well-being, satisfaction with life, disabled athletes.

<sup>a</sup> anabelav@esdrm.ipsantarem.pt

<sup>b</sup> dt\_desporto6@hotmail.com

<sup>c</sup> jmoutao@esdrm.ipsantarem.pt

<sup>d</sup> rafaela\_sousa\_pinto@hotmail.com

<sup>e</sup> soniamorgado@esdrm.ipsantarem.pt

<sup>f</sup> teresabento@esdrm.ipsantarem.pt

<sup>g</sup> luiscid@esdrm.ipsantarem.pt

439

### QUALITY OF LIFE OF WOMEN WITH URINARY INCONTINENCE, USING ICIQ-SF

Sara Karbage<sup>1,a</sup>, Zélia Santos<sup>1,b</sup>, Raimunda Silva<sup>1,c</sup>, Rithianne Frota<sup>1,d</sup>, Leonardo Bezerra<sup>1,e</sup>, Lia Maristela Jacob<sup>1,f</sup>, Caio Borges<sup>1,g</sup>

<sup>1</sup>Universidade de Fortaleza. Fortaleza, CE, Brasil

<sup>II</sup>Hospital Geral César Cals. Fortaleza, CE, Brasil

<sup>III</sup>Universidade Federal do Ceará. Fortaleza, CE, Brasil

**Introduction:** Urinary incontinence (UI) is more common in women and affects negatively their quality of life (QoL). Studies detect differences in QoL according to the type of UI, indicating that women with mixed urinary incontinence (MUI) have poorer QoL than those with stress urinary incontinence (SUI). Specific QoL questionnaires can be used to assess the main differences between groups.

**Objective:** To assess QoL of Brazilian women with UI, according to its type.

**Methods:** Transversal study between July 2011 to June 2013. All women underwent gynecological examination and signed an informed consent form. International Consultation on Incontinence Questionnaire - Short Form (ICIQ-SF) was applied. Questionnaire answers were compared according to the type of UI. Kruskal-Wallis and Mann-Whitney were used for statistical tests, and the level of significance was set at <0.05. The Statistical Package Social Science (SPSS) was used for all calculations.

**Results:** A total of 240 women were evaluated in this period, and 217 (90%) had complaints of UI. According to their symptoms, they were classified as SUI (34%), MUI (60%) or urge-incontinence (6%). Groups were similar according to age, parity and weigh of newborn. Three of the four questions were statically different between groups: frequency of urine loss (p=0.001), QoL impact (p=0.001) and the total score (p=0.002). Only the amount of urine loss was similar (p=0.324).

**Conclusions:** According to ICIQ-SF, women with MUI have poorer QoL compared with those with SUI or urge-incontinence isolated. It's a valuable and easy instrument to perform in women from our region.

**Descriptors:** quality of life, urinary incontinence, women.

<sup>a</sup>sara\_arcanjo@hotmail.com

<sup>b</sup>zeliasantos@unifor.br

<sup>c</sup>rmsilva@unifor.br

<sup>d</sup>rithiannefrota01@hotmail.com

<sup>e</sup>leosobreira@uol.com.br

<sup>f</sup>lia\_maristela@hotmail.com

<sup>g</sup>ccaiorb@hotmail.com

440

### PERCEIVED SOCIAL SUPPORT IN ADULT CELIAC PERSONS

Catarina Lobão<sup>1,a</sup>, Rui Gonçalves<sup>1,b</sup>, Ricardo Baltazar<sup>1,c</sup>, Ana Raquel Lobão<sup>1,III,d</sup>

<sup>I</sup>Escola Superior de Saúde de Leiria. Leiria, Portugal

<sup>II</sup>Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal

<sup>III</sup>Bluepharma. Coimbra, Portugal

**Introduction:** The social support is one of the functions of the group of people with whom the individual maintains contact (social network) and that may offer help. This support can be offered through i) informal networks (family, friends and neighbors) and ii) formal networks (groups/social organizations). Celiac disease is defined as an autoimmune and chronic disease, which forces subjects to develop adaptive measures in order to live in a healthy way.

**Objective:** We intended to characterize the perceived social support and its influence on the well-being of adult celiac person.

**Methods:** We use the Portuguese version of the Medical Outcomes Study Social Support Survey that evaluates the structural social support (social network) and functional social support (in four different dimensions) perceived by the subject.

**Results:** This national study with 231 adult celiac persons shows that they had a "good social support" perception which translates into better adherence to therapy, improving their health condition.

**Conclusions:** The results allow us to conclude that social support plays an important role in adaptation to chronic illness, to prevent adverse psychological effects on behavioral responses associated with poorer adherence to treatment, decreased social isolation, and decreased morbidity.

**Descriptors:** Social support, Celiac disease, Well-being

<sup>a</sup>catarina.lobao@ipleiria.pt

<sup>b</sup>rgoncalves@esenfc.pt

<sup>c</sup>ricardo.monteiro@ipleiria.pt

<sup>d</sup>araquelobao@gmail.com

441

**NURSING CLINICAL SUPERVISION: SUPPORT STRATEGIES**Regina M. F Pires<sup>1,a</sup>, Filipe M. S Pereira<sup>2,b</sup><sup>1</sup>Universidade Católica Portuguesa. Porto, Portugal<sup>2</sup>Escola Superior de Enfermagem do Porto. Porto, Portugal

**Introduction:** Clinical supervision (CS) is a formal process of professional support and facilitator of the skills development, with effects on the quality of health care, basing on three fundamental functions: formative, normative and support. The support or restorative function to support supervised in order to reduce stress and maintain appropriate emotions, providing support to overcome significant situations.

**Objective:** The study aims to contribute to the design of a program of SC in the context of primary health care by identifying a set of support strategies that integrate it.

**Methods:** A qualitative, exploratory study. Data were collected through semi-structured interviews, attended eight nurses from primary health care between May and June 2011. Data analysis was based on the grounded theory method, using the Nvivo7 program.

**Results:** The participants felt that the program should include strategies of CS career guidance in complex clinical situations; individual supervision sessions for discussion of sensitive topics with supervisor avoiding exposure in the group; group sessions to share opinions, feelings and emotions; the working group as a support element; positive feedback and emotional support from the supervisor; learning about coping strategies; monitoring strategies at distance.

**Conclusions:** The study is a contribution to the design of a program of CS in the context of primary health care by identifying a set of strategies for promoting support. We consider that strategies of support are very important in CS, they contribute to the promotion of nurse's quality of life.

**Descriptors:** Clinical Supervision; Nursing; Quality of Life.

442

**PAIN AND QUALITY OF LIFE IN PATIENTS WITH DIABETIC FOOT ULCER: PRELIMINARY RESULTS**Susana Pedras<sup>1,a</sup>, M. Graça Pereira<sup>1,b</sup>, Rui Carvalho<sup>1,c</sup><sup>1</sup>Escola de Psicologia. Universidade do Minho. Braga, Portugal<sup>2</sup>Centro Hospitalar do Porto. Serviço de Endocrinologia. Consulta Multidisciplinar do Pé Diabético. Porto, Portugal

**Introduction:** One of the most serious complications of diabetes is Diabetic Foot Ulcer (DFU) that affects about 15% of patients with diabetes throughout life and is a major cause of non traumatic lower limb amputation.

**Objective:** Analyse the sociodemographic and clinical characteristics (profile) of a sample of type 2 diabetes patients with DFU including the relationship between pain, dependence and quality of life.

**Methods:** Fifty patients with DFU participated in the study. The study was conducted in five central hospitals, in the North of Portugal. The instruments used were: SF36 (Short Form Health Survey; Ferreira, 2000) that assess quality of life; IB (Barthel Index; Sequeira, 2007) that assess functional dependence in daily living activities; and the BPI (Brief Pain Inventory; Azevedo et al, 2007) that evaluates the intensity and interference of pain.

**Results:** Older patients showed more dependence, more impaired quality of life particularly in the physical function and performance dimensions as well as a greater interference of pain in their daily activities. Intensity of pain was negatively associated with general health, mental health, and vitality, all dimensions of quality of life. Interference of pain, in daily activities, was positively associated with functional dependence and negatively associated with physical function, physical performance, general health, and vitality. Finally, longer duration of foot ulcers were associated with less vitality.

**Conclusions:** Interventions to promote quality of life in DFU patients need to focus on pain and functional dependence, particularly in older patients.

**Descriptors:** Type 2 Diabetes, Diabetic Foot Ulcer, Pain, Dependence, Quality of Life.

<sup>a</sup> regina@esenf.pt<sup>b</sup> filipereira@esenf.pt<sup>a</sup> susanapedras@gmail.com<sup>b</sup> gracep@psi.uminho.pt<sup>c</sup> rui.morais.carvalho@gmail.com

443

### EFFECTS OF PHYSICAL ACTIVITY ON MENTAL HEALTH IN PATIENTS WITH DEPRESSION

João Moutão<sup>1,a</sup>, Diana Cordeiro<sup>1,b</sup>, Nuno Borda D'Água<sup>1,c</sup>, Diogo Monteiro<sup>1,d</sup>, Anabela Vitorino<sup>1,e</sup>, Susana Alves<sup>1,f</sup>, Luís Cid<sup>1,g</sup>

<sup>1</sup>Escola de ciências do Desporto de Rio Maior. Instituto Politécnico de Santarém. Centro de Investigação em Desporto, Saúde e Desenvolvimento Humano. Santarem, Portugal

<sup>2</sup>Escola de ciências do Desporto de Rio Maior. Instituto Politécnico de Santarém. Rio Maior, Portugal

<sup>3</sup>Centro Hospitalar do Oeste. Serviço de psiquiatria e saúde Mental. Caldas da Rainha, Portugal

<sup>4</sup>Escola de ciências do Desporto de Rio Maior. Instituto Politécnico de Santarém. Centro de investigação em qualidade de vida

**Introduction:** Physical activity has been shown to be positively associated with mental health and well-being.

**Objective:** The present study simultaneously examined two hypotheses using structural equation modelling (SEM): 1) the practice of physical activity alleviates dysphoric mood reducing overall symptoms of depression; 2) reduction of depression state creates a positive and direct effect on mental health by improving satisfaction with life and self-esteem.

**Methods:** Fifty female patients diagnosed with depression, all women, with an average age of 50 year old (SD =11) completed four measures: International Physical Activity Questionnaire, Beck Depression Inventory, Satisfaction with Life Scale and the Rosenberg's Self-esteem Scale. A structural equation modelling procedure was used to examine the model of best fit for physical activity, depression, self-esteem and life satisfaction variables.

**Results:** Results showed that depression mediate the relationship between physical activity and general mental health (self-esteem and life satisfaction).

**Conclusions:** This study demonstrated the mechanism through which physical activity influences female patient's mental health. Implications for improving mental health in patients diagnosed with depression are discussed.

**Descriptors:** structural equation modelling; depression; physical activity; self-esteem; and life satisfaction.

<sup>a</sup> jmoutao@esdrm.ipsantarem.pt

<sup>b</sup> dianafrcd@hotmail.com

<sup>c</sup> nunobd@hotmail.com

<sup>d</sup> dt\_desporto6@hotmail.com

<sup>e</sup> anabelav@esdrm.ipsantarem.pt

<sup>f</sup> salves@esdrm.ipsantarem.pt

<sup>g</sup> luiscid@esdrm.ipsantarem.pt

444

### AGEING OF PEOPLE WITH DISABILITY: IDENTIFICATION OF RISK FACTORS RELATED TO FALLS

Joanito Niquini Rosa Júnior<sup>1,a</sup>, Letícia Rocha Dutra<sup>1,b</sup>, Mariana Xavier de Sousa<sup>1,c</sup>, Izabela Rocha Dutra Silva<sup>1,d</sup>, Mariana Simões<sup>1,e</sup>, Antônio Moacir de Jesus Lima<sup>1,f</sup>

<sup>1</sup>Universidade Federal dos Vales do Jequitinhonha e Mucuri. Teófilo Otoni, MG, Brasil

<sup>2</sup>Programa de pós-graduação em enfermagem. Universidade Federal dos Vales do Jequitinhonha e Mucuri. Teófilo Otoni, MG, Brasil

<sup>3</sup>Universidade Federal dos Vales do Jequitinhonha e Mucuri. Teófilo Otoni, MG, Brasil

**Introduction:** The aging of the world population and the factors related to other people dependency refer to challenges in the context of public health, demanding greater economic and social requirements. In this scenario, the falls are a major causal factor for the dependence of the elderly, since they cause a high rate of disability and mortality. Parallel to this thought, understanding the aging process in individuals with disabilities highlights issues that go beyond the timeline and needs special attention.

**Objective:** The study aims to evaluate the risk factors for falls in people with intellectual disability in the aging process.

**Methods:** It is a descriptive study conducted with all students of the Association of Parents and Friends of Exceptional Children, APAE, in a municipality in Jequitinhonha Valley, MG, aged over 50, not in wheelchair, with intellectual disabilities, which were submitted to Scale Berg, an assessment based on quantitative description of the ability of functional balance.

**Results:** Through the study it can be seen that all students have some imbalance in the dynamic weight shift while standing without support, but none had a total score of Berg indicative threshold for risk of falls.

**Conclusions:** Aging as a dynamic and progressive process can lead to loss of the individual's ability to adapt to the environment and consequently interfere with their social participation. Thus, previously identified risk factors and to propose initiatives for health promotion and prevention are ways of achieving healthy aging and independence.

**Descriptors:** aging; quality of life; disabled people; prevention; risk of falls.

<sup>a</sup> jrniqini@yahoo.com.br

<sup>b</sup> leticiadutrato@gmail.com

<sup>c</sup> mariana.x.souza@hotmail.com

<sup>d</sup> izabelardutra@gmail.com

<sup>e</sup> mari\_curveo@yahoo.com.br

<sup>f</sup> antonijesus@yahoo.com.br



445

### THE GRIEVING PROCESS: YOUNG ADULTS STRATEGIES AFTER THE LOSS OF A PARENT

Ana Catarina Leite<sup>1,a</sup>, Dayse Neri de Souza<sup>11,b</sup>, José Eduardo Rebelo<sup>11,c</sup>

<sup>1</sup>Universidade Católica Portuguesa. Porto, Portugal

<sup>11</sup>Universidade de Aveiro. Aveiro, Portugal

**Introduction:** Losing someone you love entails suffering, grieve and is an adaptation process, irrespective of the age group one is in. To face the death of one of the parents during adolescence is certainly aggravating, because the teen will experience feelings of loss, frustration and helplessness. One way to integrate the loss into our lives is keeping memories of past moments with that person. They help revisit time and space. The photographs, objects and special places, are considered a way of maintaining the continuity of the relationship with the deceased. Learning how to create a new relationship with the person who physically left of our lives, it's turning their presence in sweet memories that can comfort.

**Objective:** This paper is within the scope of the Dissertation carried on for the Master in Palliative Care. Its goal is to reveal the strategies of the grieving process in young adult women, which have lost a parent by a disease likely to benefit from palliative care.

**Methods:** There were conducted semi-structured interviews to 5 young adult women, 30 minutes each, and the content analysis was done with webQDA 0.9. software.

**Results:** The results show that objects and memories were the main means used by young people to reframe the loss.

**Conclusions:** The objects and memories are still part of the daily life of the young women interviewed and help them deal with the suffering of the loss and to be able to have a different posture facing it.

**Descriptors:** young adults; parent loss; adolescence; grieve; strategies.

446

### PASSION, MOTIVATION AND SUBJECTIVE WELL-BEING IN LEISURE SURF

Luís Cid<sup>111,a</sup>, Carlos Sousa<sup>1b</sup>, Joana Ferreira<sup>1c</sup>, Anabela Vitorino<sup>1d</sup>, Diogo Monteiro<sup>1e</sup>, João Moutão<sup>111,f</sup>

<sup>1</sup>Escola de ciências do desporto de Rio Maior. Rio Maior, Portugal

<sup>11</sup>Centro de investigação em desporto, saúde e desenvolvimento humano. Universidade da Beira Interior. Covilhã. Portugal

**Introduction:** According to Dualistic Model of Passion (DMP), passion can be conceptualized by a strong inclination toward an activity that individuals like (or love), in which they invest time and energy. Another important characteristic of passion is the internalization of activity into one's identity (self), being this process is also a central feature of Self-Determination Theory (SDT), in the differentiation between the two types of behavior regulation: controlled or autonomous motivation.

**Objective:** Analyze the relationship between passion, behaviour regulation, and subjective well-being in leisure surfers.

**Methods:** Participated in this study 183 leisure surfers, of both genders (33 female, 150 male), aged between 18 and 47 years old ( $M=28.3$ ,  $SD=7.8$ ), and surfing experience range between 1 and 30 years ( $M=7.61$ ,  $SD=6.69$ ), that completed the Portuguese versions of Passion Scale (PS), Behavioral Regulation in Sport Questionnaire (BRSQ), Satisfaction with Life Scale (SWLS), and Subjective Happiness Scale (SHS). All data was collected by researchers in Peniche and Baleal beach.

**Results:** The main results showed a significant positive correlation between harmonious passion and autonomous motivation ( $r=.607$ ,  $p=.000$ ) and with subjective well-being ( $r=.261$ ,  $p=.000$  and  $r=.218$ ,  $p=.003$ , for satisfaction with life and subjective happiness, respectively). The results also showed a significant positive correlation between autonomous motivation and satisfaction with life ( $r=.246$ ,  $p=.001$ ) and subjective happiness ( $r=.147$ ,  $p=.043$ ).  
**Conclusions:** These results show us that leisure surfers can expect achieve high levels of subjective well-being if they develop an harmonious passion for the activity and regulate there's motivation for autonomous forms (e.g., for fun).

**Descriptors:** passion; motivation; well-being; sport; surf.

<sup>a</sup> anacatarina.leite@hotmail.com

<sup>b</sup> dayneri@ua.pt

<sup>c</sup> rebelo@ua.pt

<sup>a</sup> luiscid@esdrm.ipsantarem.pt

<sup>b</sup> carlosjmsousa@hotmail.com

<sup>c</sup> ferreira\_joana87@hotmail.com

<sup>d</sup> anabelav@esdrm.ipsantarem.pt

<sup>e</sup> dt\_desporto6@hotmail.com

<sup>f</sup> jmoutao@esdrm.ipsantarem.pt

447

**BACK PAIN CHARACTERISTICS OF UNIVERSITY STUDENTS**Gustavo Desouzar<sup>II,V</sup>, Rui Matos<sup>III,III</sup>, Ernesto Filgueiras<sup>IV</sup>, Filipe Melo<sup>V</sup><sup>I</sup>Centro de Investigação em Motricidade Humana. Instituto Politecnico de Leiria. Leiria, Portugal<sup>II</sup>Centro de Investigação em qualidade de vida. Instituto Politécnico de Leiria. Instituto Politécnico de Santarém. Portugal<sup>III</sup>Escola superior de educação e ciências sociais. Instituto Politecnico de Leiria. Leiria, Portugal<sup>IV</sup>LabCom. Universidade da Beira Interior. Covilha, Portugal<sup>V</sup>Laboratorio do comportamento Humano. Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal

**Introduction:** The low level of regular physical activity in young people, mainly university students, became a problem of public health (Matsudo et al, 2002; Ruiz et al, 2005). The development of disease and reduced quality of life are associated with higher costs for public health in general (Pardini et al, 2001).

**Objective:** This paper presents the study of the relationship between back pain level (according to Visual Analogue Scale [VAS]) and the practice of regular physical activity.

**Methods:** Belonged in this study 720 university students related with healthcare domain (physiotherapy, occupational therapy, speech therapy, nursing, dietary therapy and, sport and wellness), aged between 17 and 30 years (mean 20,27+2,314).

**Results:** Back pain complaints was presented for 76.9% of the inquired students (N=554), VAS mean values of maximum pain were 3.42+2.426, the highest average was in the lumbar region with 4.58+1.753; participants who had the highest average pain (4.29+2.495) belong to speech therapy course, followed by course of physiotherapy with 3.68+2.261, occupational therapy with 3.63+2.419, dietary therapy with 3.29+2.453 and nursing with 3.17+1.981. Conversely, the lowest average pain was presented in the course of sports and wellness, 2.45+2.680. In relation to average weekly physical practice, the course sports and wellness had more than doubled (4.79+3.241) the average of the remaining courses (1.97+3.023).

**Conclusions:** These results showed significant negative correlation according to Spearman's test (p=.000) between physical activity and back pain, which can be a good indicator towards quality of life.

**Descriptors:** back pain; physical activity; university students; Visual Analogue Scale (VAS).

<sup>a</sup> rui.matos@ipleiria.pt<sup>b</sup> ernestovf@gmail.com<sup>c</sup> fmelo@fmh.ulisboa.pt

448

**CONCEPTION OF PERSONS WITH 65 YEARS OF AGE OR OLDER TO BE OLD OR AGING**Laércio Deleon Melo<sup>I,a</sup>, Cristina Arreguy-Sena<sup>II,b</sup>, Paulo Ferreira Pinto<sup>III,c</sup>, Luciene Carnevale de Souza<sup>I,d</sup>, Luciene Muniz Braga<sup>IV,e</sup><sup>I</sup>RN and Studying Masters in Master's Program in Nursing FACENF-UJFF, Juiz de Fora, MG, Brasil<sup>II</sup>RN, PhD and Associate Professor of Nursing School of the Federal University of Juiz de Fora (FACENF-UJFF), Juiz de Fora, MG, Brasil<sup>III</sup>Physical Educator, PhD and Professor of College of Physical Education University of Juiz de Fora (FACENF-UJFF), Juiz de Fora, MG, Brasil<sup>IV</sup>RN, MS and Pursuing Ph.D. in the Pursuing Ph.D. at the University of Lisbon, Portugal and Professor of the Federal University of Viçosa, Viçosa, MG, Brasil

**Introduction:** In the period from 1950 to 2025 estimates indicate increased by fifteen times the number of elderly Brazilians, which equates to 20 million, people aged ≥60 years. The irreversibility of an aging population and the improvement of living conditions are able to modify the conception design to be aged or elderly among persons aged ≥ 65 years.

**Objective:** This study aimed to understand the concept developed by people who have aged ≥65 years before modifies the terms "being old" or "being aged".

**Methods:** Case study conducted with people living in an region covered by primary care services health of the Brazilian. Data collected at home by recorded interviews (average duration 30 minutes) held in October to December/2013 addressing the characterization of participants and guiding questions on the subject. Ethical and legal requirements have been met research with human subjects.

**Results:** Teem people participated in the research with 65-96 years. The concept of being old does not match established by Brazilian legislation, being the person aged 60 considered young. The explanations used to be aged were based theories of aging and social reasons (disengagement, activity and socio- emotional selectivity).

**Conclusions:** The results showed that while having autonomy and social participation, respondents with lower income conceived as the emergence of limitation imposed by the environment. This research served as a pilot study for master's project, guiding readjustment of print and approach to capture the intervening variables on the process of aging.

**Descriptors:** Aging; Aged; Health of the Elderly; Public Health; Life Style.

<sup>a</sup> laerciodl28@hotmail.com<sup>b</sup> cristina.arreguy@ufjf.edu.br<sup>c</sup> paulo.ferpinto@gmail.com<sup>d</sup> luenf.ufjf@yahoo.com.br<sup>e</sup> lucienemunizbraga@yahoo.com.br

449

### PSYCHOLOGICAL WELLBEING, SATISFACTION WITH LIFE AND OPTIMISM IN SPORTS MANAGERS

Luís Gonzaga<sup>a</sup>, Sónia Morgado<sup>b</sup>, Joana Matias<sup>c</sup>

*Escola Superior de Desporto de Rio Maior. Instituto Politécnico de Santarém. Portugal*

**Introduction:** In the discourse of its managers, the competitiveness of national sport is increasingly relative, or captive, to the constraints of competitiveness of the respective national economy with an obvious impact on productivity of sports associations and clubs, reflecting a market of very unequal competition. Now, if in the modern conception of happiness, the material aspect plays a major character, the positive subjective experience, usually linked to performance and sports productivity, should result therefore from immaterial and intangible capital consisting in human potential and virtues that interests to study.

**Objective:** The purpose of the present study is to measure sports managers' psychological well-being and their satisfaction with life and explore the relationship of these dimensions with their current optimism.

**Methods:** Data were collected from a sample of 62 managers of various sports aged between 18 and 50 years (M=24,77; SD=6,53). A 18-item version of Ryff's (1989) PWB scales assessed six dimensions: autonomy; environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. We also used the SWLS - Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) and the Scale for Optimism (Barros, 1998).

**Results:** indicated moderate correlations between the level of satisfaction with life and all dimensions of PWB but autonomy and environmental mastery. The same relations were found between these psychological two major variables and sports managers' optimism.

**Conclusions:** Our study adds comprehensive evidence that perceived unpredictable environments and the feeling of loss of autonomy unsettle life satisfaction and optimism in sports management.

**Descriptors:** Psychological Wellbeing, Satisfaction with Life, Optimism, Sports Managers.

<sup>a</sup>lgonzaga@esdrm.ipsantarem.pt

<sup>b</sup>soniamorgado@esdrm.ipsantarem.pt

<sup>c</sup>joanamatias3@gmail.com

450

### (EX)USERS OF INJECTABLE DRUGS SEROPOSITIVES FOR HIV AND QUALITY OF LIFE

Cinthia Medina Queiroz<sup>1,a</sup>, Cristina Arreguy-Sena<sup>1,b</sup>, Paula Krempser<sup>11,c</sup>, Luciene Muniz Braga<sup>11,d</sup>, Mariléia Leone<sup>11,e</sup>, Luciene Carnevale de Souza<sup>11,f</sup>

<sup>1</sup>Escola de Enfermagem. Universidade Federal de Juiz de Fora. Juiz de Fora, MG, Brasil

<sup>11</sup>Escola de Enfermagem. Universidade Federal de Juiz de Fora. Juiz de Fora, MG, Brasil

<sup>111</sup>Programa de pós-graduação. Universidade Federal Juiz de Fora. MG, Brasil

<sup>1111</sup>Programa de pós-graduação. Universidade de Lisboa. Lisboa, Portugal

**Introduction:** AIDS is a problem of worldwide repercussions impacts on matters of health and quality of life, and its prevalence among Brazilian people who use injectable drugs is around 5.9%.

**Objective:** This study aimed to analyze the social representations that people with HIV/AIDS and (former) injectable drug users on self-puncture vessel initially performed in teenager/adult.

**Methods:** Research outlined in the Theory of procedural Social Representations. Performed in a specialized service center for people with AIDS in Brazil.

**Results:** Participated (ex) users of injectable drug with diagnosis for AIDS. Used three techniques: free call-up (EVOC program); technique of "cutting and pasting of comic magazine" with the recording of speech (Nvivo program category by similarity) and questionnaire with closed questions. Theoretical saturation was used as a criterion for sample definition. Attended ethical requirements. Twenty participants. The pictures translated rich communication symbols that express the insertion of needle, the pleasure arising from the drugs and impotence towards dependence. Captured valorative dimensions (regret, depression, fear and sadness), the irreversibility of seropositivity (indifference) and the effects of the drug (joy and disease), facts corroborated with evoked words. The prioritization of pleasure, the need of new vein puncture generated the overlook with auto safety.

**Conclusions:** It was concluded that the reflections of the participants demonstrated limitation in lifestyle, the impact of the law of cause/effect represented by the drug/sero-conversion for HIV and pauperization of interpersonal relationships as a result of the treatment that limit the quality of life.

**Descriptors:** Nursing; HIV Infections; Illicit Drugs; Intravenous infusions; Self-medication.

<sup>a</sup>cintinelamedina@hotmail.com

<sup>b</sup>cristina.arreguy@ufjf.edu.br

<sup>c</sup>paulakrempser.enf@gmail.com

<sup>d</sup>lucienemunizbraga@yahoo.com.br

<sup>e</sup>marileon@terra.com

<sup>f</sup>lucienecarnevale@hotmail.com

451

### PARTICIPATION OF THE FAMILY CAREGIVER IN ADHERENCE OF HYPERTENSIVE PERSON TO TREATMENT - ANALYSIS OF THE IMPACT OF HEALTH PROMOTION

Laurineide F. Cavalcante<sup>1,a</sup>, Maria Tereza Borges<sup>1,b</sup>, Zélia Maria Santos<sup>1,c</sup>, Rachel Borges<sup>1,d</sup>, Caio Borges<sup>1,e</sup>, Antonia Lidiany Soares<sup>1,f</sup>, Waniska Natália Aguiar<sup>1,g</sup>

<sup>1</sup>Universidade de Fortaleza. Fortaleza, Ceará, Brasil

<sup>11</sup>Universidade Federal do Ceará. Fortaleza, Ceará, Brasil

**Introduction:** The systemic arterial hypertension (SAH) is a disease of increasing prevalence in the world and a major risk factor in the development of cardiovascular diseases. It's therefore a major public health problem worldwide.

**Objective:** Analyze the impact of participation in the treatment of hypertensive patients in health promotion for family caregivers.

**Methods:** Descriptive study with a quantitative approach, performed on Primary Health Care Unit, located in Fortaleza, Ceará, Brazil. The sample consisted of 354 family caregivers. Data were collected in four months by structured interview.

**Results:** Most family caregivers were aged between 50 and 69 years (55.9%), female (72.6%), brown (52.5%), practiced Catholicism (81.6%), were retired (55.6%), came from Fortaleza, CE (63.2%), were married (59.3%), had its own property (87.0%), and informed monthly income 1-2 current minimum wages. The causative factors impact on health promotion cited by family caregivers, stood out: awareness of the risk of hypertension (33.0%), prevention of risk factors (32.2%), promote healthy eating in the family (27.9%), periodic measurement of blood pressure (24.5%), regular physical exercise (22.0%), abstaining from smoking and alcoholism (20.6%).

**Conclusions:** Participation of family caregivers fosters health promotion thereof, as the family caregiver monitoring hypertensive patients to treatment, each time he learns more about the behaviors of control of hypertension, which are mostly preventive risk factors for hypertension in family caregiver.

**Descriptors:** Family caregivers. Arterial hypertension. Adherence to treatment.

<sup>a</sup> lauridiniz@yahoo.com.br

<sup>b</sup> mariatborges@uol.com.br

<sup>c</sup> zeliasantos@unifor.br

<sup>d</sup> rachel\_rb@hotmail.com

<sup>e</sup> caaiorb@Hotmail.com

<sup>f</sup> lidiane\_01@hotmail.com

<sup>g</sup> lcavalcante2@fanor.edu.br

452

### HOST: ORAL HEALTH CARE IN A PUBLIC HOSPITAL IN

Daylis Fifth Pereira<sup>a</sup>, Daian Cross Days<sup>b</sup>, Ellen Hilda Souza Alcântara Oliveira<sup>c</sup>, Evilin Feitosa Sources<sup>d</sup>, Joseane Gomes da Silva<sup>e</sup>, Nathália Santana<sup>f</sup>, Santana Costa, Taline Kings de Jesus<sup>g</sup>

Universidade Estadual de Feira de Santana. Feira de Santana, BA, Brasil

**Introduction:** This experience report deals with the action of Permanent Education in Oral Health, held at the General Hospital Emergency Clériston Andrade in Feira de Santana, Bahia, Brazil (HGCA), the Education Program staff for Work and Health (PET) Emergency Department/UEFS held in December 2013.

**Objective:** Educate the HGCA emergency patients on the practice of proper oral hygiene, linking the theoretical to the practical knowledge.

**Methods:** This exploratory study interventionist. Used as instrument for data collection visits in locus and patient's medical history. The enrolled population were 42 male patients admitted to the Emergency Room Male (PAM), aged between 18-65. The sample comprised a group that made use of prosthesis and/or natural dentition.

**Results:** Hospital dental care aims of oral abnormalities that require procedures for low, medium or high complexity, aiming to improve the health and quality of life of hospitalized. In the lawsuit it was found that there was a poor oral hygiene of patients, which may adversely corroborate your predictions. We visited beds developed the following actions: the brushing technique, indication and flossing and fluoride wire teaching, as well as pointed out the importance of hygiene in disease prevention.

**Conclusions:** Guidelines for the reception were directed to the motor and related to the understanding of patients and family capacity, about the educational activity. This stage of the project will result in the restructuring of the Oral Hygiene Protocol, culminating in the installation of an outpatient dental clinic.

**Descriptors:** Home. Oral health. Continuing Education.

<sup>a</sup> daylizquinto@hotmail.com

<sup>b</sup> daiandias@gmail.com

<sup>c</sup> negraellen@yahoo.com.br

<sup>d</sup> evilinfeitosa@hotmail.com

<sup>e</sup> joseanegomes-@hotmail.com

<sup>f</sup> nathapsi@gmail.com

<sup>g</sup> ketily@yahoo.com.br

453

### THE FAMILY CAREGIVER'S KNOWLEDGE ABOUT THE TREATMENT OF HYPERTENSIVE PERSONAL: ANALYSIS FOCUSING ON HEALTH EDUCATION

Paula Dayanna Sousa Santos<sup>a</sup>, Laurineide de Fátima Diniz Cavalcante<sup>b</sup>, Fátima Luna Pinheiro Landim<sup>c</sup>, Rithianne Frota Carneiro<sup>d</sup>, Maria Tereza Sá Leitão Ramos Borges<sup>e</sup>, Zélia Maria de Sousa Araújo Santos<sup>f</sup>, Thaiane Vieira da Ponte<sup>g</sup>

*Universidade de Fortaleza. Fortaleza, CE, Brasil*

**Introduction:** Hypertension is a disease of increasing prevalence in the world, major risk factor for cardiovascular disease. The family has significant relevance in participation in the treatment of hypertensive person.

**Objective:** Analyze the knowledge of family caregivers about the treatment of hypertensive person with a focus on health education.

**Methods:** Descriptive study in Unit Primary Health Care in the Regional Executive Secretary VI, in Fortaleza-Cearpa-Brazil, with 354 family caregivers of hypertensive person enrolled in HIPERDIA and indicated by these users. Data were collected from June to September 2013 by interview. Organized the data in Statistic Package for Social Sciences (SPSS) program, and the analysis was based on health education. The reasons complemented the quantitative data analysis. Results. The highlights family caregivers aged between 50 and 69 years (55.9%), female (80.2%), brown (52.5%), Catholics (81.6%), retired (55.6%). Most family caregivers knew the conduct of treatment: regular use of medication (90.9%), adequate intake of salt (90.1%) and vegetable fat (61.8%). About 234 (66.1%) respondents knew the type of antihypertensive drug, however only 80 (22.5%) family members knew the daily amount of drug ingested.

**Conclusions:** The results of the study showed that family caregivers had limited knowledge about the treatment of hypertension. The lack of information of these families is a difficulty to collaborate in the treatment of hypertensive person or any other health problem, which implies the discontinuation of treatment.

**Descriptors:** family caregivers, hypertension, health education.

<sup>a</sup> pauladayane@hotmail.com

<sup>b</sup> lauridiniz@yahoo.com.br

<sup>c</sup> lunna@unifor.br

<sup>d</sup> rithianefrota01@hotmail.com

<sup>e</sup> mariatborges@uol.com.br

<sup>f</sup> zeliasantos@unifor.br

<sup>g</sup> thaianeponte@hotmail.com

454

### FROM THE DESIRE OF HAVING A CHILD TO THE DESIRED CHILD: THE DREAM COME TRUE FOR THE COUPLE

Bruno Miguel Valério<sup>a</sup>, Joana Rita Parente Branco<sup>b</sup>, Marisa Sofia da Silva Nunes<sup>c</sup>, Solange Domingues Rodrigues<sup>d</sup>, Tiago Manuel Jordão Silva<sup>e</sup>, Carolina Miguel da Graça Henriques<sup>f</sup>

*Instituto Politécnico de Leiria. Escola Superior de Saúde. Portugal*

**Introduction:** The desire of having a child is one of the human being's basic needs. Although the conception of a child is, apparently, a natural and spontaneous act, that is not the reality for some couples who struggle with infertility. From the infertility process to the fulfilment of the dream of being parents, couples experience different feelings and emotions.

**Objective:** To know the couples experience with children under one year old, in result of fertility treatments, from the infertility diagnosis period to the postpartum period.

**Methods:** This is a qualitative research of phenomenology approach. Regarding the data collection, this is a transversal and retrospective study, which used a semi-structured interview as data collection instrument, interpreted through the model proposed by Colaizzi (1978).

**Results:** The results show that due to the infertility diagnosis confirmation and through the infertility treatments, couples express feelings with negative connotation in contrast to positive feelings, having conjugal, familiar, social and professional implications. During the gestational period, several experiences arise on couples, such as preoccupation, fear and anxiety, but also happiness and personal/conjugal fulfilment. During postpartum, the experienced feelings go from anxiety and fear to happiness by finally being able to see the desired child. Regarding the experience as parents, couples reveal that having children has always been part of a life project, reporting responsibility but that fatigue arises as difficulty, being support networks essential.

**Conclusions:** This study may contribute to a better understanding of couples' experiences from the infertility diagnosis period to the postpartum period, representing a benefit for health professionals and human caring in nursing.

**Descriptors:** Infertility; Parenthood; Transition; Couple; Adjustment.

<sup>a</sup> bruno.valerio@gmail.com

<sup>b</sup> joanaritabranco@gmail.com

<sup>c</sup> marisa.sofia.14@hotmail.com

<sup>d</sup> solangerodrigues05@gmail.com

<sup>e</sup> tiago306@gmail.com

<sup>f</sup> carolina.henriques@ipleiria.pt

455

### INFORMAL CAREGIVERS OF PORTUGUESE CENTENARIAN :A FIRST GLANCE FROM THE OPORTO CENTENARIAN STUDY

Sara Alves<sup>1,a</sup>, Oscar Ribeiro<sup>1,b</sup>, Daniela Brandão<sup>1,c</sup>, Natália Duarte<sup>1,d</sup>, Lia Araújo<sup>1,e</sup>, Laetitia Teixeira<sup>1,f</sup>, Maria João Azevedo<sup>1,g</sup>, Constança Paul<sup>1,h</sup>

<sup>1</sup>Unidade de Investigação e Formação sobre Adultos e Idosos. Porto, Portugal

<sup>11</sup>Unidade de Investigação e Formação sobre Adultos e Idosos. Instituto de Serviço Social do Porto. Escola Superior de Saúde da Universidade de Aveiro. Portugal

<sup>111</sup>Escola Superior de Educação de Viseu. Unidade de Investigação e Formação sobre Adultos e Idosos. Portugal

<sup>1111</sup>Instituto de Ciências Biomédicas Abel Salazar. Unidade de Investigação e Formação sobre Adultos e Idosos. Portugal

**Introduction:** The increasing number of centenarians has enhanced the attention to this age group and to their specific care needs. Informal care represents an important support for centenarians but the available knowledge on this topic in quite scarce in the national context.

**Objective:** To provide a first overview of caregiving aspects (burden and positive aspects) in a sample of informal caregivers of centenarians.

**Methods:** A sample of 46 informal caregivers of centenarians from the Oporto Centenarian Study was considered. Information on sociodemographic aspects and on the caregiving experience (e.g. length of care, relationship with centenarian), presence of positive aspects of caregiving (from the Positive Aspects of Caring scale) and caregiver strain (from the Caregiver Strain Index-modified) were obtained.

**Results:** Informal caregivers have a mean age of 63.9 years, are mostly women (87%), married (63%) and children of the centenarian (63%). Time spent on caregiving tasks is on average 19.6 hrs/day (SD=8.22) and the length of care is around 11 years (SD=10.80). Caregiving revealed to be an experience that provided meaning to most caregivers' life but with several strains associated, namely physical strain and sleep disturbance.

**Conclusions:** This is a first and preliminary approach to informal caregivers of centenarians and further information on their specificities will be obtained and made available in the near future from the ongoing project *Centenarians' offspring: intergenerational ambivalence and demands of care*.

**Descriptors:** Informal caregivers, centenarians; Strain; Gains.

<sup>a</sup> sara.alves@unifai.eu

<sup>b</sup> oribeiro@ua.pt

<sup>c</sup> daniela.brandao@unifai.eu

<sup>d</sup> nduarte@unifai.eu

<sup>e</sup> liajaraújo@esev.ipv.pt

<sup>f</sup> lteixeira@unifai.eu

<sup>g</sup> mjoao@unifai.eu

<sup>h</sup> paul@icbas.up.pt

456

### PROFILE OF THE CERVICAL SPINE OF ACADEMIC PROFESSORS

Feliciano, C.<sup>1,a</sup>, Veríssimo, C.<sup>1,b</sup>, Santos M.<sup>1,c</sup>, Vaz, D.C.<sup>111,d</sup>, Carrão, L.<sup>1111,e</sup>

<sup>1</sup>Unidade de Investigação em Saúde. Escola Superior de Saúde de Leiria. Instituto Politécnico de Saúde. Leiria, Portugal

<sup>11</sup>Centro de química e Centro de Neurociências e Biologia Celular. Universidade de Coimbra. Coimbra, Portugal

<sup>111</sup>Departamento de desporto & Saúde. Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal

**Introduction:** Complaints arising from cervical abnormalities and neck pain are a recurrent problem among professors. The work style (desk and computer work) adopted by this group of professionals highly predisposes this population to develop neck problems.

**Objective:** This study aims to characterize the profile of the cervical region of the IPL professors.

**Methods:** Descriptive-correlational study applied to a sample professors, that responded (n=91) the NULI-20 questionnaire; among which a sub-group of 26 underwent a physical evaluation (posture, fleximetry and goniometry) and responded the NDI-questionnaire and to the Visual Analog Scale (VAS).

**Results:** The age of the participants was on average 39.7±8.1 years old. The prevalence of neck pain was found to be 71.4% (n=91) among the whole sample, whereas females showed neck pain prevalence (66.2%, p<0.05). Computer (61.5%) and desk (20.9%) work were identified as the most pain-inducing activities, presenting on average a VAS of 20.0±17.4. According to the NDI, a functional disability index of 5.2±3.6 was obtained, whereas, according to the NULI-20 a value of 1.2±0.7 was reported, being these results strongly correlated (r Spearman=0.69) to a slight level of disability.

**Conclusions:** The population understudy is submitted to considerable work risks, with females exhibiting major complains. The group has shown a certain tendency for head anteriorization and low intensity pain. Overall, the prevalence of neck pain and complains is within previously reported studies, conducted over similar populations, which makes this professional group, a special group for prophylactic interventions.

**Descriptors:** Neck; pain; professors; work style, posture.

<sup>a</sup> catia.feliciano@gmail.com

<sup>b</sup> verissimo.cclaudia@gmail.com

<sup>c</sup> ssantos.mariana@gmail.com

<sup>d</sup> daniela.vaz@ipleiria.pt

<sup>e</sup> luis.carrao@ipleiria.pt.

457

### THE BUFFERING EFFECT OF WARMTH AND SAFENESS MEMORIES AND FEELINGS AGAINST SHAME ON DEPRESSION

Marcela Matos<sup>a</sup>, José Pinto-Gouveia<sup>b</sup>, Cristiana Duarte<sup>c</sup>

*Centro de Investigação do Núcleo de Estudos e Intervenção Cognitivo-Comportamental. Universidade de Coimbra. Coimbra, Portugal*

**Introduction:** Positive and negative affiliative experiences in early life have a major impact on affect regulation and vulnerability to psychopathology. However, while shame memories have been linked to psychopathology, the protective effects of affiliative experiences on this relationship were never explored.

**Objective:** This paper examines two moderator models of early memories of warmth and safeness on the association between shame memories and depressive symptoms. A mediator model of current feelings of social safeness on these linkages is further tested.

**Methods:** Participants described an early shame experience and completed a set of self-report measures assessing the centrality and traumatic characteristics of the shame memory, early memories of warmth and safeness, current social safeness and connectedness and depressive symptoms.

**Results:** Path analyses results showed that early memories of warmth and safeness moderated the relationship between centrality of shame memory and depression, by attenuating its impact. No moderator effect was found for the relation between shame traumatic memory and depression. Furthermore, feelings of social safeness totally mediated the effect of early affiliative memories on depression, and partially mediated the effect of centrality of shame memories on depression.

**Conclusions:** Affiliative relationships may engender the source of safeness and warmth that buffers the effects of early shame experiences on negative affect. The quality of early experiences may either fuel or damage one's ability to generate warmth and feel safe with others, using them to soothe one's distress which, in turn, determines the vulnerability to depressive symptoms.

**Descriptors:** Shame memory; Positive affiliative memories; Social safeness; Depression; Path analysis; Moderator effect; Mediator effect.

458

### SELF-CARE PROFILE IN HAEMODIALISED CLIENTS

Paulo Marques (PhD)<sup>a</sup>, Ana Evaristo (MSc, RN)<sup>b</sup>

*Escola Superior de Enfermagem do Porto. Porto, Portugal*

**Introduction:** Haemodialysis is a therapeutic method of renal function substitution, necessary for the maintenance of life in people in stage five chronic renal failure. This treatment is successful in prolonging survival in people with kidney disease. The major challenge in the area of self-care of clients who undergo haemodialysis is centered on the management of the therapeutic regimen.

**Objective:** The aim of this study is to describe the self-care profile of terminal chronic renal failure patients enrolled in a regular program of haemodialysis and explores the nature of this profile's influence on the successful management of the therapeutic regimen.

**Methods:** This research took place in Portugal, using a quantitative approach through the use of an instrument which included the 'Self-Care of Home Dwelling Elderly' and an assessment of therapeutic regimen management skills; it made use of a non-probabilistic sample - 122 participants.

**Results:** The self-care profile of the clients who underwent haemodialysis is predominantly of the 'indefinite' type. However there were 45 participants whose self-care corresponded to the 'adherence to the responsible profile'.

**Conclusions:** The clients whose attitudes and behaviours were consistent with the abandoned self-care profile demonstrated fewer competencies in the area of management and knowledge of haemodialysis, and less understanding relative to the medication, diet and fluid restriction regimens. The participants with higher scores in the responsible self-care profile possessed more knowledge, took better care of their vascular access and were more effective in the management of their dietary regimen.

**Descriptors:** Nursing; Self-care; self-care profile, haemodialysis, Therapeutic regimen management.

<sup>a</sup> marcela.s.matos@gmail.com (and phone 917981854)

<sup>b</sup> jpgouveia@fpce.uc.pt

<sup>c</sup> cristianaod@gmail.com

<sup>a</sup> paulomarques@esenf.pt

<sup>b</sup> ep3692@esenf.pt

459

### IMPACT OF LIFESTYLE, QUALITY OF LIFE AND TREATMENT ADHERENCE AMONG OVERWEIGHT ADOLESCENTS

P Gaspar<sup>1,a</sup>, P Sousa<sup>1,b</sup>, H Fonseca<sup>1,III,c</sup>, F Gaspar<sup>V,d</sup>

*Unidade de investigação em Saúde. Escola Superior de Saúde de Leiria. Instituto Politécnico de Leiria. Leiria, Portugal*

*<sup>II</sup>Faculdade de Medicina. Universidade de Lisboa. Lisboa, Portugal*

*<sup>III</sup>Clinica de Obesidade pediátrica. Departamento de pediatria. Hospital de Santa Maria. Lisboa, Portugal*

*<sup>IV</sup>Escola Superior de enfermagem de Lisboa. Lisboa, Portugal*

**Introduction:** Overweight is an extra burden for the adolescent development and triggers severe physical and psychosocial problems. Adherence to behavior change and to a healthier lifestyle is crucial for effective weight control management.

**Objective:** This study aims to analyze the reciprocal influence of BMI z-score, lifestyle, treatment adherence, and obesity-related quality of life, and to identify their main predictors among overweight adolescents.

**Methods:** The sample consists of 94 adolescents who are currently attending a Pediatric Obesity Clinic, aged 12-18 years, average age 14.17 years (SD=1.51). Obesity-related quality of life was assessed with the “Impact of Weight on Quality of Life”, treatment adherence with the “Adherence to Weight Control Questionnaire” and health-promoting lifestyle with the “Adolescent Lifestyle Profile”. Statistical analysis was performed using nonparametric tests.

**Results:** There was no significant relationship either between BMI z-score and lifestyle or BMI z-score and treatment adherence. BMI z-score was negatively associated with the obesity-related quality of life. Obesity-related quality of life was further correlated to some dimensions of health-promoting lifestyle and adherence to weight control. Adherence to weight control was positively influenced by various lifestyle domains. A broad array of moderators was identified for each of these constructs.

**Conclusions:** Findings suggest the reciprocal influence between lifestyle, adherence to weight control and quality of life among overweight adolescents. Intervention programs should be designed not only tailoring the individual adolescent health needs but also taking into account the moderators that have been identified.

**Descriptors:** Overweight; Quality of life; Adolescents; Treatment adherence; Lifestyle.

<sup>a</sup> pedro.gaspar@ipleiria.pt

<sup>b</sup> pedro.sousa@ipleiria.pt

<sup>c</sup> helenaregalofonseca@gmail.com

<sup>d</sup> mfgaspar@esel.pt

460

### HEALTH-PROMOTING LIFESTYLE PROFILE IN PORTUGUESE ACADEMIC COMMUNITY

Pedro Sousa<sup>a</sup>, Pedro Gaspar<sup>b</sup>, Maria Dos Anjos Dixe<sup>c</sup>, Sara S. Dias<sup>d</sup>

*Unidade de investigação em Saúde. Escola Superior de Saúde de Leiria. Instituto Politécnico de Leiria. Leiria, Portugal*

**Introduction:** There are many factors that influence health, and there is no doubt that some have to do with personal behaviours and lifestyle. Nowadays it is important to understand the main determinants of lifestyles and the way they vary among individuals, to make appropriate use of their resources and promote a healthy lifestyle.

**Methods:** In this cross-sectional study it was used the Portuguese version of the Health Promoting Lifestyle Profile II questionnaire to investigate academic community's lifestyles in a sample of 889 individuals. T-test and One-way ANOVA (with post hoc tests) were used to compare the HPLP-II scores according gender, incomes, academic community status, living with family and health surveillance. Multiple regression analysis was used to explain the effects of the different covariates on the dependent variables.

**Results:** The sample had an overall HPLP-II mean score of 2.62 (SD=0.39), with the highest mean score being for nutrition (3.02±0.49) and the lowest for health responsibility (2.04±0.64). The results show that: female reported better overall lifestyle, health responsibility, interpersonal relations, and nutrition; males reported better physical activity. Participants with low incomes reported worse physical activity and interpersonal relations. Students reported better stress management. The regression analysis shows that different covariates explain the dependent variables.

**Conclusions:** These findings emphasize the multifactorial character of lifestyles and will enable healthcare providers and health promoters to develop effective interventions to assist in improving health lifestyles in the academic community and will help in devising suitable intervention programs.

**Descriptors:** Health Promoting; Lifestyle; academic community; Determinants; health behaviors.

<sup>a</sup> pmlsousa@gmail.com

<sup>b</sup> pedrgaspar@gmail.com

<sup>c</sup> manjos.dixe@gmail.com

<sup>d</sup> sara.dias@ipleiria.pt



461

### DO THOUGHT SUPPRESSION TENDENCIES STRENGTHEN THE LINK BETWEEN SOCIAL RANK AND DEPRESSIVE SYMPTOMS?

Cláudia Ferreira<sup>a</sup>, Inês A. Trindade<sup>b</sup>, Lara Palmeira<sup>c</sup>

*Centro de Investigação do Núcleo de Estudos e Intervenção Cognitivo Comportamental. Faculdade de Psicologia e Ciências da Educação. Universidade de Coimbra. Coimbra, Portugal*

**Introduction:** Thought suppression is an experiential avoidance process defined as the effort to control unwanted inner experiences (i.e., to eliminate or reduce their intensity and frequency). However, it leads to paradoxical consequences, increasing the rate and strength of the unwanted thoughts. Even though thought suppression has been linked to the etiology and maintenance of distinct psychopathology conditions (e.g., depression, obsessive-compulsive disorder), its role in the relationship between unpleasant social rank comparisons and depressive symptomatology is yet to be clearly understood.

**Objective:** The present research aims to explore the moderation effect of thought suppression on the relationship between perceptions of social rank and the experience of depressive symptoms.

**Methods:** The study's sample was composed by 450 students, from both genders, with a mean age of 17.57 years-old.

**Results:** Correlational statistics revealed that thought suppression (WBSI) is linked to psychological inflexibility (AAQ-II), unfavourable social comparisons (SCRS) and psychopathological symptoms (DASS-21). A path analysis showed that thought suppression significantly moderates the impact of SCRS on the severity of depressive symptoms and explains 26.4% of the variance of this symptomatology. The graphic representation of the model reveals that for the same level of unfavourable social comparisons, those participants who show higher tendencies to control unpleasant thoughts tend to present more severe depressive symptomatology, when compared to those with lower levels of thought suppression.

**Conclusions:** Our data support the pervasive effect of this strategy (that aims at controlling unpleasant inner experiences) and highlight its paradoxical effect on depressive symptoms, which underlies the development and maintenance of psychopathological symptomatology.

**Descriptors:** Depressive Symptomatology; Thought Suppression; Unfavourable Social Comparisons; Clinical Psychology.

<sup>a</sup> claudiaferreira@fpce.uc.pt

<sup>b</sup> ines.almeidatrindade@gmail.com

<sup>c</sup> larapalmeira@gmail.com

462

### PERSON DEPENDENT ON INVASIVE VENTILATION AT HOME: CARING IN PARTNERSHIP WITH FAMILY

Ana Pinto<sup>1,a</sup>, Carla Nascimento<sup>11,b</sup>

<sup>1</sup>*Centro Hospitalar Lisboa Norte. Lisboa, Portugal*

<sup>11</sup>*Escola Superior de Enfermagem de Lisboa. Lisboa, Portugal*

**Introduction:** The use of mechanical ventilation at home is now a growing reality and a challenge for health professionals and society in general. The transition of the person dependent on invasive ventilation to home covers several structural axes, such as the involvement and participation of the family. Caring in partnership with family requires specific skills of care. The creation of nursing tools led to the development of these skills and is vital for the dependent person and family when returning home.

**Objective:** Disclose a nursing instrument focused on transition to home of the person dependent on invasive ventilation, which has been used on the continuing care unit of a central hospital in the area of Lisbon.

**Methods:** The construction of this instrument emerged from the needs perceived by a nursing team and has been sustained on scientific evidence and empirical experience of themselves.

**Results:** The nursing instrument was given as a matrix for decision making on the discharging plan of the dependent person on invasive ventilation and as a guide of family skills training to return home.

**Conclusions:** Identified instruments that promote the preparation of the homecoming of the person dependent on mechanical ventilation as a priority for health teams with special impact on the quality of life for person and family health.

**Descriptors:** home returning, discharge planning, partnership caring, family.

<sup>a</sup> ana.cris.pinto@sapo.pt

<sup>b</sup> carla.nascimento@esel.pt

463

## HOW BODY IMAGE INFLEXIBILITY IMPACTS ON DISORDERED EATING ATTITUDES AND BEHAVIOURS

Inês A. Trindade<sup>a</sup>, Cláudia Ferreira<sup>b</sup>

*Centro de Investigação do núcleo de estudos e Intervenção Cognitivo-Comportamental. Faculdade de Psicologia. Universidade de Coimbra. Universidade de Coimbra. Coimbra, Portugal*

**Introduction:** Literature has highlighted the impact of psychological inflexibility in mental health. That is, the incapacity of adopting a non-judging, defused and accepting attitude towards one's thoughts and feelings has been pointed as a central risk factor to various forms of psychopathology. Specifically, psychological inflexibility related to body image comprises rigid cognitive (i.e., control) and behavioural (i.e., avoidance) patterns in relation to one's body, which generate greater psychological distress and suffering. The existing data warrant additional research in order to enhance the knowledge about the impact of this process on disordered eating attitudes and behaviours.

**Objective:** The present study aimed at exploring the impact of body image inflexibility on the relationship between eating psychopathology and its central risk factors, BMI and body dissatisfaction.

**Methods:** In this study participated 286 female students, aged between 15 and 23 years-old (M=18.43; SD=1.90).

**Results:** BMI, body dissatisfaction (BD) and body image inflexibility (BI-AAQ) were positive and significantly correlated with EDE-Q. BI-AAQ was tested as mediator on the association of BMI (Model 1) and BD (Model 2) towards eating psychopathology. These models explained 62 and 65% of EDE-Q, respectively, and revealed that the impact of BMI and BD on eating psychopathology was partially mediated by BI-AAQ.

**Conclusions:** This study clarifies the mediational role of body image inflexibility to explain the engagement in disordered eating behaviours. Also, it underlies the importance of developing adaptive strategies to deal with unwanted body-related internal experiences, in both clinical settings and community programs which target body image difficulties.

**Descriptors:** BMI; Body Dissatisfaction; Body Image Inflexibility; Eating Psychopathology; Acceptance and Commitment Therapy; Clinical Psychology.

464

## STANDARDS OF SLEEP QUALITY IN HOSPITALIZED PATIENTS ON MEDICAL SURGERY CONTEXT

Ana Certo<sup>1,a</sup>, Ana Galvão (Ph.D)<sup>11,b</sup>, Maria José Gomes (Ph.D)<sup>111,c</sup>

*<sup>1</sup>Instituto Politécnico de Bragança. Bragança, Portugal,*

*<sup>11</sup>Departamento das Ciências Sociais e Gerontologia. Núcleo de Investigação e Intervenção no Idoso. Porto, Portugal, Instituto Politécnico de Bragança. Bragança, Portugal*

*<sup>111</sup>Departamento das Ciências de Enfermagem. Núcleo de Investigação e Intervenção no Idoso. Porto, Portugal, Instituto Politécnico de Bragança. Bragança, Portugal*

**Introduction:** Sleep is crucial for the wellbeing and balance of a person. Sleep disorders have particular relevance in hospitalized patients, affecting their quality of life and recovery. Changes in patterns of sleep are the main factors that affect its quality, in 15 to 35% of the cases.

**Objective:** identify through a systematic review of the literature, the factors that are responsible for disorders of sleep patterns in hospitalized patients.

**Methods:** The PICO scale, which acronym is, Patient, intervention, comparison and Outcomes, aims to answer the question: "what factors interfere with sleep patterns of hospitalized patients?" which requires research evidence. Databases B-on, Scielo and LILACS were queried for papers based related with qualitative and quantitative studies including the following keywords: sleep disorders, quality of sleep, factors that interfere with sleep patterns, quality of life and patients hospitalized.

**Results and Conclusions:** We found evidence that such sleep disorders in hospitalized patients are caused by emotional factors: Worry about being in the hospital, sharing room, home, son, disability, assistance of the health team. Environmental factors: mattress, light, bed, temperature, motion, noise, cars, Pathological factors: cough, nausea, pain, malaise, weakness and catheterism. These factors are cited in multiple relevant studies, in which pain is specially focused, because, since it is the fifth vital sign, it has a particular impact on the sleep quality of hospitalized patients.

**Descriptors:** sleep disorders, quality of sleep, factors that interfere with sleep patterns, quality of life and hospitalized patients.

<sup>a</sup> ines.almeidatrindade@gmail.com

<sup>b</sup> claudiaferreira@fpce.uc.pt

<sup>a</sup> catarinacerto@hotmail.com

<sup>b</sup> anagalvao@ipb.pt

<sup>c</sup> mgomes@ipb.pt

465

**STRESS IN CONTEXT PERIOPERATIVE**Na Rita Gonçalves<sup>1,a</sup>, Ana Galvão (Ph.D)<sup>1,b</sup>, Ana Certo<sup>1,c</sup><sup>1</sup>*Instituto Politécnico de Bragança. Bragança, Portugal*<sup>1</sup>*Departamento das Ciências Sociais e Gerontologia. Núcleo de Investigação e Intervenção no Idoso. Porto, Portugal, Instituto Politécnico de Bragança. Bragança, Portugal***Introduction:** This study approaches the issue of stress in perioperative nurses.**Objective:** find out what stress level, the burnout level experienced and the coping strategies that they use.**Methods:** This is a non experimental study, quantitative, descriptive and correlational, in an transversal plane. The sample consisted with 81 participants, 27 perioperative nurses of the Northeast Local Health Unit (ULSNE) and 54 of the Trás-os-Montes and Alto Douro Central Hospital. We applied three assessment tools: Maslach Burnout Inventory (MBI) of Maslach and Jackson (1986), Nurse Stress Index (NSI) of Harris (1989) and Problem Solving Inventory (IRP) of Vaz Serra (1987).**Results and conclusions:** The main results were, according to the NSI, the sample showed a considerable degree of stress, presenting values equivalent to stressful in the sub-scales workload 1 (Quantitative), Organizational Climate and Dealing with patients and family. At the level of burnout, we found that the sample has a low level of burnout and through IRP we concluded that the sample as a whole, has reasonable coping mechanisms, showing effective strategies in terms of internal/external control problems and control the aggressiveness internalized/externalized.**Descriptors:** Operating room, Stress, Burnout, Coping.

466

**WHAT PRACTICES AND BEHAVIOUR AFTER THE FALL OF THE ELDERLY, IN RESIDENTIAL STRUCTURES FOR SENIORS?**Cristina Baixinho<sup>1,a</sup>, M<sup>a</sup> Anjos Dixe<sup>1,b</sup><sup>1</sup>*Escola Superior de Enfermagem de Lisboa. Lisboa, Portugal*<sup>1</sup>*Unidade de Investigação em saúde. Escola superior de saúde de Leiria. Leiria, Portugal***Introduction:** In residential structures for the elderly falls are a concern for their high incidence and prevalence. Prevention through investment in work teams that integrate, in their daily practice, strategies for risk assessment and preventive measures.**Objective:** This study had as objectives: to identify the team's practices and behaviors for the prevention of falls and to relate the team's practices and behaviors with the practices and behaviors of intervention for prevention of falls in institutionalized elderly.**Methods:** Descriptive correlational and cross-study. The samples were 152 helpers of direct action of six residential structures for the elderly, which authorized the realization of the study. The scales were constructed and validated (Baixinho & Dixe, 2013), showing good psychometric characteristics.**Results:** After the analysis of the percentage of each of the indicators of the scale, we can see that the risk factors of falling are always discussed in 38.8% of team situations, preventive measures in 31.6% and the decision of preventive measures to be applied are always decided in team in 33.6% of cases. The professionals consider communication essential to prevent falls, recognizing that through communication they know, evaluate, interpret and transmit relevant elements for the prevention of falls. There is statistically significant difference between the range of practices and team behaviors with behaviors and practices of intervention for prevention of falls of then institutionalized elderly.**Conclusions:** The team cares to identify risk factors and to implement preventive measures. Best team practices results in better practices and behaviors in the prevention of falls.**Descriptors:** Fall; Practices; Behaviour; Elder; residential Structures for seniors.<sup>a</sup> velosogoncalves@hotmail.com<sup>b</sup> anagalvao@ipb.pt<sup>c</sup> catarinacerto@ipb.pt<sup>a</sup> crbaixinho@esel.pt<sup>b</sup> manjos.dixe@gmail.com

467

### ANTHROPOMETRIC MEASURES, EATING HABITS AND PERFORMANCE OF PORTUGUESE SOCCER PLAYERS

Adriana Mota<sup>l</sup>, Sandrina Mendes<sup>l</sup>, António Fernandes<sup>l</sup>, Juliana Almeida-De-Souza<sup>l,a</sup>

<sup>l</sup>*Instituto Politécnico de Bragança. Escola de Saúde. Bragança, Portugal*

<sup>ll</sup>*Instituto Politécnico de Bragança. Escola de agricultura e Universidade de Trás os Montes e Alto Douro. Centro de Estudos Transdisciplinares para o Desenvolvimento. Portugal*

**Introduction:** According to the literature, anthropometric and physiological variables may be a determinant success factor for the players' performance.

**Objective:** Verify the influence of anthropometric measures on player's performance. Verify the influence of eating habits on player's performance.

**Methods:** A cross-sectional, quantitative, observational and analytical study was developed. A sample of 87 Soccer Players from Superliga (Portuguese Football League) was collected. Anthropometric measures were evaluated using a Tanita<sup>®</sup> body composition analyzer TBF-300, a compass Cescorf<sup>®</sup> and a tape measure. Eating habits were assessed using food diaries. The Cooper test was used to evaluate the player's performance. SPSS 21.0 was used to compute descriptive statistics and Kruskal-Wallis and Mann-Whitney tests.

**Results:** The performance evaluation showed that players covered, in average, 2,706.3 (SD=220) meters, enabling to realize that 12.6% had a medium performance, 16.1% have a good performance and the two highest ratings, Excellent and Superior, both represented 35.6%. Differences, statistically, significant were found in some anthropometric measures, namely, waist circumference (p=0.045), the suprailiac skinfold (p=0.000) and biceps skinfold (p=0.001), when performance was considered. Relatively to eating habits, statistically, significant differences were not found in all parameters: protein, fat, carbohydrate, water, dietary fiber, vitamin D and magnesium (p>0,05).

**Conclusions:** Players with greater waist circumference have a lower performance and players with bigger biceps suprailiac skinfold have lower performance. These differences may be due to the effect of body fat. However, further studies are needed to confirm this hypothesis.

**Descriptors:** Anthropometric measures, Eating habits, Performance, Cooper test, Soccer Players, Portugal.

<sup>a</sup> julianaalmeida@ipb.pt

468

### HARMFUL EFFECTS OF THE USE OF PSYCHOACTIVE SUBSTANCES IN PERCEPTION OF USERS

Ângela Maria Uchôa Rodrigues<sup>l,a</sup>, Rita Neuma Dantas Cavalcante De Abreu<sup>l,b</sup>, Francisca Liliane Pereira Da Costa<sup>ll,c</sup>, Gilson Holanda Almeida<sup>lll,d</sup>, Mayara Lívia Magalhães De Morais<sup>ll,e</sup>, Mara Joyce De Queiroz<sup>ll,f</sup>, Thereza Maria Magalhães Moreira<sup>llg</sup>, Maria Alice Da Rocha Oliveira<sup>ll,h</sup>, Ingrid Nascimento da Silva Franklim de Mesquita<sup>ll,i</sup>

<sup>l</sup>*Universidade de Fortaleza. Instituto Dr. José Frota. Fortaleza, CE, Brasil*

<sup>ll</sup>*Universidade de Fortaleza. Fortaleza, CE, Brasil*

<sup>lll</sup>*Centro Universitário Crhistus. Centro Universitário Crhistus*

<sup>llv</sup>*Universidade Estadual do Ceará. Universidade Estadual do Ceará. Ceará, Brasil*

**Introduction:** The wide and illegal use of psychoactive substances has been assumed frightening and devastating proportions in contemporary Western society. The harmful effects often appear only after decades of using. The prevalence of substance abuse and substances dependence is increasing at the ages earlier and earlier. In Brazil, at least 10% of the total population use or abuse alcohol.

**Objective:** This study aimed to investigate the perception of drug consumption according the point of view of users.

**Methods:** This is a descriptive and qualitative study comprising a convenience sample composed by 10 male patients attended in a public day-hospital for treatment of addictive disorders in Fortaleza, Ceará, Brazil. Data collection occurred from December/2013 to January/2014 by an instrument in order to identify socio-demographics variables and inquired the subjects perceptions. The procedure was examined and approved by the University of Fortaleza Research Ethics Committee.

**Results:** aged 21-48 years, mean 35 years old, the majority coming from Fortaleza City, three prior psychiatric hospitalizations an average. All subjects were using some psychoactive substance: alcohol in the totality of the sample, most associated with tobacco or multiple drugs including marijuana, crack and cocaine. In generally, subjects linked substance use with physical illnesses (heart, liver, cancer), mental illness (psychosis), or social-familial damage.

**Conclusions:** Paradoxically, 1/3 of those surveyed said do nothing to prevent these evils and 2/3 utilized ineffective mechanisms according themselves.

**Descriptors:** Psychoactive substances; substance abuse, damage.

<sup>a</sup> angeluchoa@unifor.br

<sup>b</sup> rita\_neuma@yahoo.com.br

<sup>c</sup> dliliane@unifor.br

<sup>d</sup> gilsonholanda@gmail.com

<sup>e</sup> mayrinhalivia@hotmail.com

<sup>f</sup> marajoyce21@hotmail.com

<sup>g</sup> tmmoreira@yahoo.com

<sup>h</sup> liceerochaa@gmail.com

<sup>i</sup> ingryd200inove@hotmail.com

469

**“MY BODY, MY SHAME”: DOES BODY IMAGE SHAME PLAYS A SPECIFIC ROLE IN BINGE EATING?**Cristiana Duarte<sup>a</sup>, José Pinto-Gouveia<sup>b</sup>

*Centro de Investigação do Núcleo de Estudos e Intervenção Cognitivo Comportamental. Faculdade de psicologia e ciência das educação. Universidade de Coimbra. Portugal*

**Introduction:** Shame unfolds from our evolution-shaped motives to be seen as an attractive social agent and to avoid criticism or rejection from the social group. Shame has been regarded as key in several psychopathological conditions, namely eating psychopathology. However, the specific role that shame regarding one's physical appearance plays in binge eating, particularly against other relevant variables, remains to be investigated.

**Objective:** This study explores the relationships between binge eating, BMI, body image shame, depressive symptoms and perceived/ideal body image discrepancy. Furthermore, the predictive effect of body image shame on binge eating; and the mediator effect of body image shame on the association between perceived/ideal body image discrepancy and depression on binge eating is examined.

**Methods:** 329 female college students and from the general population, answered a set of self-report questionnaires. Descriptive, correlational and mediational analyses were conducted.

**Results:** Binge eating is significantly and positively correlated with BMI, body image shame, depressive symptomatology and perceived/ideal body image discrepancy. Furthermore, body image shame is the best significant predictor of binge eating. Mediator analyses indicate that body image shame significantly mediates the association between perceived/ideal body image discrepancy and binge eating, and the relationship between depression and binge eating.

**Conclusions:** Findings highlight that the effect of body image shame on binge eating goes beyond the overall impact of negative body image perceptions and depressive symptomatology. This study seems therefore to contribute for the understanding of the processes underlying binge eating and has potential research and clinical implications for this public health problem.

**Descriptors:** Binge eating; Body image shame; Depression; Body image discrepancy; Mediation analysis.

470

**THE PSYCHOMETRIC PROPERTIES OF THE BODY IMAGE SHAME SCALE FOR ADOLESCENTS (BISS-A)**Cristiana Duarte<sup>a</sup>, José Pinto-Gouveia<sup>b</sup>

*Centro de Investigação do Núcleo de Estudos e Intervenção Cognitivo Comportamental. Faculdade de psicologia e ciência das educação. Universidade de Coimbra. Portugal*

**Introduction:** Research has shown that shame, and particularly body image-focused shame, play a key role on development and maintenance of body image difficulties and disordered eating behaviours. The assessment of body image shame in adolescence, a critical time frame for the onset of eating psychopathology, may be particularly relevant.

**Objective:** The current study aimed at testing the psychometric properties of the Adolescent Version of the Body Image Shame Scale (BISS-A), a recently developed measure assessing the phenomenology and dimensions of body image shame.

**Methods:** The BISS-A factorial structure and psychometric properties were examined in a sample of adolescent girls attending middle schools (N = 614), who answered a set of self-report measures.

**Results:** A Confirmatory Factor Analysis corroborated the adequacy of the two-factor structure of the BISS-A, assessing an externalized and an internalized dimension of body image shame. This structure revealed good to very good global and local model fit indices. Findings also indicated that the BISS-A has very good internal consistency, construct and discriminant validities, and test-retest reliability. The scale is also positively associated with measures of body dissatisfaction, eating psychopathology, self-criticism and overall psychopathological symptoms. Moreover, the BISS-A discriminates between cases of participants with eating psychopathology from non-cases.

**Conclusions:** The BISS-A seems to be a psychometrically sound measure to assess body image shame in adolescence. These findings suggest that the use of this specific, short and reliable measure in this developmental stage may have relevant implications for the understanding, intervention and prevention of eating disorders among adolescents.

**Descriptors:** Body image shame; adolescence; eating psychopathology; Confirmatory Factor Analysis; Psychometric properties.

<sup>a</sup> cristianaod@gmail.com<sup>b</sup> jpgouveia@fpce.uc.pt<sup>a</sup> cristianaod@gmail.com<sup>b</sup> jpgouveia@fpce.uc.pt

471

### AMYOTROPHIC LATERAL SCLEROSIS: KNOWLEDGE OF THE QUALITY OF LIFE OF PEOPLE AFFECTED

Amanda Holanda Severo<sup>a</sup>, Zuila Maria de Figueiredo Carvalho<sup>b</sup>, Daisy Maria Silva<sup>c</sup>, Raelly Ramos Campos<sup>d</sup>, Samira Rocha Magalhães<sup>e</sup>, Winner Gomes Machado<sup>f</sup>

*Universidade Federal do Ceará. Fortaleza, CE, Brasil*

**Introduction:** The Amyotrophic Lateral Sclerosis (ALS) is a neuromuscular, degenerative, progressive, disabling and fatal disease, determines total dependence of the individual.

**Objective:** Evaluate the quality of life of patients with ALS based Amyotrophic Lateral Sclerosis Assessment Questionnaire (ALSAQ-40).

**Methods:** Qualitative study with nine patients attending the outpatient clinic at the University Hospital of Fortaleza-Ceará-Brazil. The number of participants was limited by saturation of the findings, Polit (2011). We used a semi-structured interview guide based on the items ALSAQ-40, relating to basic human needs, validated in 1999 in English and in 2010 in Portuguese, with the inclusion criteria: diagnosis of ALS; cognitively preserved. Exclusion criteria and discontinuity: desistance research and death in the course of collection. In patients with difficulties in speech and writing used the computer. Data were organized by content analysis. The ethical aspects were respected protocol of the Ethics Committee, n. 225.057.

**Results:** The findings were divided into five categories: Difficulties in the development of activities of daily living; Communication difficulties; Hopes for the future; Experienced concerns and Sentiments patients. Many reported falls due to difficulties in walking; feeding was impaired due to frequent choking and loss of muscle strength, preventing food preparation; communication difficulties were present, in writing or in speech, but also simultaneously, preventing social interaction; disease progression was a reported concern, accompanied by symptoms of depression, anxiety and worthlessness.

**Conclusions:** It is necessary that nurses transform their care practices for improving the quality of life of these patients, sharing difficulties and guiding healthy strategies to help overcome the experienced steps.

**Descriptors:** Amyotrophic Lateral Sclerosis, Quality of Life, Nursing, Nursing Research, Knowledge.

<sup>a</sup> amandah\_severo@hotmail.com

<sup>b</sup> zmfca@fortalnet.com.br

<sup>c</sup> daisy\_nha691@hotmail.com

<sup>d</sup> raelita\_@hotmail.com

<sup>e</sup> samira\_magalhaes@hotmail.com

<sup>f</sup> winnergomes@gmail.com.br

472

### CHILDREN WITH NEUROLOGICAL DISEASE: MISHEL'S THEORY AND MATERNAL BEHAVIOR

Renata Sá Brasileiro<sup>a</sup>, Zuila Maria de Figueiredo Carvalho<sup>b</sup>, Daisy Maria Silva<sup>c</sup>, Samia Jardelle Costa de Freitas Maniva<sup>d</sup>, Joyce Miná Albuquerque Coelho<sup>e</sup>, Roberta de Araújo e Silva<sup>f</sup>

*Universidade Federal do Ceará. Fortaleza, CE, Brasil*

**Introduction:** The hard emotional preparation to care of a child with neurological disorders, especially as the uncertainty in their children's illness, made us motivated to know the mother's knowledge based on the assumptions of Theory Mishel, because this theory deals with the uncertainties, anxieties and doubts not knowing what might happen to them in the future.

**Objective:** Analyze the perceptions of mothers, as the uncertainty of diagnosis in their child's illness based on the assumptions of Mishel's theory.

**Methods:** This is a qualitative study conducted in a referral pediatric hospital in the city of Fortaleza, Brazil, July 2013. The research subjects were 12 mothers of children with neurological disorders during follow-up in hospital. The instrument for data collection was a semi-structured script of interview related to Mishel Theory, validated in 1990 in English, still in validation process in Portuguese. Data were analyzed by analysis of content. Findings in 4 themes: Knowledge of neurological disease; Time of diagnosis; Experienced feelings and concerns; Hopes and expectations about the future. Ethical aspects were respected, the project received the number 300.166 of the Ethics Committee.

**Results and Conclusions:** Perceived many feelings of uncertainty and denial at the time of diagnosis, resulting from disruption of the expected and the lack of clear information about the child's future. This study hopes to collaborate for understanding on the damage and interference that the lack of information leads to the mother of children with neurological disorders.

**Descriptors:** Child, Maternal Behavior, Neurology Diseases, Nursing Theory, Nursing.

<sup>a</sup> renatasafb@hotmail.com

<sup>b</sup> zmfca@fortalnet.com.br

<sup>c</sup> daisy\_nha691@hotmail.com

<sup>d</sup> samia.jardelle@gmail.com

<sup>e</sup> joyminah@yahoo.com.br

<sup>f</sup> roberta.2010@yahoo.com.br

473

### BEING FUSED WITH BODY IMAGE: THE IMPACT ON ONE'S QUALITY OF LIFE

Cláudia Ferreira<sup>a</sup>, Inês A. Trindade<sup>b</sup>, Mariana Brandão<sup>c</sup>, Ana Martinho<sup>d</sup>, Patrícia Fortunato<sup>e</sup>

*Faculdade de Psicologia e Ciências da Educação. Universidade de Coimbra. Coimbra, Portugal*

**Introduction:** Cognitive fusion is an emotional regulation process that involves the entanglement with one's thoughts, regarding them as facts rather than interpretations of reality. It leads therefore to maladaptive patterns of psychological functioning and is linked to psychopathology. Body image-related cognitive fusion (i.e., the entanglement with thoughts regarding body image) has been the focus of recent studies which demonstrate its pervasive role on psychopathology. Nevertheless, body image-related cognitive fusion's impact on psychological quality of life (QoL) has never been examined.

**Objective:** This study explores body image-related cognitive fusion's impact on the relationship between BMI and psychological QoL, and between body dissatisfaction (BD) and psychological QoL.

**Methods:** This study comprises 296 female college students aged between 18 and 27 years old ( $M=20.38$ ;  $SD=1.90$ ). Their BMI's mean was 21.43 ( $SD=2.80$ ).

**Results:** All the domains of QoL were negatively correlated with body image-related cognitive fusion (CFQ-BI). It should be noted that psychological QoL's correlation with CFQ-BI showed a large magnitude. BMI and BD held negative associations with psychological and social QoL. A mediation analysis revealed that CFQ-BI totally mediates the relationships between BMI and psychological QoL ( $R^2=.28$ ), and BD and psychological QoL ( $R^2=.29$ ).

**Conclusions:** These results stress the essential role of body image-related cognitive fusion on the individuals' own views of their psychological well-being (QoL). Indeed, it was revealed that the impact of BMI and BD on women's QoL totally depends upon the level to which one is fused with body image-related thoughts.

**Descriptors:** Quality of Life; Body Image-related Cognitive Fusion; BMI; Acceptance and Commitment Therapy; Clinical Psychology.

<sup>a</sup> claudiaferreira@fpce.uc.pt

<sup>b</sup> ines.almeidatrindade@gmail.com

<sup>c</sup> marianabrandao\_@hotmail.com

<sup>d</sup> anamartinho91@gmail.com

<sup>e</sup> patricia.rfortunato@gmail.com

474

### EXPERIENTIAL AVOIDANCE AMPLIFIES THE IMPACT OF BODY IMAGE-RELATED EXPERIENCES ON QUALITY OF LIFE

Cláudia Ferreira<sup>a</sup>, Inês A. Trindade<sup>b</sup>, Lara Palmeira<sup>c</sup>, Ana Marta Daniel<sup>d</sup>, Vanessa Correia<sup>e</sup>

*Faculdade de Psicologia e Ciências da Educação. Universidade de Coimbra Coimbra, Portugal*

**Introduction:** Physical appearance has been pointed as a central factor on women's self-evaluation and quality of life (QoL). According to Acceptance and Commitment Therapy, human suffering is not determined by one's experiences but rather how one relates to them. In fact, experiential avoidance (i.e., the unavailability to contact with internal experiences without trying to control/avoid them) has been intrinsically related to a poorer well-being.

**Objective:** This study investigates whether BMI, body dissatisfaction (BD) and social comparisons based on physical appearance (SCPAS) predict QoL and whether experiential avoidance (AAQ) moderates the impact of physical appearance on QoL.

**Methods:** Participants were 301 female college students (age  $20.42\pm 1.96$  years old on average; BMI  $21.43\pm 2.80$  on average) who completed self-report measures.

**Results:** All of the body-related measures (BMI, BD and SCPAS) presented negative correlations with general, psychological and social QoL. A regression analysis revealed that BMI, BD and SCPAS explain a total of 18% of psychological QoL's variance, with SCPAS emerging as the strongest predictor. Also, results show the moderator effect of AAQ on the relationship between social comparisons based on physical appearance and psychological QoL. The moderation variable explained 38.8% of psychological QoL's variance.

**Conclusions:** This study reveals that experiential avoidance moderates, as it amplifies, the pervasive effect of social comparisons based on physical appearance on QoL. Indeed, for the same level of social comparisons based on physical appearance, those women who present higher levels of psychological inflexibility report a decreased quality of life.

**Descriptors:** Quality of life; social comparisons based on physical appearance; experiential avoidance; Acceptance and Commitment Therapy; Clinical Psychology.

<sup>a</sup> claudiaferreira@fpce.uc.pt

<sup>b</sup> ines.almeidatrindade@gmail.com

<sup>c</sup> larapalmeira@gmail.com

<sup>d</sup> ana.marta.daniel@gmail.com

<sup>e</sup> vanessa\_ribeirocorreia@hotmail.com

475

**INSOMNIA: PREVALENCE AND ASSOCIATED FACTORS**

Cátia Lopes<sup>a</sup>, Daniela Lopes<sup>b</sup>, Sofia Ferreira<sup>c</sup>, Teresa I. G. Correia<sup>d</sup>, Isabel C. Pinto<sup>e</sup>

*Escola Superior de Saúde. Instituto Politécnico de Bragança. Bragança, Portugal*

**Introduction:** Nowadays sleep disorders are very common and affect most of the population, the most common may be insomnia. Insomnia is defined as the difficulty of initiating or maintaining sleep it, may also be reflected in an early wake up and by the presence of a non-restful sleep and it is associated with impairment in social and occupational functioning of the individual.

**Objective:** Knowing the prevalence and the associated factors of insomnia.

**Methods:** This is a cross-sectional epidemiological study. The population is constituted by 205 individuals of both sexes, aged over 18, who were in public places of a city in the north of the country. We applied a questionnaire to all the people who went through these places between 9 am to 7 pm. Insomnia was evaluated using the DSM-IV (Diagnosis and Statistical Manual of Mental Disorders). We use the Chi-square to study the relation between the independent variables with variable insomnia, adopting a confidence interval of 95%.

**Results:** The prevalence of insomnia was 46.8%. Who suffers more from insomnia are: women in menopause (64.1%), elder people (66.7%) and those with four or fewer years of education (73.9%). There was no significant statistical relationship between the prevalence of insomnia and sex or residence. The causes of insomnia are: concern (48.6%), noise (31.8%) and disease (8.4%). The drugs most consumed by insomniacs are benzodiazepines (79.2%).

**Conclusions:** In this study insomnia affects about half of participants. The presence of insomnia seems to be related with the age increasing, low education and menopausal status in female.

**Descriptors:** Insomnia; Prevalence; Quality of life; Risk Factors; Sleep disorders; Sleep initiation and maintenance disorders.

<sup>a</sup> a18850@alunos.ipb.pt

<sup>b</sup> a18908@alunos.ipb.pt

<sup>c</sup> a19588@alunos.ipb.pt

<sup>d</sup> teresaicorreia@ipb.pt

<sup>e</sup> isabel.pinto@ipb.pt

476

**ACCIDENTS AT WORK BY EXCESSIVE EFFORTS/ INAPPROPRIATE MOVEMENTS IN NURSES**

Matilde D.S. Martins<sup>1,a</sup>, Teresa I.G. Correia<sup>1,b</sup>, Maria C. B. Figueiredo<sup>1,c</sup>

*<sup>1</sup>Escola Superior de Saúde. Instituto Politécnico de Bragança. Bragança, Portugal*

*<sup>11</sup>Escola Superior de Enfermagem do Porto. Porto, Portugal*

**Introduction:** Nurses continuously develop various activities that expose them to excessive force and inappropriate movements.

**Objective:** Characterize the accidents reported by overexertion and inappropriate movements in Portuguese nurses during 2009 and 2010.

**Methods:** Retrospective cross-sectional study, covering the period from January 1, 2009 to December 31, 2010. Were defined as inclusion criteria, be nurse and having notified by excessive straining and improper motion accident. The information was obtained by reference to the computer record of accidents at work General Administration of Health Services, relating to 672 nurses.

**Results:** There were 672 notifications of accidents by overexertion/ inappropriate moves in Portuguese nurses. The higher prevalence of these accidents was in nurses with over 10 years of service 277 (41.2%), 565 were female (42.6%) in the age group 25-29 (29.9%) and practice time for 555 shifts (82.6%). At admission there were 387 (57.3%) within 3 hours of work 330 (49.1%) and the third day after weekly rest 216 (32.1%). The Mobilization of patients was the most frequent cause of this accident 430 (64.0%). The main effects were the sprains and strains 321 (47.8%), mainly the trunk reached 367 (54.7%) and absenteeism caused 373 (55.5%). On average 17.7 days missed a total of 12.054 days.

**Conclusions:** There was a high prevalence of accidents during the mobilization of patient so important to invest in the implementation of mechanical equipment for the mobilization and transport of patients.

**Descriptors:** Accidents; Occupational Health Nursing; Occupational Risk; Inappropriate movements.

<sup>a</sup> matildemartins@ipb.pt

<sup>b</sup> teresaicorreia@ipb.pt

<sup>c</sup> ceu@esenf.pt



477

### THE IMPLICATIONS OF EMOTIONAL INTELLIGENCE IN SELF-ESTEEM

Lisete dos Santos Mendes Mónico<sup>a</sup>, Patrícia Isabel Valente dos Santos<sup>b</sup>, Luiza Nobre Lima<sup>c</sup>

*Faculdade de Psicologia e Ciências da Educação. Universidade de Coimbra. Coimbra, Portugal*

**Introduction:** The construct of Emotional Intelligence has caused a growing interest in the domain of psychology. It comprises the individuals' ability to resort to sophisticated information processing systems about their and others emotions, as well as the ability to use this information to guide thinking and behavior. This ability has adaptive functions that benefit themselves and others.

**Objective:** The central problem of our work focuses on the implications of Emotional Intelligence in Self-esteem. We proposed two research hypotheses: Emotional Intelligence and Self-esteem are positively correlated (H1), and it is possible to predict Self-esteem through Emotional Intelligence (H2).

**Methods:** We conducted a quantitative survey with a non-random sample of 200 Portuguese citizens, 55 males and 145 females, aged between 18 and 60 years-old (M=25.26; SD=8.53). We validated the Scale of Emotional Intelligence (Rego et al, 2007), that comprises 17 items grouped into six factors: Understanding of own emotions (M=5.00), Self-control against criticism (M=4.71), Self-encouragement (M=5.14), Emotional self-control (M=4.36), Empathy and emotional contagion (M=5.78), and Understanding the emotions of others (M=4.99). Using a five-point Likert scale, we developed a unifactorial measure of Self-esteem (M=3.79), which showed good psychometric properties.

**Results:** The results support our two hypotheses: We found a significant correlation between emotional intelligence and Self-esteem (H1), and the multiple regression analysis showed that we can predict Self-esteem through Emotional Intelligence (H2).

**Conclusions:** We conclude that is important to examine Emotional Intelligence as a psychological repertoire of acquired skills, and explore their contributions regarding the challenges in the field of Self-esteem.

**Descriptors:** Emotional Intelligence; Self-esteem; Scale of Emotional Intelligence; Measure of Self-esteem.

<sup>a</sup> lisete\_monico@fpce.uc.pt

<sup>b</sup> patriciaivalente@hotmail.com

<sup>c</sup> luizabelima@fpce.uc.pt

478

### COMFORT IN A PERMANENT CARE UNIT/ EMERGENCY SERVICE: PATIENTS PERCEPTION

Raquel Rosa<sup>1,2,a</sup>, Patrícia Ribeiro<sup>1,2,b</sup>

<sup>1</sup>*Centro Hospitalar Barreiro. Montijo, Portugal*

<sup>2</sup>*Universidade Católica Portuguesa. Lisboa, Portugal*

**Introduction:** In daily nursing practice and especially in the emergency department, the concept of comfort ends up lost in the middle of other concepts that emerge as priorities. Considering this, it becomes important to develop studies referring to the phenomenon of comfort as an individual and particular experience, regarding a specific context (Kolcaba, 2003; Ribeiro, 2013).

**Objective:** This study aims to understand the perception of patients regarding comforting experience in a permanent care unit of a private Hospital in Lisbon.

**Methods:** This is a descriptive exploratory study that uses qualitative methodology. Responses were collected through observation and informal conversations with 23 patients hospitalized in the observation room, male and female, aged between 16 and 91 years old. Only patients that spent 4 hours or more in the observation room were included in this study.

**Results:** The results show that most of the patients value the phenomenon of comfort regarding the four contexts defined by Kolcaba in her theory. The study also revealed that issues related to socio cultural and psycho-spiritual context emerge as the most significant. On the other hand, the main factors of discomfort are related essentially to issues involving the environmental context.

**Conclusions:** Besides being a basic need, comfort is also revealed as a structural pillar care of the person that requires multiple investigations in the most varied areas (Kolcaba, 2003; Oliveira, 2011; Ribeiro, 2013).

**Descriptors:** Comfort; Nursing; Emergency service.

<sup>a</sup> pereira.raquel12@gmail.com

<sup>b</sup> patriciacps@ics.lisboa.ucp.pt

479

### PHYSICAL DEPENDENCE ELDERLY INFORMAL CAREGIVER'S MENTAL HEALTH, LIVING IN CORUCHE COUNTY

Ricardo Nuno Silva Rocha<sup>1a</sup>, Maria Anjos Dixe<sup>1b</sup><sup>1</sup>*Unidade de Saúde Familiar Vale do Sorraia. Coruche, Portugal*<sup>2</sup>*Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

**Introduction:** Caring for an elderly with physical dependence is for informal caregiver a difficult and exhausting process in a physical, emotional and social level.

**Objective:** Know and relate the levels of mental health, perceived difficulties and coping strategies used by informal caregivers with physical dependence

**Methods:** Descriptive correlational study performed in non-probabilistic by convenience sample of 26 physical dependence elderly informal caregivers, for at least 6 months, who responded to a questionnaire consisting of sociodemographic questions, the Mental Health Inventory (MHI), the Carers' Assessment of Difficulties Index (CADI) and Carers' Assessment of Managing Index (CAMI). All Helsinki Declaration principles were attended in data collecting.

**Results:** Average caregivers age was 59.8 years (SD=9.3); mainly domestic (34.6% or retired (23.1%), 4th grade (57.7%), mostly taking care one of the parents (57.7%). The main reason which led them to assume the role of caregiver was family obligation (31.8%) and not afford to put the elderly in an institution (31.8%). Mostly have a mental health low level and severe symptoms of mental illness (56%). Mental health lower levels are related to higher perceptions of the difficulties in the caregiving demands area, with reactions to the caregiver role and with the elderly previous relationship (p<0.01). Good levels of mental health are related to the use of "take some free time to myself" coping strategy (p<0.01).

**Conclusions:** The results point to the need to develop elderly dependent caregivers mental health intervention and promotion programs.

**Descriptors:** Mental Health; Caregivers; Frail Elderly.

<sup>a</sup> rnsrocha@gmail.com<sup>b</sup> manjos.dixe@gmail.com

480

### EXPERIENCES OF PATIENTS UNDERGOING RENAL DIALYSIS: INTEGRATIVE LITERATURE REVIEW

Ana Mariele de Souza<sup>a</sup>, Cibelle Barcelos Filipini<sup>b</sup>, Sara Rodrigues Rosado<sup>c</sup>, Eliza Maria Rezende Dázio<sup>d</sup>, Silvana Maria Coelho Leite Fava<sup>e</sup>, Érica Mayumi Guskuma<sup>f</sup>*Escola de Enfermagem da Universidade Federal de Alfenas. Alfenas, MG, Brazil*

**Introduction:** Chronic renal failure (CRF) constitutes a serious public health problem due to the high morbimortality rates. It compromises the physical and psychological dimensions with personal, family and social repercussions, directly interfering in the patient's life quality.

**Objective:** To identify scientific evidences related to the experiences of patients with CRF undergoing renal dialysis.

**Methods:** Integrative literature review, conducted in January 2014, on the databases LILACS and MEDLINE with the descriptors: "Kidney transplant", "Renal dialysis", "Nursing". The following inclusion criteria were used: articles in English, Spanish and Portuguese, available in full, published between 2009 and 2013, and as exclusion criteria: theses, dissertations, books, reports, abstracts and articles that did not answer the main question: "What are the experiences of patients with CRF undergoing renal dialysis?" A validated instrument was applied and adapted by the researchers.

**Results:** In the first search 188 articles were identified and, after the inclusion and exclusion criteria were applied, four articles were selected for the sample. From the articles' analysis emerged the following categories: "The impact of CRF and its treatment" and "Coping mechanisms". The discovery of CRF diagnosis causes ambiguous feelings of revolt and acceptance in subjects who require this treatment to live. Among the used coping mechanisms are: readaptation of daily life, religion belief and hope for a transplant.

**Conclusions:** Nurses should know the experiences of patients with CRF in order to include interventions in care planning that promote the strengthening of mechanisms for coping with the disease.

**Descriptors:** Kidney transplant; Renal Dialysis; Nursing.

<sup>a</sup> anamarielle\_bd@hotmail.com<sup>b</sup> cibellebarcelos@hotmail.com<sup>c</sup> sara.rrosado@hotmail.com<sup>d</sup> elizadazio@yahoo.com.br<sup>e</sup> silvanalf2005@yahoo.com.br<sup>f</sup> mayumierica@hotmail.com

481

### IMPROPER USE AND ABUSE OF VOCAL CORDS AMONG TEACHERS: INTERVENTION OF THE SPEECH AND LANGUAGE THERAPIST

Sara Raquel Granjeiro Serra, Joana Pedrosa Santos, Michelle Costa Gonzalez<sup>a</sup>, Sônia Cristina de Sousa Pós de Mina<sup>b</sup>

*Escola Superior de Saúde. Instituto Politécnico de Leiria. Portugal*

**Introduction:** The vocal quality is the audible sound resulting from the combination of several factors, which once modified, can lead to implications for the vocal quality. Teachers, as vocal professionals, are the class who show higher superiority in vocal modifications.

**Objective:** To verify how efficient the speech and language therapist intervention is, in improving teacher's vocal quality, following the Vocal Hygiene Program and techniques of vocal treatment.

**Methods:** Partly experimental case study of pre-test/post-test, without a control group. Using a combined sample of seven teachers from higher education; six female and one male, with an average age of 41 years old. The instruments used were a guide of social demographic characterisation, and an acoustic evaluation and perception of voice. The intervention was on a weekly basis for a period of ten weeks. It is considered that all formal procedures and ethical considerations were met and that free informed consent was obtained.

**Results:** In the acoustic vocal quality, there are statistically significant differences ( $p \leq 0,05$ ), a verification of a reduction in the parameters of loudness ( $Z = -2,366$ ;  $p = 0,018$ ). We verified a medium increase in the Maximum Time of Phonation, although no statistically significant differences exist. There were no identified alterations in the perceived vocal quality.

**Conclusions:** The improvement in pneumophonoarticulatory coordination, which is linked to the programme of vocal hygiene, leads to a more efficient loudness usage, allowing better breathing control/support. The constitution of a representative sample population and the creation of a control group are conditions for future studies.

**Descriptors:** Speech Therapy; Voice Disorders; Faculty; Occupational Health; Voice Training.

<sup>a</sup> ellechim\_@hotmail.com

<sup>b</sup> sonia.mina@ipleiria.pt

482

### EDUCATIONAL STRATEGIES FOR THE PREVENTION OF AMPUTATION IN PEOPLE WITH DIABETES

Cibelle Barcelos Filipini<sup>1,a</sup>, Sara Rodrigues Rosado<sup>1,b</sup>, Lidiane Aparecida Monteiro<sup>1,c</sup>, Ana Mariele de Souza<sup>1,d</sup>, Érica Mayumi Guskuma<sup>1,e</sup>, Eliza Maria Rezende Dázio<sup>1,f</sup>, Solange Cervinho Bicalho Godoy<sup>1,g</sup>

<sup>1</sup>Universidade Federal de Alfenas. Alfenas, MG, Brazil

<sup>11</sup>Universidade Federal de Minas Gerais. Belo Horizonte, MG, Brazil

**Introduction:** Diabetes Mellitus (DM) constitutes a serious public health problem, evidenced by the rising morbimortality rates and by the development of chronic complications, among which stand out the ends' amputations. Therefore, the need of investments in health education programs for the prevention and control of the disease is evidenced.

**Objective:** To identify scientific evidences related to the adoption of educational practices aimed at the prevention of amputations in people with DM.

**Methods:** Integrative literature review carried out with the descriptors "Education", "Health", "Amputation" and "Diabetes Mellitus" in the Virtual Health Library. We used as inclusion criteria: articles in English, Spanish and Portuguese, available in full, published between 2003 and 2013 and, as exclusion criteria: theses, dissertations, books, abstracts and articles that did not answer the main question: "What educational strategies have been developed for the prevention of amputation in people with DM?"

**Results:** In the first search, 37 articles were identified and, after the inclusion and exclusion criteria were applied, six articles were selected to provide sample. From the articles' analysis, the following categories emerged: "Educational Strategies aimed at the prevention of amputations on people with DM" and "The importance of Health Education for the prevention of complications". Health education possesses the purpose of sensitizing and motivating necessary changes on the attitudes of a person with DM.

**Conclusions:** Health professionals must be ready to conduct health education, seeking to strengthen preventive actions and to encourage peoples' autonomy on the perspective that they may have a healthier life.

**Descriptors:** Education; Health; Amputation; Diabetes Mellitus.

<sup>a</sup> cibellebarcelos@hotmail.com

<sup>b</sup> sara.rrosado@hotmail.com

<sup>c</sup> lidianemonteiro22@hotmail.com

<sup>d</sup> anamariela\_bd@hotmail.com

<sup>e</sup> mayumierica@hotmail.com

<sup>f</sup> elizadazio@yahoo.com.br

<sup>g</sup> ange@enf.ufmg.br

483

**DIABETIC HEALTH PROFILE**

Rui Cruz<sup>I,a</sup>, Catarina Leitão<sup>II,b</sup>, Pedro Ferreira<sup>III,c</sup>, Luiz Santiago<sup>III,d</sup>, Carlos Fontes Ribeiro<sup>IV,e</sup>

<sup>I</sup>*Escola Superior de Tecnologia da Saúde. Instituto Politécnico de Coimbra. Coimbra, Portugal*

<sup>II</sup>*Centro de Estudos e Investigação em Saúde. Universidade de Coimbra. Coimbra, Portugal*

<sup>III</sup>*Universidade da Beira Interior. Covilhã, Portugal*

<sup>IV</sup>*Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal*

**Introduction:** Worldwide Diabetes Mellitus (DM) affects approximately 382 million people. In Portugal, the prevalence of patient with diabetes is approximately 1 million. The economic and human costs of this disease are high and it is essential to get to know the diabetic health profile of patients in order to optimize its management.

**Objective:** To characterize a diabetic population, according to social-demographic, clinical and specific health profile.

**Methods:** An observational, descriptive and transversal study was conducted on 153 diabetics. The protocol for data collection included a specific measure of the diabetic health profile and a generic measure of health status, clinical and socialdemographic information.

**Results:** Of the 153 subjects, 54.2% were female and 45.8% male, aged between 17 and 86 years, which the mean age is 61.99 years (SD±14.16). 72.6% are below the compulsory education, 58.8% are retired. 85% of individuals have DM2 and 11.8% DM1. Average time of diagnosis is 13.28 years (SD±11.52) disease, with a mean of 6.8 HbA1c (SD±0.99). The specific measure of the diabetic health profile, presented in the Disinhibited eating 31.50 (SD±21.84), the Barriers to activity 31.40 (SD±18.85) and Psychological distress 18.55 (SD±20.14).

**Conclusions:** Our sample shows a clinical picture below reference values. In different areas of the health profile, the average values are quite low, most noticeably on the level of psychological tension.

**Descriptors:** Diabetes Mellitus; Health-related Quality of Life; Chronic illness; Health outcomes; Ambulatory care.

<sup>a</sup> ruic@estescoimbra.pt

<sup>b</sup> catarinaleitao.pt@gmail.com

<sup>c</sup> pedrof@fe.uc.pt

<sup>d</sup> lmsantiago@netcabo.pt

<sup>e</sup> fontes.ribeiro@gmail.com

484

**TRANSLATION, ADAPTATION AND CULTURAL VALIDATION OF THE WORKSTYLE SHORT FORM FOR PORTUGUESE POPULATION**

Joana Evangelista<sup>a</sup>, Ana Carvalho<sup>b</sup>, Tiago Flório<sup>c</sup>, Emanuel Vital<sup>I</sup>, Maria dos Anjos Dixe<sup>II</sup>

<sup>I</sup>*Escola Superior de Saúde, Instituto Politécnico de Leiria, Leiria, Portugal*

<sup>II</sup>*Unidade de Investigação em saúde (UIS); Escola Superior de Saúde, Instituto Politécnico de Leiria, Leiria, Portugal*

**Introduction:** The work related musculoskeletal disorders are an increasing concern, becoming necessary to adapt and validate instruments to assess the perception of health in work.

**Objective:** Cross-cultural adaptation of the Workstyle Short Form (WSF) to Portuguese (European); identify the sociodemographics, professionals and health characteristics of the sample; and determine the level of perception of health at work and the relationship between Workstyle Short Form - Portuguese version (WSF-PT) and age, pain intensity and gender of the sample.

**Methods:** This study of methodological investigation focused on 165 workers with an average age of 43.1±9.3 years, 72.7% female who spend, on average, 6.7±1.2 hours per day on the computer. Validation followed the same methodology of the authors of the original scale (Feuerstein & Nicholas, 2005) to whom the authorization was requested, as well as the heads of directions of the institutions where the data were collected.

**Results:** After analyzing the fidelity and validity of the items, the WSF-PT was composed of 22 items, that allow the achievement of an overall score (higher scores, worse perception of health at work) organized in 5 dimensions that explain 63.4% of total variance. It has a semantical equivalent and good fidelity levels (Cronbach's alpha =0.89 and Intraclass Correlation =0.89) as well as construct and criterion validity.

**Conclusions:** This study has good psychometric properties that justify the use of WSF-PT in the occupational health area. However, future studies are suggested to improve the reliability and validity of this instrument.

**Descriptors:** Computers; Psychometrics; Work; Occupational health.

<sup>a</sup> joana\_evangelista@gmail.com

<sup>b</sup> anamargaridaccarvalho@gmail.com

<sup>c</sup> tiagof17@hotmail.com

485

### WHAT WAS THE CAUSE OF SKIN RASHES ON CARCAVELOS AND COSTA DA CAPARICA BEACHES LAST SUMMER?

Zilda Morais<sup>a</sup>, Tiago Parracho<sup>b</sup>

*Centro de Investigação Interdisciplinar Egas Moniz. Caparica, Portugal*

**Introduction:** The skin rashes episodes occurred in the summer 2013 in Carcavelos and Costa da Caparica beaches are not yet clarified, being the microalgae hypothesis discarded by the Portuguese Environment Agency. In recent years, jellyfish blooms in the Spanish Mediterranean beaches led to similar effects in swimmers. The jellyfish *Catostylus tagi* (Hackel, 1869) occurs annually in the estuary of the Tagus and Sado rivers but its average abundance is unknown.

**Objective:** To investigate if *C. tagi* could be responsible for the skin rashes episodes.

**Methods:** Samples of *C. tagi*, along with the water of the Tagus, were collected in Trafaria area. The resulting broth of toxins released into water was applied to limited and defined areas of the leg, arm and hands of eight volunteers. The in vivo effect of the toxin was registered by sensory description and photographs of the volunteers.

**Results:** The strength of the effect was related to the number of jellyfish by water volume. The extract of a jellyfish in 100 L of water showed weak and random effect while the extract of a jellyfish in 5 L of water affected all volunteers. In the latter case, red spots of several intensities emerged together with a burning sensation. Edemas were about 0.5 cm in diameter and lasted about 40 minutes, with maximum at 20 minutes.

**Conclusions:** Considering the similarity between the symptoms reported by swimmers and *C. tagi* effects shown in volunteers, it seems that the occurrence of a bloom of this jellyfish in 2013 should not be excluded.

**Descriptors:** public health; skin rashes; seawater safety; sea bath; jellyfish bloom.

<sup>a</sup> zmorais@egasmoniz.edu.pt

<sup>b</sup> tpar2000@hotmail.com

486

### THE LIFE-WORLD OF AGED IN HOMES: ETHNOGRAPHIC PERSPECTIVE

Luiz Fernando M. Xavier<sup>1,a</sup>, Karolina V. D. L. Fagundes<sup>1,b</sup>, Michelly E. Ribeiro<sup>1,c</sup>, Paulo Henrique Maia<sup>1,d</sup>, João Henrique M. Ribeiro<sup>1,e</sup>, Maria Angélica Mendes<sup>1,f</sup>, José V. Silva<sup>1,g</sup>

<sup>1</sup>*Escola de Enfermagem. Universidade Federal de Alfenas. Alfenas, Brazil*

<sup>2</sup>*Escola de Enfermagem Wenceslaus Braz. Itajubá, Minas Gerais, Brazil*

**Introduction:** This study explores the experience of older people living in Long-stay Institution, since it has become an important alternative for the care of older people, mainly in developing countries.

**Objective:** To understand the meaning of the experience of the elderly in Long-stay Institution.

**Methods:** It was used the Ethnographic Methodology and the Interpretative of Culture Theory centered on the concept of semiotic culture, being the Participant Observation conducted in a Long-Stay Institution in the South of Minas Gerais, Brazil.

**Results and Conclusions:** The experience of the institutionalized elderly is express in three dimensions: Transition to the civil status for institutionalized, the process of depersonalization; The elaboration of tactics for adaptation: nor accept everything and avoid be rebel against everything and The life determined in a specific world: dynamics of the institution. The first dimension highlights the process of desingularization of the institutionalized elderly person followed by development of tactics for adaptation, which constitute the second dimension. Lastly, the third dimension emphasizes the dynamics of the Institution, recognizing its structure and professional performance as factors related to older people responses about the institutionalization process. This micro ethnographic description intends to register and provide an interpretative knowledge, even though small, of the elderly, that might promote comprehension of this institutionalized human, who is writing the epilogue to his life story.

**Descriptors:** Life world, Aged, Holmes for the Aged.

<sup>a</sup> lf\_xavier@hotmail.com

<sup>b</sup> karolvitorelli@yahoo.com.br

<sup>c</sup> michellyer@hotmail.com

<sup>d</sup> phmaiaaph@gmail.com

<sup>e</sup> enf.joaoh@gmail.com

<sup>f</sup> mawtws@gmail.com

<sup>g</sup> enfjvitorsilva@oi.com.br

487

### QUALITY OF LIFE, NUTRITIONAL STATUS AND INDIVIDUAL PERCEPTIONS OF WORKING CONDITIONS OF EMPLOYEES WORKING IN A FOOD COMPANY

Carla Corradi Perini<sup>a</sup>, Fabiane de Cássia Savi Tomasiak<sup>b</sup>, Fernanda Laska<sup>c</sup>, Yasmim Anderson Amorim<sup>d</sup>, Cilene da Silva Gomes Ribeiro<sup>e</sup>

*Escola de Saúde e Biociências. Pontifícia Universidade Católica do Paraná. Curitiba, Brazil*

**Introduction:** Quality of life is related to factors such as health, safety and convivial relationships, and has been discussed over the years, involving the State, workers and companies. Thus, it's believed that, due to the social problems and the changing world of work, the corporate social responsibility has become enlarged or challenged because the guarantee of quality of life of employees can create better work conditions and productivity.

**Objective:** To analyze nutritional indicators and individual perceptions of working conditions of employees working in a food company, assessing factors that affect the quality of life of them.

**Methods:** Anthropometric measurements (weight, height, body mass index and waist circumference) and dietary assessment (eating habits and frequency) were performed. The data of workers' perceptions of working conditions were obtained through semi-structured interviews. The method for analysis was the content analysis proposed by Bardin.

**Results:** Were studied 42 subjects, being 28.56% of them overweight or obese, and all of them have increased waist circumference and inadequate dietary profile. In relation to working conditions, the worker's perception is that they perform the work with pleasure and they work in the area of food for quite some time. In addition, the company provides the equipment for prevention that are related to health and wellness, which directly affect their work activities.

**Conclusions:** Although companies promote a safe environment to work, there is still the need to implement health promotion programs that will serve to inform, suggest behavioral strategies, create opportunities and reduce interpersonal barriers, providing more active and healthy life styles.

**Descriptors:** Working conditions. Nutritional status. Health. Quality of life.

<sup>a</sup> carla.corradi@pucpr.br

<sup>b</sup> fabiane.tomasiak@pucpr.br

<sup>c</sup> fernanda020293@hotmail.com

<sup>d</sup> yasmim\_08@hotmail.com

<sup>e</sup> cilene.silva@pucpr.br

488

### INTAKE DIET AND QUALITY OF LIFE IN DIABETIC PATIENTS ADMITTED IN A UNIVERSITY HOSPITAL IN SOUTHERN BRAZIL

Cilene da Silva Gomes Ribeiro<sup>a</sup>, Amanda Kruger<sup>b</sup>, Nathalia Sfredo<sup>c</sup>, Carla Corradi Perini<sup>d</sup>, Fabiane Savi Tomasiak<sup>e</sup>

*Pontifícia Universidade Católica do Paraná, Curitiba, Brazil*

**Introduction:** A balanced diet is important for diabetics because the nutritional requirements should be achieved to prevent acute and chronic complications.

**Objective:** To evaluate the dietary intake of diabetic patients and to evaluate the acceptability of the diet at university hospital.

**Methods:** Cross-sectional, exploratory and descriptive study with 23 diabetic patients, between May and June 2013. Patients who received "diet for diabetes" or "low sodium diet for diabetes" orally exclusively of normal consistency were included. This study was conducted in four steps, the first step occurred quantification of food offered at meals (breakfast, lunch, snack and dinner) through digital scale and measuring cup for liquids, considered "diet offering". The second step were measured of food discarded, considering "diet intake". The third step the acceptability of meals was assessed by Hedonic Scale with 9 points and information about the reasons for rejection. In the last step were calculated the nutritional requirements and consumption of food, using guidelines established by Brazilian Diabetes Society (SBD 2009) for macronutrients and fiber, and Recommended Dietary Allowances (RDA, 1989) for energy by Dietpro 5.5i software.

**Results:** The offer and intake of energy, macronutrients and fiber are insufficient for both genders and guidelines (SBD and RDA). The analysis of acceptability showed that the low acceptance occurs due to lack of appetite and inappropriate to dietary habits.

**Conclusions:** The results suggest the need to adequate the hospital diet for diabetic patients in order to avoid the risk of complications, to reduce the period of intervention and to improve quality of life of patients.

**Descriptors:** Diabetic, Hospital diet, Quality of life, Complications, Eating habits.

<sup>a</sup> cilene.silva@pucpr.br

<sup>b</sup> amanda.kruger@ig.com.br

<sup>c</sup> natisfredo@hotmail.com

<sup>d</sup> carla.corradi@pucpr.br

<sup>e</sup> fabiane.tomasiak@pucpr.br

489

### SOMATOTYPE AND BODY MASS COMPOSITION IN EUROPEAN PORTUGUESE ADULT SPEAKERS

Débora Franco<sup>I,II,a</sup>, Fernando Martins<sup>II,III</sup>, Mário Andrea<sup>II</sup>, Isabel Fragoso<sup>IV,V</sup>, Júlia Teles<sup>IV,V</sup>

<sup>I</sup>Escola Superior de Saúde. Instituto Politécnico de Leiria. Portugal

<sup>II</sup>Centro de Linguística. Universidade de Lisboa. Portugal

<sup>III</sup>Faculdade de Letras. Universidade de Lisboa. Portugal

<sup>IV</sup>Faculdade de Medicina. Universidade de Lisboa. Portugal

<sup>V</sup>Faculdade de Motricidade Humana. Universidade de Lisboa. Portugal

<sup>V</sup>Centro Interdisciplinar para Estudo da Performance Humana. Lisboa, Portugal

**Introduction:** The definition of normative data for speech production involves knowledge of biological differences reflected in the production of linguistic settings. The human body has a specific body composition, which differs from individual to individual, and a specific morphological type.

**Objective:** The aim of our study was to verify if relationships existed between somatotype, body mass composition and acoustic parameters of voice quality in European Portuguese adult speakers.

**Methods:** Seventy four adults, 35 male and 39 female, were assessed to obtain anthropometric and acoustic measures. Subjects were also classified as normal and dysphonic speakers. Morphological characterization was done considering their endomorphism, mesomorphism, ectomorphism, body density, body mass index, fat mass, fat percentage (Fat%), and fat free mass. Voice quality analysis of vowels [a], [i] and [u] was based on fundamental frequency (f0), f0 range, first, second, third and fourth formants, intensity, jitter, shimmer, and Harmonic-to-Noise Ratio (HNR).

**Results:** Multivariate regression analyses were used to identify the morphological variables that significantly predicted acoustic parameters. Height and the ectomorph component have a significant effect on f0 range, whereas Somatotype Attitudinal Distance and Fat% have a significant effect on shimmer and weight, and the mesomorph component on HNR. Additionally, sex and age have a significant effect on frequency parameters, and dysphonia on aperiodic noise variables.

**Conclusions:** The findings suggested that body composition and somatotype have a relationship with acoustic parameters. Morphological measures can add useful information to voice assessment protocols and should be taken into account when considering particular treatment strategies.

**Descriptors:** Voice quality; Dysphonia; Acoustic parameters; Somatotype; Body mass composition.

<sup>a</sup> debora.franco@hotmail.com

490

### FOOD INTAKE QUALITY IN THE PREOPERATIVE AND POSTOPERATIVE OF BARIATRIC SURGERY

Magda Rosa Ramos da Cruz<sup>I,II,III,a</sup>, José Simão de Paula Pinto<sup>II,b</sup>, Antônio Carlos Ligocki Campos<sup>II,c</sup>, Alcides José Branco Filho<sup>III,d</sup>, Ana Luíza Savaris Menegotto<sup>III,e</sup>, Egon Wildauer<sup>II,f</sup>

<sup>I</sup>Pontifícia Universidade Católica do Paraná. Paraná, Brazil

<sup>II</sup>Universidade Federal do Paraná. Paraná, Brasil

<sup>III</sup>Advanced Laparoscopy Center of Parana. Paraná, Brazil

**Introduction:** Bariatric surgery is effective treatment for weight loss and metabolic control in morbidly obese patients. It is known that surgery reduces food intake and nutrient absorption facilitating weight loss, although the weight loss in most operations will depend directly on the total energy intake.

**Objective:** The aim in this paper is to evaluate the food intake quality in the preoperative and postoperative and verify the weight loss in patients who underwent bariatric surgery.

**Methods:** It was analyzed registration forms of 100 patients from the Nutrition Service of CEVIP with 3 months, 6 months, and 1 year of surgery.

**Results:** Improvement was observed in the quality of the food intake and increase in physical activity. The fluid intake in these patients is reduced. The protein intake was adequate after one year of surgery. In this study was observed that the bariatric surgery was effective regarding the weight loss and improvement in the food intake.

**Conclusions:** Special attention should be given in the first year of surgery, in the use of vitamin, mineral, and protein supplements. The nutritionist has an essential role in the postoperative of bariatric surgery, guiding the food intake, encouraging changes in behavior, as well as to prescribe nutritional supplements whenever is necessary.

**Descriptors:** bariatric surgery; weight loss; food intake.

<sup>a</sup> nutriclinmagda@bol.com.br

<sup>b</sup> simao@ufpr.br

<sup>c</sup> accampos@ufpr.br

<sup>d</sup> ajbranco@terra.com.br

<sup>e</sup> ana\_luz@hotmail.com

<sup>f</sup> egon0910@gmail.com

491

## PREDICTORS OF POSTPARTUM QUALITY OF LIFE IN BRAZILIAN MOTHERS

Elizian Braga Rodrigues Bernardo<sup>1,a</sup>, Lara Leite de Oliveira<sup>1,11,b</sup>, Hellen Livia Oliveira Catunda<sup>1,c</sup>, Luciana Maria Oliveira Nascimento<sup>11,d</sup>, Mirna Fontenele de Oliveira<sup>1,e</sup>, Priscila de Souza Aquino<sup>1,f</sup>, Ana Karina Bezerra Pinheiro<sup>1,g</sup>

<sup>1</sup>Universidade Federal do Ceará. Brazil

<sup>11</sup>Universidade do Porto. Portugal

<sup>111</sup>Maternidade Escola Assis Chateaubriand. Fortaleza, Brazil

**Introduction:** The postpartum period can have a significant physical, emotional, and social impact on the quality of a woman's life. Most postpartum research has focused on physical complications and only a few studies have specifically investigated quality of life.

**Objective:** The purpose of this study was to explore predictors affecting the quality of life of postpartum Brazilian mothers.

**Methods:** A cross-sectional Quality of Life survey was performed in 210 Brazilian mothers during the early postpartum period. Data was collected using an interview technique and two instruments: 1) a maternal questionnaire and the 2) Maternal Postpartum Quality of Life tool/ Brazilian version. The association between maternal characteristics and quality of life in the postpartum period was investigated with bivariate and multivariable analyses.

**Results:** Mothers who had the best Quality of Life were white, registered students, 30-40 years of age, who were married or living with a partner, and without physical complaints; in addition, they had at least an 8th grade education, more than 4 children, and had attended more than 8 prenatal visits with a nurse. The stepwise model indicated that white race ( $p < .05$ ) and married or living with a partner ( $p < .05$ ) were the best predictors of Quality of Life in postpartum women.

**Conclusions:** Marital status and race conditions may predict quality of life in postpartum Brazilian mothers. In addition, improved knowledge concerning the postpartum, maternal experience may help develop health interventions to enhance the quality of life of this population.

**Descriptors:** Nursing; Mothers; Postpartum; Quality of life; Predictors.

<sup>a</sup> priscilapetenf@yahoo.com.br

<sup>b</sup> mirnafontenele@ig.com.br

<sup>c</sup> elizian\_rodrigues@yahoo.com.br

<sup>d</sup> hellen\_enfermagem@yahoo.com.br

<sup>e</sup> lara.leite@hotmail.com

<sup>f</sup> elizbernardo@hotmail.com

<sup>g</sup> anakarinaufc@hotmail.com

492

## AVERAGE OF SODIUM INTAKE OF MEALS SUPPLIED TO WORKERS

Cilene da Silva Gomes Ribeiro<sup>a</sup>, Amanda Almeida da Cruz<sup>b</sup>, Fabio Teixeira Farias<sup>c</sup>, Flavia Auler<sup>d</sup>

Pontifícia Universidade Católica do Paraná. Brazil

**Introduction:** The prevalence of hypertension is increased and excessive sodium intake is one of the most evident etiologies of this disease. Currently, the eating out is routine of many individuals, especially in large cities. The restaurants have become an important place of collective feeding, and the offer of large number of preparations and autonomy of choice to consumers, has generated questions about the choices often erroneous.

**Objective:** To evaluate the amount of intrinsic and extrinsic sodium offered and consumed by a sector of workers in a restaurant.

**Methods:** We used parameter values as sodium established by Food Program Worker (Programa de Alimentação do Trabalhador) and WHO (2007). The amounts of sodium intrinsic (inherent in each food) and extrinsic (added for seasoning) of food served and consumed by the workers were quantified by weighing and factsheets.

**Results:** According to the analysis of chemical composition performed was observed that the amounts of intrinsic sodium in foods used to prepare the preparations were on average in 1,002 mg per serving of food served. The average per capita supply of the intrinsic and extrinsic sodium in the meals was 3,241.34 mg, corresponding to 8.10 g of salt in each of the meals consumed by workers.

**Conclusions:** The workers who consume meals at the restaurant in question consume higher amounts of sodium, which can lead to problems in the quality of life of this population.

**Descriptors:** sodium intake, collective feeding, workers, eating out, chemical composition.

<sup>a</sup> cilene.silva@pucpr.br

<sup>b</sup> amanda.almeida.cruz@gmail.com

<sup>c</sup> fabio\_cfc@hotmail.com

<sup>d</sup> flavia.auler@pucpr.br



493

### STRATEGIES USED BY CAREGIVERS IN COMMUNICATION WITH PERSON WITH APHASIA

Barbara Santiago<sup>a</sup>, Gabriela Teixeira<sup>b</sup>, Ana Rita Reis<sup>c</sup>, Márcia Marques<sup>d</sup>, Sónia Pós de Mina, Maria dos Anjos Dixe

*Escola Superior de Saúde. Instituto Politécnico de Leiria. Portugal*

**Introduction:** Communicate with a person with aphasia is not always easy, consequently caregivers need to use a set of strategies for achieving communicate effectively.

**Objective:** Describe the strategies used by caregivers in communication with the person with aphasia.

**Methods:** Descriptive study performed on a sample of seven caregivers of people with aphasia who answer to a structured interview consisting of the dimension conversational skills with CAPPA-P [Conversation Analysis Profile for People with Aphasia, (Whitworth, Perkins & Lesser, 1997)]. The study was conducted in accordance with the principles of the Declaration of Helsinki.

**Results:** The seven caregivers mentioned thirteen different strategies. The strategy with the highest frequency of use (23,64%) was “let the patient think and talk”, being applied in most situations. The second most used (18,18%) was “try to guess”. Then was used “correct the patient” (16,63%), “complete words” (9,09%), “let the patient stop and rephrase” (7,27%), “try to talk”, (5,45%), “give clues” (5,45%), “ask to repeat” (3,64%) and “forgets” (3,64%). Are also used four other strategies, once each (1,82%): “performs gestures”, “seek the objects of the response targets”, “stops” and “let the patient think, speak and rephrase.”

**Conclusions:** The caregivers use the strategies in an instinctive way and, in general, use the same regardless of the specific difficulties experienced. Therefore, the strategies used are not always correct nor the best help to the partner, so it's necessary that the speech therapist accompanying the person with aphasia provides appropriate strategies to caregivers.

**Descriptors:** strategies; aphasia; caregivers; communication; speech therapy.

<sup>a</sup>barbaracomtiago19@gmail.com

<sup>b</sup>gabriela.teixeiro88@gmail.com

<sup>c</sup>ritaspreis@hotmail.com

<sup>d</sup>marciacmarques@hotmail.com

494

### BODY PRACTICE'S EFFECTS OF LIAN GONG IN HEALTH PROMOTION: A LITERATURE REVIEW

Raiana Soares de Sousa Silva<sup>1,a</sup>, Juliana Evaristo Sousa<sup>1,b</sup>, Renata Miranda de Araújo Laet Lopes<sup>1,c</sup>, Nayla Raabe Vênção de Moura<sup>1,d</sup>, Ana Carolina Ferrer Lobo<sup>1,e</sup>, Eduardo Araújo da Silva<sup>1,f</sup>, Janaína Maria Medeiros Macêdo Mênêzes<sup>1,g</sup>

<sup>1</sup>Universidade Federal do Piauí. Teresina, Brazil

<sup>2</sup>Universidade Estadual do Piauí. Teresina, Brazil

**Introduction:** With respect to health promotion, very important subjects are discussed, such as prevention and control of diseases, occupational diseases and chronic non-communicable diseases such as hypertension, obesity and diabetes. Due to the high risk that these diseases bring to the quality of life and public health in general it is necessary to use new methods that, combined with conventional treatment, reduce the impact and incidence of these diseases. As an example there is the Lian Gong, an alternative practice of Chinese Oriental medicine which incorporates 18 simple movements divided into steps, stretching, slow breathing and environment with music, working the body and mind relationship.

**Objective:** To review the literature on the effects of body Lian Gong practice in health promotion.

**Methods:** This study was done through a literature search of books, journals and articles present in the databases: SciELO and LILACS, using the following keywords: liang gong, body practice, Chinese medicine. The articles analyzed are dated from the period between 2004 and 2013.

**Results:** The literature review showed, according to the author, that Lian Gong provides direct benefits to health practitioners, both in physical health, providing reduction of pain, stretching and strengthening, as mental health, reducing stress levels, improving mood and social interaction. Moreover, it was noticed a decrease in medication use by practitioners.

**Conclusions:** Lian Gong is an effective practice in the restoration and maintenance of health, promoting well-being, whether individually or collectively, and may be used preventively or as adjuvant therapy in controlling diseases already installed.

**Descriptors:** body practice; health promotion; preventive health; public health; quality of life.

<sup>a</sup>raiana\_sousa@hotmail.com

<sup>b</sup>ju\_evaristo@hotmail.com

<sup>c</sup>renataa\_miranda@hotmail.com

<sup>d</sup>raabe@hotmail.com

<sup>e</sup>caroolferrer@hotmail.com

<sup>f</sup>eduardoaraujo@hotmail.com

<sup>g</sup>janainamenezes14@hotmail.com

495

### THE MOTIVATIONAL FACTORS OF COLLEGE STUDENTS TO ENGAGE IN A PHYSICAL ACTIVITY PROGRAM

Nuno Amaro<sup>1,a</sup>, Luís Coelho<sup>1,II,b</sup>, João Cruz<sup>1,c</sup>, Rui Matos<sup>1,II,d</sup>, Pedro Morouço<sup>III,e</sup>

<sup>1</sup>Research Centre for Human Movement Sciences. Instituto Politécnico de Leiria. Leiria, Portugal

<sup>II</sup>Investigation Centre in Life Quality. Instituto Politécnico de Leiria. Leiria, Portugal

<sup>III</sup>Centre for Rapid and Sustainable Product Development. Instituto Politécnico de Leiria. Leiria, Portugal

**Introduction:** Physical activity is considered an excellent option to achieve an optimum health condition. However, college students are usually linked to a sedentary life style, compromising health and life quality. Previous studies stated that men are usually linked to exercise due to challenge and fitness, while women look for appearance and stress management.

**Objective:** The aim of this study was to analyse which are the motivational factors that may lead college students to engage in a physical activity program. In addition, it was intended to verify possible differences between genders.

**Methods:** An online questionnaire was answered by 606 (395 ♀ and 211 ♂) college students.

**Results:** Overall, students pointed as major factors to engage in a regular physical activity program “health improvement” (84.2%), “body image improvement” (65.0%), “leisure time occupation” (36.1%), and “meet other people” (26.6%). Results were similar between male and female students, except for the higher importance given by the latter in “meet other people” (21.3 vs. 36.5%,  $p < 0.001$ ).

**Conclusions:** When college students were asked which motivational factors would make them engage in a regular physical activity program, health improvement presented the higher connotation. This result suggests that students are aware of the benefits of physical activity. Appearance took second place, inducing that the aesthetic factor also has great relevance for this population. The only differences between genders were in the factor “meeting other people”, suggesting that female students give more meaning to the sociological features. These results provide the necessary data to create an effective regular physical activity program.

**Descriptors:** health, exercise; quality of life.

<sup>a</sup> nuno.amaro@ipleiria.pt

<sup>b</sup> coelho@ipleiria.pt

<sup>c</sup> joaocruz@ipleiria.pt

<sup>d</sup> rui.matos@ipleiria.pt

<sup>e</sup> pedro.morouco@ipleiria.pt

496

### CORRELATION BETWEEN FINE AND GROSS MOTOR COORDINATION IN CHILDREN

Luís Coelho<sup>1,II,a</sup>, Nuno Amaro<sup>1,b</sup>, João Cruz<sup>1,c</sup>, Catarina Leitão<sup>1,d</sup>, Miguel Bernardes<sup>1,e</sup>, Pedro Morouço<sup>1,II,f</sup>, Rui Matos<sup>1,II,g</sup>

<sup>1</sup>Research Centre for Human Movement Sciences. Instituto Politécnico de Leiria. Portugal

<sup>II</sup>Investigation Centre in Life Quality. Instituto Politécnico de Leiria. Portugal

<sup>III</sup>Centre for Rapid and Sustainable Product Development. Instituto Politécnico de Leiria. Portugal

**Introduction:** It is well documented that sedentary life styles compromise appropriate levels of health and life quality. Furthermore, low levels of regular physical activity leads to weaker levels of motor coordination. Within children’s motor coordination literature, focus is mostly put on fine and gross coordination separately. The link between these two could be a good indicator for how balanced motor coordination is developing in a child, given a specific age.

**Objective:** The present study focused on analysing possible correlations between fine and gross motor coordination.

**Methods:** From IPL Sports Academy, in Leiria, sixteen children (7 ♀ and 8 ♂, aged 5-10 years) were recruited. Gross and fine motor coordination were assessed using the test battery “Körperkoordinationstest für kinder” (KTK) and Minnesota manual dexterity test (MMD) respectively. It was also used a handgrip dynamometer to assess hand-grip strength (HS).

**Results:** Strong and positive statistically significant correlations were found between age and HS ( $r = 0,82$ ,  $p = 0,000$ ) ranging from 5,7kg to 20,1 kg. Moderate and negative statistically significant correlations were observed between children’s age and MMD test ( $r = -0,71$ ,  $p = 0,005$ ). No statistically significant correlations were found between results from KTK and MMD tests ( $p > 0,05$ ). Negative and moderate statistically significant correlations were found between MMD tests and HS tests ( $r = -0,51$ ,  $p \leq 0,05$ ).

**Conclusions:** Overall gross motor coordination performance cannot be used to determine hands fine motor coordination performance. Nevertheless, children with better results on HS were faster manipulating objects with their hands, which demonstrates an existing and significant link between these two types of coordination for the same limb.

**Descriptors:** Motor coordination; Fine motor coordination; Gross motor coordination; Motor coordination assessment; Ktk.

<sup>a</sup> coelho@ipleiria.pt

<sup>b</sup> nuno.amaro@ipleiria.pt

<sup>c</sup> joaocruz@ipleiria.pt

<sup>d</sup> catarina.leitao@ipleiria.pt

<sup>e</sup> miguelbernardes2@gmail.com

<sup>f</sup> pedro.morouco@ipleiria.pt

<sup>g</sup> rui.matos@ipleiria.pt

497

### STRESS IN UNIVERSITY STUDENTS AND CARDIOVASCULAR RESPONSE TO ACADEMIC STRESSORS

Teresa Guimarães<sup>a</sup>, Ana Patrícia Silva<sup>b</sup>, Iolanda Monteiro<sup>c</sup>, Rui Gomes<sup>d</sup>

*Escola Superior de Tecnologia da Saúde. Instituto Politécnico de Lisboa. Portugal*

**Introduction:** University students are frequently exposed to events that can cause stress and anxiety, producing elevated cardiovascular responses. Repeated exposure to academic stress has implications to students' success and well-being and may contribute to the development of long-term health problems.

**Objective:** To identify stress levels and coping strategies in university students and assess the impact of stress experience in heart rate variability (HRV).

**Methods:** 17 university students, 19-23 years, completed the University Students Stress Inventory, the Depression Anxiety Stress Scales and the Ways of Coping Questionnaire. Two 24h-Holter recordings were performed, on academic activity days, including one of them an exam situation.

**Results:** Students tend to present moderate stress levels, and prefer problem-focused coping strategies in order to manage stress. Exam situations are perceived as significant stressors. Although we found no significant differences in HRV (SDNN), between days with and without an exam, we registered a lower SDNN score and a variation in heart rate (HR) related to exam situation (maximum HR peak at 10 minutes before the exam, and total HR recovery 20 minutes after the exam), reflecting sympathetic activation due to stress.

**Conclusions:** These results suggest that academic events, especially those related to exam situations, are the cause of stress in university students, with implications at cardiovascular level, underlying the importance of interventions that help these students improve their coping skills and optimize stress management, in order to improve academic achievement and promote well being and quality of life.

**Descriptors:** Academic stress; university students; heart rate; heart rate variability; coping strategies.

<sup>a</sup> tguimaraes@estesl.ipl.pt

<sup>b</sup> ana.silva@estesl.ipl.pt

<sup>c</sup> iolandamonteiro88@gmail.com

<sup>d</sup> rui\_gomes\_01@hotmail.com

498

### QUALITY OF LIFE OF PALLIATIVE PATIENTS – DIFFERENCES BETWEEN MEN AND WOMEN

Ana Querido<sup>a</sup>, Maria dos Anjos Dixe<sup>b</sup>

*Escola Superior de Saúde. Instituto Politécnico de Leiria. Portugal*

**Introduction:** Quality of life (QOL) is an important issue for palliative patients and a relevant indicator of health care teams performance. Although men and women have different roles in modern societies, there is a consensus on equal rights concerning health and illness. Health professionals aimed better QOL to all patients, no matter sex differences. Palliative patients are frequently affected by symptoms interfering with daily living activities, compromising their QOL. Nevertheless men and women have the same rights, there might be different impact of symptoms on QOL, which is unknown.

**Objective:** To identify the major symptoms affecting QOL and their prevalence by sex; To analyze differences in QOL between men and women.

**Methods:** This correlational study used a socio demographic/clinical questionnaire and McGill QOL-PT Questionnaire (scaling 0-10, lower scores indicate worse QOL). 205 palliative patients were recruited from Portuguese palliative care settings – inpatient, day units and home care. Ethical committees approved the research and informed consent was obtained.

**Results:** Patients mean age=64,51(+/-12,3), 55,1% men, 85,40% diagnosed with cancer, 73,17% married, living with family (84,39%). Fatigue, pain and insomnia were the most prevalent symptoms in palliative patients, sometimes coexisting. Women experienced more intense fatigue, pain and depression than men. Except for support ( $p>0,05$ ), men experienced better global QOL than women ( $p<0,001$ ), physical, psychological and existential ( $p<0,05$ ).

**Conclusions:** QOL is significantly lower in women at the end of life. Palliative care teams need to access pain, fatigue and depression in palliative patients and especially care should be addressed to women in such condition.

**Descriptors:** Quality-of-life; Palliative Patients; Palliative Care; Gender differences; End-of-life.

<sup>a</sup> ana.querido@ipleiria.pt

<sup>b</sup> maria.dixe@ipleiria.pt

499

### CARING FOR SOMEONE WITH ADVANCED DISEASE AT HOME: THE CAREGIVER'S PERCEPTIONS

Amélia Ferreira<sup>I,II,a</sup>, José Martins<sup>II,III,b</sup><sup>I</sup>*Unidade de Cuidados na Comunidade de Lousada. Lousada, Portugal*<sup>II</sup>*Faculdade de Medicina. Universidade do Porto. Porto, Portugal*<sup>III</sup>*Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal*

**Introduction:** In the past decades, the improvement of the social and health conditions and the scientific advances led to a progressive demographic ageing and new health necessities. Consequently, the prevalence of chronic, progressive and incapacitating diseases arose, resulting into relatively long periods of dependency.

**Objective:** To describe and analyze the perceptions and experiences of the caregivers of people with advanced disease in the community.

**Methods:** Exploratory-descriptive study, using a qualitative methodology, with a phenomenological approach. A semi-structured interview was used. Eight caregivers of people with advanced disease living in a community of the interior north region of Portugal were interviewed, at their homes, from January to May 2013. All interviews were audio recorded and consequently transcript and analyzed using the Giorgi method.

**Results:** All caregivers are female and catholic. The average age is 57,3 years. The majority is a daughter (50,0%), married (87,5%), stay at home women (75,0%), with a low school level (75% have 4 years or less of school). The average time as caregiver is 7,7 years. Through the reading and analyzes of the interviews, eight central themes emerged: being a caregiver of a person with advanced disease in the community, communication, human dignity respect, difficult and facilitate factors, coping mechanisms, positive and negative feelings. The first theme is central and influenced by the other seven themes.

**Conclusions:** The caregivers of people with advanced disease in the community context live enriching experiences with positive and negative repercussions that echo through their life and health.

**Descriptors:** Community; Advanced Disease; Caregiver.

500

### CARING FOR PEOPLE WITH DEMENTIA IN THE COMMUNITY: CAREGIVER'S BURDEN AND QUALITY OF HEALTH

Alexandra Pereira<sup>I,a</sup>, José Martins<sup>II,III,b</sup><sup>I</sup>*Unidade de Cuidados na Comunidade de Lousada. Lousada, Portugal*<sup>II</sup>*Faculdade de Medicina. Universidade do Porto. Porto, Portugal*<sup>III</sup>*Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal*

**Introduction:** Dementia is an acquired condition. The major known risk factor is age. In an ageing society, dementia emerges as a relevant topic due to its long evolution course that can have devastating health and social repercussions for the caregiver in the community context.

**Objective:** To analyze the burden and quality of health of the caregiver of the person with dementia in the community context.

**Methods:** Quantitative exploratory and descriptive-correlational study. The instruments used were the Zarit Burden Interview and the EQ-5D Scale. The sample is intentional non-probabilistic (n=153). Results were analyzed using SPSS 19.0 and Pearson correlation coefficient (p≤0,05).

**Results:** The majority of the caregivers are females (83,66%), married (79,74%), with 4 years or less of school (47,06%), retired (32,68%). The average age is 56,71 years. In average, they're caregivers for 5,67 years and spent 13,55 hours/day providing care. The main reason for becoming a caregiver is family/emotional ties. Average Zarit Burden Interview score was 60,01 points. Average EQ-5D score obtained was 0,61 points. Average EQ-VAS score obtained was 62,96 points. Moderate levels of pain (61,44%), anxiety and depression (56,21%) were found. Statistically significant inverse correlation was found between burden and quality of health.

**Conclusions:** Caring for someone with dementia in the community can be quite challenging. Low levels of quality of health and high levels of burden were found and an inverse correlation between them was verified, which confirms that caring for someone with dementia can led to negative physical and mental health repercussions.

**Descriptors:** Quality of health; Caregiver; Dementia; Community.

<sup>a</sup> amelia.ferreira123@sapo.pt<sup>b</sup> jmartins@esenfc.pt<sup>a</sup> alemnap@gmail.com<sup>b</sup> jmartins@esenfc.pt

501

### ANXIETY DISORDERS: A STUDY WITH PATIENTS IN A BRAZILIAN PSYCHIATRIC HOSPITAL

Raíla Tôrres de Meneses<sup>1,a</sup>, Samantha Luzia Guimarães Franco<sup>1,b</sup>, Márcia Astrês Fernandes<sup>1,c</sup>, Renata Dias da Silva Santos<sup>1,d</sup>, Anna Karolinne de Oliveira Silva<sup>1,e</sup>, Priscila do Vale Machado<sup>1,f</sup>, Francisca Fabiana Fernandes Lima<sup>1,g</sup>

<sup>1</sup>Faculdade de Saúde. Ciências Humanas e Tecnológicas Do Piauí. Brazil

<sup>11</sup>Universidade Federal do Piauí. Brazil

**Introduction:** Anxiety is a feeling characterized by fear and apprehension derived from something unknown. Even though it has a physiological character, anxiety is recognized as pathological when it is exaggerated, disproportionate to the stimulus. Anxiety disorders are the most prevalent group among the psychiatric disorders, and it affects all social classes worldwide.

**Objective:** Analyze how individuals live with anxiety disorders in their daily lives; discuss the implications of anxiety disorders in social, family, emotional and occupational lives and analyze the degree of psychic distress of the individual.

**Methods:** This is an exploratory and descriptive survey with a qualitative approach. The research was approved by the Ethics Committee in Research, CAAE protocol 10909512.0.0000.5210 and abides by the National Council of Health 466/2012. Semistructured interviews were done with 20 subjects, in a Psychiatric Hospital of reference in the Northeast of Brazil, during the months of March and April 2013. After collection, the data were divided in categories.

**Results:** The analysis revealed that anxiety disorders are often associated with other psychic morbidities. Interviewees reported difficulties in affective-relational, productive and socio-cultural aspects, and for the most of them the diagnosis were connected with negative feelings and stress.

**Conclusions:** Anxiety disorders weaken people and their social relationships. It must be emphasized that the individualities of each client, require a specific and effective care plan able to meet his needs. Moreover, such studies may contribute to the reflection of nursing practice in order to improve the care provided to individuals with that diagnosis.

**Descriptors:** Disorder; Anxiety; Stress; Psychic.

<sup>a</sup> railameneses@hotmail.com

<sup>b</sup> samannthinha-lindinha123@hotmail.com

<sup>c</sup> m.astres@bol.com.br

<sup>d</sup> renatadias92@hotmail.com

<sup>e</sup> annakrol@hotmail.com

<sup>f</sup> prisciladovale@live.com

<sup>g</sup> ffabiana-fl@hotmail.com

502

### RELATIONSHIP BETWEEN MENTAL ILLNESS AND WORK: STUDY IN A BRAZILIAN PSYCHIATRIC HOSPITAL

Francisca Fabiana Fernandes Lima<sup>1,a</sup>, Nadyelle Elias Santos Alencar<sup>1,b</sup>, Marcia Astres Fernandes<sup>1,c</sup>, Géssica Spindola Castelo Branco<sup>1,d</sup>, Adriana Silveira Costa<sup>1,e</sup>

<sup>1</sup>Universidade Federal do Piauí. Brazil

<sup>11</sup>Faculdade de Saúde, Ciências Humanas e Tecnológicas Do Piauí. Brazil

**Introduction:** Work assumes vital importance to the survival of humans, being a mean for achieving interpersonal and material achievements, however, it has become a way of dissatisfaction, attrition and mental suffering, being responsible for the development of various psychiatric diseases.

**Objective:** To analyze the influences, of work, in the arise, treatment and recovery from mental disorders.

**Methods:** Qualitative and exploratory Field Research, conducted between March and April 2013 in a Psychiatric Hospital in Northeast of Brazil with 20 subjects aged between 21 and 78 years. The study was approved by the Ethics Committee in Research of the University Center, UNINOVAFAP, CAAE 10894812.0.0000.5210 protocol and obeyed the National Council of Health 466/2012.

**Results and Conclusions:** Mental disorders related to work reported a higher incidence among males, and on professions, the most frequent were police officers and construction workers, followed by traders, and drivers. The most frequent diagnosed pathologies include: schizophrenia (40%), Anxiety Disorders (25%) and Depressive Disorders (20%). Various situations at work contributed to the mental illness, such as unsanitary conditions and mentally stressful situations. However, even though the work has been the cause of physical and mental illness, for some, the labor is a therapeutic way to guarantee a healthy life. Thus, further studies are needed to establish healthy limits in the work routine, preventing the ills associated with it.

**Descriptors:** Mental Health; Mental Disorders; Work; Occupational Health; Brazil.

<sup>a</sup> ffabiana-fl@hotmail.com

<sup>b</sup> nadyelle-elias@hotmail.com

<sup>c</sup> m.astres@bol.com.br

<sup>d</sup> gehcastelobranco@hotmail.com

<sup>e</sup> adrianasilveiracosta@hotmail.com

503

### VAGINAL PARTURITION, SEXUALITY AND EPISIOTOMY: AN INTEGRATIVE REVIEW

Flávia Dayana Ribeiro da Silveira<sup>a</sup>, Grazielle Roberta Freitas da Silva<sup>b</sup>, Nadyelle Elias Santos Alencar<sup>c</sup>, Francisca Fabiana Fernandes Lima<sup>d</sup>, Renata Dias da Silva Santos<sup>e</sup>, Priscila do Vale Machado<sup>f</sup>, Anna Karolinne de Oliveira Silva<sup>g</sup>

*Universidade Federal do Piauí. Brazil*

**Introduction:** The way to bring the world a new life has suffered gradual and progressive modifications over the centuries, in order to provide benefits for parturition to the binomial mother-child. Based on this, the aspiration for answers inside the health area becomes constant and even what formerly was judged as beneficial into parturition assistance, to be known, episiotomy, incision widely used for parturients in Brazil, can be questionable, in view of the physical and psychic consequences.

**Objective:** To reflect about the assistance to vaginal birth, with emphasis in the necessities and consequences of Episiotomy.

**Methods:** It is an integrative revision of literature, performed between April and May of 2013, in the databases Scielo and Lilacs. Utilizing the key words: normal parturition, episiotomy e sexuality, this search resulted in 145 articles, being 12 selected. Were prepared 2 analysis categories: Episiotomy of routine in assistance to normal parturition and Episiotomy and sexuality: a physical and psychical trauma.

**Results and Conclusions:** Gradually, studies about episiotomy as a dispensable procedure are arisen, whose unreasonable use entails physical harm, such as blood loss, suture needs and perineal pain, with the possibility to happen intestinal, urinary and sexual disfunctions, in addition to psychical harm to the woman during the parturition procedure, puerperium and marital/sexual life. It is Affirmed, then, the necessity to review the parturients practices of assistance, considering the cientifical evidencies and individualized cares. In this sense, there is a necessity to stimulate humanized models of services, respecting the singularity of each parturient.

**Descriptors:** Natural Childbirth; Sexuality; Episiotomy; Assistance; Brazil.

<sup>a</sup> flaviadayana@gmail.com

<sup>b</sup> grazielle\_roberta@yahoo.com.br

<sup>c</sup> nadyelle-elias@hotmail.com

<sup>d</sup> ffabiana-fl@hotmail.com

<sup>e</sup> renatadias92@hotmail.com

<sup>f</sup> prisciladovale@live.com

<sup>g</sup> annakrol@hotmail.com

504

### THEORY OF DIVERSITY AND UNIVERSALITY IN CULTURAL CARE: IN FOCUS THE FEMININE SEXUALITY

Flávia Dayana Ribeiro da Silveira<sup>a</sup>, Maria Helena Barros Araújo Luz<sup>b</sup>, Grazielle Roberta Freitas da Silva<sup>c</sup>, Nadyelle Elias Santos Alencar<sup>d</sup>, Francisca Fabiana Fernandes Lima<sup>e</sup>, Renata Dias da Silva Santos<sup>f</sup>, Priscila do Vale Machado<sup>g</sup>

*Universidade Federal do Piauí. Brazil*

**Introduction:** Caring about the human being goes beyond the prevention concepts, diagnosis, treatment and rehabilitation. Exerting a care with a satisfactory effect encompasses knowledge and notions about the cared being, regarding the values, beliefs and the cultural context in which it is inserted. Leininger's Theory of Diversity and Universality in Cultural Care refers to a set of concepts and hypothesis of nursing interconnected and reasoned in the cultural needs of individuals and groups, with focus on performing a care in the holistic way. The presence of sexuality, inside the feminine universe, plays a role with a strong cultural influence. Not far, nursing cares, can be in the basic or hospital attention, they must be performed in an attentive way, respecting the individuality and the representativeness this theme exerts in women.

**Objective:** Standing out the importance to know the cultural meaning in which the cared being is inserted, seeking a directed attention in a holistic way.

**Methods:** It is a literature review performed by indirect, descriptive and exploratory research with keywords in books and specialized periodicals about fundaments of the Theory of Diversity and Universality in Cultural Caring.

**Results and Conclusions:** Feminine sexuality culture is a result from a historical construction of sexist principles in which the woman submits to the most eccentric actions seeking to achieve pleasing sexually her partner. It depends on nurses to adopt a more flexible professional posture to the cultural reality of these women, based on the Theory of Diversity and Universality in Cultural Care, in order to observe world view.

**Descriptors:** Sexuality, Episiotomy; Culture; Nursing Care; Brazil.

<sup>a</sup> flaviadayana@gmail.com

<sup>b</sup> mhelenal@ufpi.br

<sup>c</sup> grazielle\_roberta@yahoo.com.br

<sup>d</sup> nadyelle-elias@hotmail.com

<sup>e</sup> ffabiana-fl@hotmail.com

<sup>f</sup> renatadias92@hotmail.com

<sup>g</sup> prisciladovale@live.com

505

### THE TERMINAL ILLNESS WITHIN THE FAMILY SYSTEM: A CRITICAL REVIEW OF LITERATURE

Neide Portela Areia<sup>a</sup>, Sofia Major<sup>b</sup>, Ana Paula Relvas<sup>c</sup>  
*Faculdade de Psicologia e Ciências da Educação,  
 Universidade de Coimbra. Portugal*

**Introduction:** The terminal phase of an illness is a critical period for the patient and his family. The terminal patient presents highly complex symptomatology due to the deterioration of his functional status. Therefore, attending the dying patient can be a highly traumatic experience for families.

**Objective:** This study aims to clarify the impact that terminal illness (TI) has in the family functioning dimensions and what needs are experienced by families and, determine which validated psychotherapeutic approaches respond effectively to the difficulties experienced by families.

**Methods:** For that purpose, it was conducted a critical review of literature in which were included scientific papers published in the last decade and handbooks about end-of-life care. The research was done through online databases (e.g., B-On, ProQuest) using the following keywords “terminal illness”, “end-of-life care” and “palliative care”, combined with terms like “family”, “family functioning” and “caregivers”.

**Results:** The possibility of the patient’s death dominates the whole family, forcing it to live a process of anticipated loss and intense grief, with intricate implications on its dynamics of organization, structure and functioning. Indeed, the lack of a professional approach to family needs can have a negative impact on the family system, compromising its adaptive experience of anticipatory and post-mortem grief.

**Conclusions:** The study of family experience in the context of TI is very incipient, which impairs the development of effective psychotherapeutic interventions in responding to family needs. Therefore it is critical to conduct more studies to determine the influence of TI on families and their support needs.

**Descriptors:** Terminal illness; Family; Grief; Intervention.

<sup>a</sup> neideareia@hotmail.com  
<sup>b</sup> smajor@fpce.uc.pt  
<sup>c</sup> aprelvas@fpce.uc.pt

506

### PERCEPTION OF THE PERSON WITH APHASIA AND ITS CAREGIVER ABOUT THE DIFFICULTIES AND CONVERSATIONAL CHANGES IN THE COMMUNICATION PATTERNS IN THE POST-MORBID PERIOD

Márcia Marques<sup>a</sup>, Ana Rita Reis<sup>b</sup>, Barbara Santiago<sup>c</sup>,  
 Gabriela Teixeira<sup>d</sup>, Sónia Pós de Mina<sup>e</sup>, Maria dos  
 Anjos Dixe<sup>f</sup>

*Escola Superior de Saúde. Instituto Politécnico de  
 Leiria. Portugal*

**Introduction:** It is essential to understand the difficulties of Aphasia that affect the communicative dyads as well as in the conversational changes, for a effective therapy intervention.

**Objective:** Determine the perception of the dyad difficulties and conversational changes, in the communication patterns in the post-morbid period.

**Methods:** Descriptive study involving seven dyads through a structured interview, emphasizing the difficulties and the communicative changes in post-morbid period. The study was conducted according the principles of the Declaration of Helsinki.

**Results:** The biggest difficulty of the dyad, with 100% of self awareness, was “find the word” followed by “letter and word change” with 71% to 100%. On the other hand, the lowest (between 0% and 6%) difficulty was found the exchange of “yes” for “not”, the unintelligible sentences, not understanding of the verbal material, the difficult to say what not realize, interrupting the conversation, and the repeated conversations. The biggest change on the communicational patterns occurred in the use of communicational gestures (64%) and in the change of the conversation styles (57%), in the characteristics inherent to the conversation (50%), in the conversation topic changes (29%); with 21% self awareness we found communicational partners, the situations of conversation and the auditive problems; finally, the use of facial expressions (14%).

**Conclusions:** The intervention in Speech Language Therapy adjusted for each dyad is important, and has positive results when there is consciousness of the difficulties in Aphasia.

**Descriptors:** Aphasia; Self Perception; Dyads; Difficulties; Communication.

<sup>a</sup> marciacmarques@hotmail.com  
<sup>b</sup> ritaspreis@hotmail.com  
<sup>c</sup> barbaracomtiago19@gmail.com  
<sup>d</sup> gabriela.teixeira88@gmail.com  
<sup>e</sup> sonia.mina@ipleiria.pt  
<sup>f</sup> maria.dixe@ipleiria.pt

507

**PERFORMANCE STATUS OF PALLIATIVE PATIENTS**Ana Querido<sup>a</sup>, Maria dos Anjos Dixe<sup>b</sup>*Escola Superior de Saúde. Instituto Politécnico de Leiria. Portugal*

**Introduction:** Symptoms affect daily living activities, compromising patient performance. It is common assumed that palliative patients are self-care dependent and cognitive impaired. Nevertheless, some patients keep on their living activities in spite the palliative situation, dealing with several symptoms. Evidence regarding functional performance and presence of symptoms in palliative patients cared for in different contexts/places is needed.

**Objective:** To characterize the performance status of palliative patients. To identify the symptoms interfering with performance status. To correlate performance status, age and the context/place of care.

**Methods:** This correlational study used a socio demographic/clinical questionnaire, Mini Mental State Examination (MMSE) and *Karnofsky Performance Status* (KPS). 205 palliative patients were recruited from Portuguese palliative care settings – inpatient, day units and home care. Ethical issues were attained.

**Results:** Patients aged between 28 - 89 years, living with illness for a mean time of 3 years and 9 months, mostly with cancer (85,40%), all scoring MMSE>25, indicating cognitive well function. Patients varied KPS from 30 (severe disable and hospitalization required) to 100 (normal). Median=70 (cares for self, unable to work); mode=80 (normal activity with effort, disease symptoms). Patients living home had better performance but the prevalence of pain was higher. There are significant differences in performance according to age and time of illness. Lower performance is correlated with age and context of care.

**Conclusions:** Although evidence of disease progression, patients continue their daily life functioning with good performance. Pain was determinant. Health professionals should consider symptom control to improve patient performance.

**Descriptors:** Palliative Patients; Performance Status; KPS; Symptom control.

<sup>a</sup> ana.querido@ipleiria.pt<sup>b</sup> maria.dixe@ipleiria.pt

508

**GENERIC DRUGS AND BRAND NAME****PRODUCTS: AN APPROACH ABOUT EXCIPIENTS\***Andreia Nogueira<sup>1,a</sup>, Leticia Carvalho<sup>1,b</sup>, Raquel Tavares<sup>1,c</sup>, Maximiano Prata Ribeiro<sup>1,d</sup>, Paula Coutinho<sup>1,e</sup>, Fátima Roque<sup>1,f</sup>*<sup>1</sup>Escola Superior de Saúde. Instituto Politécnico da Guarda. Portugal**<sup>2</sup>Unidade de Investigação para o Desenvolvimento do Interior. Instituto Politécnico da Guarda. Portugal*

**Introduction:** In general excipients are considered to be “inert”, however in certain patients under certain circumstances some of them have demonstrated some activity, with increasing reports of adverse reactions. Generic drugs are required to have the same active substances, strength, dosage form and rout of administration as the brand name product, but excipients could be different. The excipients that have recognized action or effects should be declared on the labelling of medicines, and are listed in the *Guideline Excipients in the label and package leaflet of medicinal products for human use*.

**Objective:** To compare generic drugs with brand name drugs in terms of excipients composition, and to evaluate the presence of excipients listed in the guideline.

**Methods:** Search of the Summary of Product Characteristics, in the Portuguese National Authority of Medicines and in the European Agency of Medicines websites for the 10 best-selling drugs in the Portuguese generic market. For the same active substance, it was compared the list of excipients to all medicines in the market.

**Results:** List of excipients was analyzed for a total of 790 medicines, and all of them contained one or more excipients listed on the guideline. There are great differences in the excipient composition between medicines, and depending on the drug, this excipients were presented on generic drug or in brand name drug.

**Conclusions:** Patients could be exposed to a significant amount of excipients that could have potential toxicity to some of them. So the option between generic or brand name products must have this in consideration.

**Descriptors:** Generic drugs; brand name drugs; excipients; adverse reactions; guidelines.

\*This work was supported by Foundation for Science & Technology (Fundação para a Ciência e Tecnologia - FCT) grant [Pest-OE/EGE/UI4056/2014] from the Portuguese Ministry of Science & Education.

<sup>a</sup> andreia\_nogueira\_19@hotmail.com<sup>b</sup> leticia\_carvalho1991@hotmail.com<sup>c</sup> rakeltavares@hotmail.com<sup>d</sup> mrribeiro@ipg.pt<sup>e</sup> coutinho@ipg.pt<sup>f</sup> froque@ipg.pt



509

### DIFFICULTIES, CONCERNS AND NEEDS IN PEDIATRIC ONCOLOGY: THE REALITY OF PEDIATRIC PATIENTS AND THEIR FAMILIES UNDER THE VIEW OF HOSPITAL CLOWNS'

Ana Sofia Melo<sup>a</sup>, Susana Caires<sup>b</sup>, Susana Correia<sup>c</sup>*Instituto de Educação. Universidade do Minho. Braga, Portugal*

**Introduction:** The remarkable progress in the treatment of pediatric cancer is often mentioned as one of the major achievements of modern medicine. Nevertheless, pediatric cancer is still a disturbing long-term experience that affects the child/adolescent and his family. In this arduous scenario, the Hospital Clowns presence emerges as one of the pediatric interventions that help children and their families to cope with the cancer disease process.

**Objective:** To evaluate the effects of cancer disease in children/adolescents and their parents, according to the view of hospital professional clowns, from the Portuguese association - Operação Nariz Vermelho, who visit the pediatric oncology services in Portugal.

**Methods:** 3 focus groups were conducted with 8 hospital clowns. The instrument used was a semi-structured interview focused on the exploration of the perceptions of these professionals regarding the difficulties, concerns and needs of pediatric patients and their parents in the course of the cancer disease.

**Results:** Data of this study were conducted through a process of qualitative analysis. Preliminary results show a large and wide number of difficulties, concerns and needs that affect the well-being and quality of life of pediatric patients and their families. According to the Hospital Clowns views, such effects occur on the physical and psychosocial domains.

**Conclusions:** The results of these preliminary study contribute to a clearer understanding of the experiences in pediatric oncology. The treatment process should focus not only on their physical needs, but also in their psychological and social needs, in order to promote the child's (and family's) well-being and a more humanized hospital atmosphere.

**Descriptors:** Pediatric oncology; Illness experiences; Hospital Clowns.

<sup>a</sup> anasofiamelo@hotmail.com<sup>b</sup> s.caires@sapo.pt<sup>c</sup> susana.c1@hotmail.com

510

### THE IMPACT OF LIFESTYLE ON HEALTH AND FUNCTIONAL INDEPENDENCE IN THE ELDERLY

Valeriana Guijo Blanco<sup>1,a</sup>, Maria do Rosário de Jesus Martins<sup>11,b</sup><sup>1</sup>*Universidad de Burgos. Spain*<sup>11</sup>*Instituto Piaget. Portugal*

**Introduction:** Population ageing is a global phenomenon which will change society in many aspects and create both challenges and opportunities. Therefore, in the two-year period of 2014-2015, the WHO (World Health Organisation) will put a renewed emphasis on elderly people's health with special attention to maintaining their independence whilst taking into account that the perception of their quality of life decreases noticeably when they are unable to maintain independence in their activities of daily living. Promotion of healthy ageing demands a study of the factors which can influence, both positively and negatively, the health of specific groups; this aspect being of utmost importance in a socio-educational/sanitary approach.

**Objective:** In this study, the setting-up of the relationship between the living habits of a group of elderly people and the state of their health and their capacity to be independent or not in their activities of daily living (basic and fundamental) has been attempted.

**Methods:** The chosen methodology has been observational and is based on the self-assessment of a group of non-institutionalised people between the ages of 65 and 85.

**Results:** It was discovered that there is a meaningful correlation between healthy living habits ( $p=0.05$ ) and independence in activities of daily living and general health.

**Conclusions:** The results point out that, although only 3.9% of the elderly persons did not suffer from any illness, their level of autonomy was very high. Therefore, maintaining healthy living habits is a good predictive factor.

**Descriptors:** Elderly; health; functional independence; lifestyle.

<sup>a</sup> vguijo@ubu.es<sup>b</sup> rosariojmartins@gmail.com

511

## PREVALENCE AND DETERMINANTS OF BREASTFEEDING IN PORTUGAL

Inês Ferreira<sup>a</sup>, Violeta Alarcão, Rui Simões, Milene Fernandes, Paulo Nicola

*Instituto de Medicina Preventiva. Faculdade de Medicina da Universidade de Lisboa. Portugal*

**Introduction:** The determinants associated with breastfeeding (BF) initiation and duration differ among populations and their understanding is crucial for the design of effective interventions.

**Objective:** To assess BF initiation and prevalence, exclusive or not, from birth to 3 and 6 months (M) and to determine the associated factors.

**Methods:** A cohort study collected data using telephone interviews at 3 and 6M postpartum from a sample of mothers randomly selected from the registry of the National Neonatal Screening Program. To identify the factors associated with BF, bivariate and multiple logistic regressions were performed.

**Results:** Ninety six per cent of the mothers initiated breastfeeding (n=494); 56.7% breastfed at 3M (33.2% exclusively) and 42.1% at 6M (0.9% exclusively). Protectors of exclusive BF at 3M were: higher maternal age [OR=1.02]; higher maternal educational level [OR=1.19]; utilization of BF supportive spaces at the health centers [OR=1.73]; higher BF self-efficacy score [OR=1.14]; awareness of a higher number of BF advantages for the mothers [OR=1.86]. Protectors of 'any' BF at 6M included older mothers [OR=1.07]; delivered at public hospitals [OR=6.07]; used BF supportive spaces at the health centers [OR=6.01] and had a higher BF self-efficacy [OR=1.19].

**Conclusions:** Despite a high rate of initiation of breastfeeding, only 33.2% of the mothers breastfed exclusively at 3M, a percentage below the 50% target set by the National Health Plan. Comparing our data with the National Health Interview Survey 1995/1996 we observed that BF initiation rate has increased from 81.4% to 95.8% and, at 6M, from 34.1% to 42.1%. Health care services can crucially impact BF success.

**Descriptors:** Breastfeeding; Prevalence; Determinants, Duration rates.

<sup>a</sup> inestavaresf@gmail.com

## RD&T – RESEARCH, DEVELOPMENT & TECHNOLOGY IN HEALTH

512

### PHOTOPOLYMERIZABLE HYDROGELS CONTAINING DRUG-LOADED PARTICLES FOR BIOMEDICAL APPLICATIONS

Tiago Morgado<sup>I</sup>, Ruben Pereira<sup>II,III</sup>, Daniela Vaz<sup>IV</sup>, Ausenda Mendes<sup>I</sup>, Paulo J. Bártoło<sup>II,V</sup>

<sup>I</sup>Escola Superior de Tecnologia e Gestão. Instituto Politécnico de Leiria. Leiria, Portugal

<sup>II</sup>Centro de desenvolvimento Rápido e Sustentado de Produto. Instituto Politécnico de Leiria. Marinha Grande, Portugal

<sup>III</sup>Instituto de Engenharia Biomédica. Instituto de Ciências Biomédicas Abel Salazar. Universidade do Porto. Porto, Portugal; Unidade de Investigação em Saúde. Escola Superior de Saúde de Leiria; Centro de Química e Centro de Neurociências e Biologia Celular de Coimbra. Universidade de Coimbra., Portugal

<sup>V</sup>School of Mechanical, Aerospace and Civil Engineering. Manchester Institute of Biotechnology. University of Manchester. UK

**Introduction:** Photopolymerizable hydrogels have been extensively investigated for several biomedical applications due to their ability to be prepared in situ in a short period of time, and to provide a great control over the spatial and temporal formation of the hydrogel.

**Objective:** To synthesize and characterize a novel photopolymerizable hydrogel system containing spatially organized drug-loaded particles for applications as drug delivery carriers.

**Methods:** Hydrogels were prepared through the layer-by-layer ultraviolet (UV) irradiation of a polyethylene glycol photosensitive solution containing alginate particles loaded with a model drug (nitrofurazone). The drug-loaded particles were incorporated into the middle layer of hydrogels and their location accessed by micro-computed tomography. The effects of the number of alginate particles in the hydrogel properties were investigated by mechanical, water absorption and in vitro degradation tests. The release profiles of drug-loaded particles, either alone or incorporated within the hydrogels, were determined in phosphate buffer solution for comparison.

**Results:** Data show that the number of alginate particles strongly determines the mechanical and in vitro degradation properties of hydrogels. The incorporation of high numbers of particles within the hydrogel limits the adhesion between adjacent layers during the polymerization, leading to a more fragile structure with lower mechanical properties and higher weight loss. The incorporation of drug-loaded particles within the hydrogels provides a better control over the drug release, eliminating the burst release effect.

**Conclusions:** The developed photopolymerizable hydrogels provide an effective system to tailor and extend the release of drugs, exhibiting promising properties for drug delivery applications.

**Descriptors:** Photopolymerizable hydrogels. Polyethylene glycol. Alginate particles. Nitrofurazone. Drug delivery.

513

### ANALYSIS OF THE ALTERATIONS INDUCED BY WORKING MEMORY TASKS IN THE ELECTROENCEPHALOGRAM

Joana Franco<sup>I,a</sup>, Diana Tavares<sup>II,b</sup>, Ana Sucena<sup>II,c</sup>

<sup>I</sup>Karolinska Universitetssjukhuset. Stockholm, Sweden

<sup>II</sup>Escola de Saúde. Instituto Politécnico do Porto. Porto, Portugal

**Introduction:** The working memory (WM) is an essential cognitive function with limited capability that allows the temporary storage and manipulation of information used in complex cognitive tasks. The Fluid Intelligence (FI) is the ability to engage and respond to new situations, regardless of previous knowledge.

**Objective:** Assess the brain areas activated during the execution of WM and FI tasks, determining the variations in quantitative electroencephalogram (qEEG).

**Methods:** Each participant was submitted to an EEG. During the EEG two tests were administered: working memory (WISC Digit Span Subtest - Direct and Reverse Order and FI task (Raven Matrices). The EEG's activity was analyzed in different times of each task.

**Results:** There were statistically significant differences in the comparison between the beginning and the end of both WM's tasks, as well as in the FI, and in the relationship of these tests to the baseline record. In a more specific analysis, we found frontal and parietal areas to be activated during the WM tasks and fronto-parietal network in IF tests, as well as a decrease in EEG power in the right parietal alpha.

**Conclusions:** During WM tasks prefrontal and parietal regions are exacerbated, while the IF test causes the activation of a fronto-parietal network. The qEEG was useful in the evaluation of electroencephalographic changes in cognitive tests for this sample. However, the possible association with other types of tests may supplement data in terms of the results accuracy and reproducibility of tasks.

**Descriptors:** Working Memory. Fluid Intelligence. Digit Span. RAVEN Matrices. qEEG.

<sup>a</sup>joanafranco@gmail.com

<sup>b</sup>tavares.diana@gmail.com

<sup>c</sup>sucena.ana@gmail.com

514

### USING VIDEO GAMES TO COMBAT CHILDHOOD OBESITY: AN INTEGRATIVE LITERATURE REVIEW

Jéssica Dias<sup>a</sup>, Chris Tibes<sup>b</sup>, Sílvia Zem-Mascarenhas<sup>c</sup>

*Universidade Federal de São Carlos. São Carlos, Brasil*

**Introduction:** Childhood obesity is one of the most serious public health challenges. According to the World Health Organization (WHO), one in three children aged 5 to 9 years are overweight. Given the increased use of technology by children today, it is believed that the use of video games in a program to combat childhood obesity is a powerful strategy for behavioral change, considering that playing is part of the routine of children.

**Objective:** To identify scientific studies that use video games to support the treatment and prevention of childhood obesity.

**Methods:** This is an Integrative Literature Review. This method enables researchers to summarize the published research about the subject of interest. As a criteria of inclusion it was defined: researches written in English or Portuguese and of the last 5 years (2009-2013).

**Results:** The search in the databases resulted in 281 studies. All titles and abstracts were read and 18 researches were elected for further analysis. The selected papers were classified into 2 categories according to the study's focus: "Serious games" or "Exergames".

**Conclusions:** According to the literature, the games most frequently used on strategies to combat childhood obesity were "serious games" and "exergames". These results demonstrate that the use of video games seems to reflect positively on children's health and to promote behavioral change. It reinforces the need for greater investment in research in this area.

**Descriptors:** Child; Child Nutrition. Nutrition Disorders. Obesity. Video Games.

<sup>a</sup> jessddias23@gmail.com

<sup>b</sup> christibes@gmail.com

<sup>c</sup> silviazem@gmail.com

515

### PHOTODYNAMIC THERAPY IN RETINOBLASTOMA: CELL PROLIFERATION AND OXIDATIVE STRESS EFFECTS

R Teixo<sup>1,a</sup>, M Laranjo<sup>1,11,b</sup>, A Serra<sup>11,c</sup>, M Piñeiro<sup>11,d</sup>, M Abrantes<sup>11,e</sup>, C Gonçalves<sup>11,f</sup>, J Casalta-Lopes<sup>11,g</sup>, A Sarmento-Ribeiro<sup>11,h</sup>, A Rocha-Gonçalves<sup>11,i</sup>, M Filomena Botelho<sup>11,j</sup>

<sup>1</sup>Unidade de Biofísica. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>11</sup>Centro de Investigação em Meio-Ambiente, Genética e Oncobiologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>111</sup>Departamento de Engenharia Química. Faculdade de Ciências e Tecnologia. Universidade de Coimbra. Coimbra, Portugal

<sup>1111</sup>Departamento de Química. Faculdade de Ciências e Tecnologia. Universidade de Coimbra. Coimbra, Portugal

<sup>11111</sup>Biologia Molecular Aplicada e Clínica Universitária de Hematologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

**Introduction:** Retinoblastoma (RB) is the most common intraocular disease in children. Photodynamic therapy (PDT) is a non-mutagenic treatment used in macular degeneration and might be a promising approach to RB.

**Objective:** Evaluate in vitro PDT anti-proliferative effects and protein content alterations in the human retinoblastoma cell line Y79 and evaluate oxidative stress alterations induced by PDT based on PS previously developed by us: bromated hydroxyphenyl porphyrin, BBr2HPP, bromated hydroxyphenyl chlorine, BBr2HPC, glucose acetylated compound, BBr2H-PPGlu-OAC, and bromated hydroxyethyloxy porphyrin, BBr2HPP-O(CH<sub>2</sub>)<sub>2</sub>OH.

**Methods:** Y79 cell line was cultured in RPMI medium with 15% FBS. Cells were incubated with several concentrations of PS and irradiated 24 hours later with a total energy of 10J. Half maximal inhibitory concentration (IC<sub>50</sub>) was calculated 24 and 48 hours after irradiation by MTT assay. Protein content was evaluated 24h after PDT with cells previously incubated with 25nM and 50nM for each PS. Flow cytometry evaluated reactive oxygen species and reduced glutathione levels (GSH). SOD activity was evaluated using a specific kit.

**Results and Conclusions:** MTT assay shown PS cytotoxicity at low concentrations and estimated IC<sub>50</sub> were about 29nM for BBr2HPP, 20nM for BBr2HPC, 17nM for BBr2H-PPGlu-OAC and 9nM for BBr2HPP-O(CH<sub>2</sub>)<sub>2</sub>OH. PDT treatment induced an imbalance of peroxides and superoxide anion, associated with decreased expression of GSH. PDT treatment induced increased SOD activity 24h after PDT. PS showed good photodynamic properties. PDT treatment decreased cell proliferation and protein content in nanomolar range through a ROS dependent pathway. PS have shown great potential in vitro. In vivo and preclinical studies will be developed.

**Descriptors:** Photodynamic Therapy. Retinoblastoma. Photosensitizers. Cytotoxicity. Reactive Oxygen Species.

<sup>a</sup> ricardo.teixo@gmail.com

<sup>b</sup> mafaldalaranjo@fmed.uc.pt

<sup>c</sup> armenio.serra@gmail.com

<sup>d</sup> pineiromarta@gmail.com

<sup>e</sup> mabrantess@ibili.uc.pt

<sup>f</sup> acc.goncalves@gmail.com

<sup>g</sup> joao.casalta@gmail.com

<sup>h</sup> absarmiento@fmed.uc.pt

<sup>i</sup> arg@qui.uc.pt

<sup>j</sup> mfbotelho@fmed.uc.pt

516

**PHOTODYNAMIC THERAPY IN RETINOBLASTOMA: EFFECTS IN CELL VIABILITY, CELL CYCLE AND P53**

RTeixo<sup>1a</sup>, M Laranjo<sup>11b</sup>, A Serra<sup>11c</sup>, M Piñeiro<sup>11d</sup>, M Abrantes<sup>11e</sup>, C Gonçalves<sup>11f</sup>, J Casalta-Lopes<sup>11g</sup>, A Sarmiento-Ribeiro<sup>11h</sup>, A Rocha-Gonçalves<sup>11i</sup>, M Filomena Botelho<sup>11j</sup>

<sup>1</sup>Unidade de Biofísica. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>11</sup>Centro de Investigação em Meio-Ambiente, Genética e Oncobiologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>111</sup>Departamento de Engenharia Química. Faculdade de Ciências e Tecnologia. Universidade de Coimbra. Coimbra, Portugal

<sup>11V</sup>Departamento de Química. Faculdade de Ciências e Tecnologia. Universidade de Coimbra. Coimbra, Portugal

<sup>11V</sup>Biologia Molecular Aplicada e Clínica. Universitária de Hematologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

**Introduction:** Retinoblastoma (RB) is a common tumor in children. Key treatments for RB are radio and chemotherapy but these treatments could lead to secondary neoplasias. Photodynamic therapy (PDT) arises as an approach to RB since it is used in macular degeneration and some cancer. We developed several photosensitizers (PS) with promising cytotoxic effects.

**Objective:** To evaluate type of cell death, cell cycle and p53 levels alterations in vitro at retinoblastoma cell line Y79, after PDT based on a group of PS developed by us: bromated hydroxyphenyl porphyrin, BBr2HPP, bromated hydroxyphenyl chlorine, BBr2HPC and glucose acetylated compound, BBr2HPPGlu-OAC and bromated hydroxyethoxy porphyrin, BBr2HPP-O(CH<sub>2</sub>)<sub>2</sub>OH.

**Methods:** Y79 cells were cultured in RPMI medium with 15% FBS. Cells were incubated with concentrations of 25, 50 and 100nM of PS and irradiated 24 hours later with a total energy of 10J. Flow cytometry was performed to evaluate cell viability and alterations in cell cycle. p53 expression was determined by western blot.

**Results:** Flow cytometry showed that PDT decreased cell viability with increase of initial apoptosis, late apoptosis/necrosis and necrosis. PDT induced arrest in S and G2/M phases dependent of PDT treatment. Preliminary results of western blot analysis showed increased levels of p53 in a concentration-dependent manner.

**Conclusions:** PS showed good photodynamic properties. PS induced cell death in the retinoblastoma cells mainly by initial apoptosis and late apoptosis/necrosis, corroborated by increased levels of p53. PDT induced cell cycle arrest in S and G2/M phases. Photosensitizers showed great potential in vitro and in vivo and preclinical studies will be developed.

**Descriptors:** Photodynamic Therapy. Retinoblastoma. Photosensitizers. Cytotoxicity. Reactive Oxygen Species.

<sup>a</sup>ricardo.teixo@gmail.com

<sup>b</sup>mafaldalارانjo@fmed.uc.pt

<sup>c</sup>armenio.serra@gmail.com

<sup>d</sup>pineiromarta@gmail.com

<sup>e</sup>mabrant@ibili.uc.pt

<sup>f</sup>acc.goncalves@gmail.com

<sup>g</sup>joao.casalta@gmail.com

<sup>h</sup>absarmiento@fmed.uc.pt

<sup>i</sup>arg@qui.uc.pt

<sup>j</sup>mfbotelho@fmed.uc.pt

517

**COMPARISON STUDY OF PROCEDURES FOR ASPIRATION OF BIOPSY SAMPLES**

Paula Mendonça<sup>1,a</sup>, Catarina Miúdo<sup>11,b</sup>, Dina Leitão<sup>111,c</sup>

<sup>1</sup>Escola Superior de Tecnologia da Saúde de Lisboa. Lisboa, Portugal

<sup>11</sup>Instituto de Patologia e Imunologia Molecular. Universidade do Porto. Porto, Portugal

<sup>111</sup>Faculdade de Medicina. Universidade do Porto. Porto, Portugal

**Introduction:** The samples obtained from fine needle aspiration in liquid base cytology (FNAC) are often limited by scarce cellularity compared to the amount of colloid and presence of blood. Accordingly, it was important to test alternative technical procedures so as to maximize the cellularity of each sample.

**Objective:** To compare the morphological features and cellularity of the three procedures in the FNAC cytodagnosis of the thyroid.

**Methods:** A total of 31 cases were each subjected to a cell block and ThinPrep preparation as well as a routine smear. The observation and analysis was performed using an optical microscope. Cytological diagnosis of each cell block case was objectively analysed for cellularity, presence of background and cellular preservation. Each smear and ThinPrep case was analysed for the presence or absence of cells. The data was analysed with Microsoft Excel (Office 2010) and SPSS (Statistical Package of Social Science) version 15.0 for Windows.

**Results:** Of 31 cases, only 20 had thyroid cells in the cell block and ThinPrep preparations, however, all smear cases contained thyroid cells. Some background was found in 30 Cell block cases with only 5 of these containing well preserved cells for cytodagnosis.

**Conclusions:** As indicated by the results, smear is the most appropriate procedure for FNAC of the thyroid.

**Descriptors:** Fine-needle aspiration. Thyroid. Cell block. Smear. ThinPrep.

<sup>a</sup>paula.mendonca@estesl.ipl.pt

<sup>b</sup>catarina.miudo@gmail.com

<sup>c</sup>dleitao@ipatimup.pt

518

### THE CONTRIBUTION OF CELLBLOCK – HISTOGEL – IN BRONCHIAL WASHING SAMPLES

Catarina Patraquim<sup>1,a</sup>, Iolanda Martins<sup>1,b</sup>, Ricardo Marques<sup>1,c</sup>, Paula Mendonça<sup>1,d</sup>, Dina Leitão<sup>1,e</sup>

<sup>1</sup>*Escola Superior de Tecnologia da Saúde. Instituto Politécnico de Lisboa. Lisboa, Portugal*

<sup>II</sup>*Instituto de Patologia e Imunologia Molecular. Universidade do Porto. Porto, Portugal*

**Introduction:** The cellblock is a technique that enables the pathologist to study the morphological detail of residual samples and can be used when it is necessary to perform additional diagnostic techniques.

**Objective:** Demonstrate the processing of bronchial washings in liquid based cytology to cellblock using HistoGel in residual samples, evaluating the morphology and preservation of cytological material.

**Methods:** There were used 40 residual samples from bronchial washings in liquid based cytology, after determination of the clinical diagnosis, being made subsequently 40 cellblocks using HistoGel. For each cellblock there was made one histological section for analysis of cell morphology, which was subsequently stained with the routine histological staining. After microscope observation, the morphology was evaluated by 3 experts in the field of pathology, based on the parameters: Cellularity, Preservation and Background.

**Results:** The average final score of 3 evaluators, on a scale of 0 to 100, in assessing the morphology of the 40 samples was 55.6. From the 40 histological sections, 5 of them were considered not viable for evaluation.

**Conclusions:** The results obtained indicate median quality maintenance of morphology. However, it is noted that in only 5 cases it was not possible to determine an evaluation, knowing from the outset that these are residual samples with a very scant cellularity. Thus, it is possible to say that the processing of bronchial washings to cellblock using HistoGel contributes to a concentration of the cytological material, allowing its evaluation and subsequent diagnosis. Additional diagnostic techniques are shown equally viable in these cellblocks.

**Descriptors:** Bronchial washings. Cellblock. Cell Morphology; Cytology. HistoGel.

<sup>a</sup> caty\_patraquim@hotmail.com

<sup>b</sup> yocatarina@hotmail.com

<sup>c</sup> rickymarques01@hotmail.com

<sup>d</sup> paula.mendonca@estesl.ipl.pt

<sup>e</sup> dleitao@ipatimup.pt

519

### VERTEBRAL METRICS: A NON-INVASIVE INSTRUMENT THAT EVALUATES THE SPINE

Ana Teresa Gabrie<sup>II,III,a</sup>, Gonçalo Mateus<sup>I</sup>, Cláudia Quaresma<sup>III,IV</sup>, Pedro Vieira<sup>I,II</sup>

<sup>I</sup>*Departamento de Física. Faculdade de Ciências e Tecnologias. Universidade Nova de Lisboa. Caparica, Portugal*

<sup>II</sup>*Centro de Física Atómica. Departamento de Física. Faculdade de Ciências e Tecnologia. Universidade Nova de Lisboa. Caparica, Portugal*

<sup>III</sup>*Departamento de Saúde. Instituto Politécnico de Beja. Beja, Portugal*

<sup>IV</sup>*Centro de Física e Investigação Tecnológica. Faculdade de Ciências e Tecnologia. Universidade Nova de Lisboa. Caparica, Portugal*

**Introduction:** The study of the biomechanical changes in the spinal column is particularly important in modern society, because they are considered the main responsible for rachialgiae aetiology. Currently, radiologic techniques are the most applied to perform this type of study. However they have many limitations due to their invasive nature. To face this problem, non-invasive techniques must be developed.

**Objective:** Our main goal is to present a completely innovative device - Vertebral Metrics. Vertebral Metrics is an instrument that aims the global evaluation of the spinal column. Noninvasively and semi-automatically, this image processing based system allows the measurement of the x, y and z positions of each spinous process on a standing position. Furthermore, it was improved in order to provide the measurement of the three-dimensional position of the scapulae.

**Methods:** Using a camera and a laser, the recognition is achieved with software capable of distinguishing prominent marks in the skin. The measurement of the spatial position of each mark is, thus, obtained through previous identification with an adequate blue marker.

**Results:** The results show that the Vertebral Metrics has sufficient accuracy for the global and simultaneous analysis of the spinal column and the shoulder girdle, since it was able to acquire the x, y and z coordinates of each spinous process and of scapular references located on each scapula. This device moves at an upward velocity of 4.62 mm/s so that each data acquisition takes about two minutes.

**Conclusions:** Vertebral Metrics can be applied in different areas such as orthopedics, neurosurgery, pediatrics and rehabilitation.

**Descriptors:** Spine. Scapula. Medical Device. Non-invasive. Image Processing.

<sup>a</sup> a.gabriel@campus.fct.unl.pt

520

### HEALTH PROMOTION (HP) IN NURSING CURRICULUM AND LEARNING CONTEXTS – 1ST AND 2ND CYCLES

M<sup>a</sup> Carmo Figueiredo<sup>1,a</sup>, José Amendoeira<sup>1,b</sup>

<sup>1</sup>Escola Superior de Saúde e Unidade de Investigação. Instituto Politécnico de Santarém. Santarém, Portugal

<sup>11</sup>Centro de Investigação Interdisciplinar em Saúde. Universidade Católica Portuguesa. Portugal

**Introduction:** The HP is developed in different contexts. Health is experienced and constructed by people in each environment. Nursing curriculum (1st and 2nd cycle) should incorporate the promotion of human development improving life quality of all people in the community, using a dynamic between school and environment. In this research, nursing curriculum contributes to HP knowledge construction, preparing students as citizens in their organizations and communities (The Edmonton Charter, 2005).

**Objective:** To discuss the HP in nursing curricula. The purpose is to build a theory about HP in nursing education, with the next questions: How is the mobilization of knowledge by teachers on the HP in the design, development and curriculum evaluation? What are the meanings attributed to the learning HP process?

**Methods:** Case study is empirical in nature, with interest in the analysis of curriculum development projects, (Ponte, 2006). We used a multiple case study that helps to reinforce the findings of it (Yin, 2003b). The techniques of data collection were: document analysis, participant observation and ethnographic interviews (Spradley, 1980) to produce information with diversity and make comparisons between data, using the triangulation (Yin, 2003).

**Results:** The concept of HP is not understood as a process of empowerment. The nursing students are experts on behaviour change and they misinterpreted HP specific content with content from other disciplines, eg: care for the breasts, breastfeeding.

**Conclusions:** we found teachers' knowledge contributions about HP to the curriculum construction and the meanings of students either as citizens or as nurses, during its development.

**Descriptors:** Health Promotion. Nursing education. Curriculum. Case study.

521

### NURSING AID PROVIDED FOR FAMILIES OF CHILDREN WITH LEUKEMIA

Roberto Firpo<sup>a</sup>, Larissa Carvalho<sup>b</sup>, Keila Pereira<sup>c</sup>

Universidade Estadual de Ciências da Saúde de Alagoas. Alagoas, Brasil

**Introduction:** For the production of care to occur, the use of the diverse knowledge that the health professional has is necessary, articulating their specific competence cores, with their own caregiver dimension. Then, the process of the nursing team's work in caring for the children with leukemia and the importance of care for the family that experiences the diagnostic and treatment of their child are considered.

**Objective:** To analyze the nursing aid's health actions that is provided to families of children with leukemia in a Private Institution of Maceió, in the period of from January to October 2011.

**Methods:** Descriptive, observational, exploratory study, with a qualitative approach and use of an interview guide applied to families of hospitalized children with leukemia. The analyzed categories were: bonding, empowerment and hosting.

**Results:** On behalf of empowerment, it was noted that the nursing team has traces of approaching the children with little attention to preparing families for autonomy in patient care. On behalf of hosting, it was observed that the nurse had compliments on dealing with patients and families and on the solving of problems, however regarding the nursing team this activity was less evident. The link between the two parts was hampered by constant staff changes in the different shifts.

**Conclusions:** traces of a caring model were noticed by a part of the nursing staff, but with negative aspects, harming progress in the act of caring for families of children with leukemia.

**Descriptors:** Leukemia. Family relations. Nursing caregivers; Child. Empowerment.

<sup>a</sup> mcarmofigueiredo55@gmail.com

<sup>b</sup> umis.projetos@essaude.ipsantarem.pt

<sup>a</sup> roberto.firpo@live.com

<sup>b</sup> larissa@seabras.net

<sup>c</sup> keilakris@hotmail.com

522

**S/N RATIO ON PERCEPTION OF THE WORD IN EUROPEAN PORTUGUESE IN NORMAL-LISTENER**Maria da Luz Godinho<sup>1,a</sup>, Margarida Serrano<sup>11,b</sup><sup>1</sup>*Centro Hospitalar de Leiria-Pombal. Portugal*<sup>11</sup>*Escola Superior da Tecnologia da Saúde. Instituto Politécnico de Coimbra. Coimbra, Portugal*

**Introduction:** The complaints of difficulty in understanding speech in individuals without hearing loss are frequent, so, the assessment of central auditory system imposes itself and is a progress in audiology clinical.

**Objective:** The aim of this study was to determine the value of the signal-to-noise ratio that enables the intelligibility of 70% in normal-hearers with disyllabic lists for the European Portuguese.

**Methods:** Were evaluated 40 individuals of Portuguese nationality aged between 18 and 30 years. The survey was conducted the speech test in noise with white noise in competition, presented ipsilaterally to relation of main message (disyllabic)/competitive message in the following relations: silence, +10 dB, +15 dB and +20 dB from the effectiveness of noise so as to determine the 70% speech intelligibility.

**Results:** It was found that to achieve 70% intelligibility a signal-to-noise ratio of +20 dB is required, and there were no statistically significant differences between ears (right/left).

**Conclusions:** We conclude that for the sample studied the signal-to-noise ratio for disyllabic in European Portuguese is +20 dB.

**Descriptors:** Central auditory processing. Audiology. Signal/noise ratio. Monaural low redundancy speech tests.

<sup>a</sup> maria.luzsg@gmail.com<sup>b</sup> margarida.serrano@gmail.com

523

**COGNIPLUS® SOFTWARE AS OCCUPATIONAL THERAPY ADJUVANT IN THE TRAINING OF WORKING MEMORY: AN EXPERIMENTAL SINGLE SUBJECT DESIGN**Joana Virgílio<sup>1,a</sup>, Sara Marques<sup>11,b</sup>, Sara Silva<sup>1,c</sup>, Jaime Ribeiro<sup>1,11,111,d</sup>, Tiago Lino<sup>1,e</sup><sup>1</sup>*Escola Superior de Saúde de Leiria. Instituto Politécnico de Leiria. Leiria, Portugal*<sup>11</sup>*Unidade de Investigação em Saúde. Centro de Investigação Inclusão e Acessibilidade em Ação. Instituto Politécnico de Leira. Leiria, Portugal*<sup>111</sup>*Didática e Tecnologia na Formação de Formadores. Universidade de Aveiro. Aveiro, Portugal*

**Introduction:** Cognitive rehabilitation technologies constitute a potential rehabilitation approach in several specific areas of cognition, in which memory is included.

**Objective:** The aim of the study is to determine the causal relationships of cognitive rehabilitation software CogniPlus® on the training of working memory in a single case study.

**Methods:** Single subject study, experimental, carried out through a 10 session training protocol with 4 working memory computerized training programs. When monitoring the program, the subject was evaluated by the Wechsler Memory Scale (WMS) as a pre and post test.

**Results and Conclusions:** Although it is not possible to generalize the results, measurable data determine changes in the memory quotient (MQ) between the assessments (from 74 to 85 points). A third evaluation suggests the need for continuing the intervention program for a longer period of time. It is necessary performing further studies to assess the effectiveness of this training program in occupational performance of individuals with memory problems of various etiologies.

**Descriptors:** Working Memory. Mental Processes. Software. Computer-Assisted Therapy. Occupational Therapy.

<sup>a</sup> joana.virgilio@gmail.com<sup>b</sup> marques.sara91@gmail.com<sup>c</sup> sara.silva525@gmail.com<sup>d</sup> jaime.ribeiro@ipleiria.pt<sup>e</sup> loptiago@gmail.com



524

### GROWTH MODEL IN MELANOCYTIC SKIN LESIONS: A GEOMETRIC LOOK TO SKIN PIGMENTED LESIONS

Ana Mendes<sup>1,a</sup>, Conceição Nogueira<sup>1,II,b</sup>, Diogo Baptista<sup>1,III,c</sup>, Jorge Pereira<sup>IV,d</sup>, Rui Fonseca-Pinto<sup>I,IV,e</sup>

<sup>1</sup>*Escola Superior de Tecnologia e Gestão. Instituto Politécnico de Leiria. Leiria, Portugal*

<sup>II</sup>*Centro de Matemática. Universidade do Minho. Braga, Portugal*

<sup>III</sup>*Centro de Investigação em Matemática e Aplicações. Universidade de Évora. Évora, Portugal*

<sup>IV</sup>*Instituto de Telecomunicações. Portugal*

**Introduction:** Melanoma is the skin cancer most dangerous in humans. Early detection of suspicious skin lesions is critical to prevent this kind of illness. Image processing techniques are an important tool in helping this task in which mathematical models can play an important role in mapping the progression of lesions.

**Objective:** In this work we present an algorithm to describe the evolution of the border of the skin lesion based on two main measurable markers: the symmetry and the geometric growth path of the lesion.

**Methods:** After a process of segmentation and image treatment in two dermatoscopic images of the same melanocytic lesion obtained at different moments in time we apply a geometric method that involves rotation of the lesion around a fixed axis, to detect the best symmetry of each image, by modelling and quantifying the changes in lesions growth. The final result is based on planar linear transformations that allows to identify irregular growth patterns.

**Results and Conclusions:** The proposed methodology was applied in melanocytic lesions showing different patterns when used in melanomas and non-melanomas. In the case of melanoma images the parameters of the mathematical model revealed an uneven growth by quadrant. These results presented a good performance on detecting an irregular growth

**Descriptors:** Digital image skin processing; Melanoma; Segmentation; Dermoscopy; Linear transformations.

<sup>a</sup> aimendes@ipleiria.pt

<sup>b</sup> conceicao.veloso@ipleiria.pt

<sup>c</sup> diogo.baptista@ipleiria.pt

<sup>d</sup> jorge.pereira.01@gmail.com

<sup>e</sup> rui.pinto@ipleiria.pt

525

### PATIENT SAFETY IN PRE-AMPUTATION COMMUNICATION

Cintia Silva Fassarella<sup>1,a</sup>, Andressa Aline Bernardo Bueno<sup>II,b</sup>, Stephanie Fontes e Oliveira<sup>I,c</sup>, Adriana Ferreira da Silva<sup>I,d</sup>

<sup>1</sup>*Universidade do Grande Rio Professor José de Souza Herdy. Rio de Janeiro, Brasil*

<sup>II</sup>*Hospital Universitário Pedro Ernesto. Universidade do Estado do Rio de Janeiro. Rio de Janeiro, Brasil*

**Introduction:** Quality of labor care has become a worldwide concern because of the damages arising from health care management affecting the patient, family and health professionals. In 2005, the Joint Commission International defined six goals for patient safety, one is to improve the effectiveness of communication among care professionals.

**Objective:** Identify communication in the pre-amputation phase from the perspective of patient safety.

**Methods:** Descriptive study with a qualitative approach. Thirty patients in a specialized hospital in Rio de Janeiro, Brazil, answered a semi-structured questionnaire. This study was approved by the Ethics Committee of the institution.

**Results:** Two categories have emerged as follows: "Feelings experienced in pre-amputation period": The majority of patients reported receiving preoperative visit by the doctor and nurse. The feelings experienced are diverse, the most mentioned were fear of pain and anxiety; "Quality of guidance provided by the team, according to the patient's vision": The pieces of information provided were satisfactory. They Reported the freedom to answer questions with nursing and safety about to the procedure, only one complained about lack of communication.

**Conclusions:** Although patients consider the level of information received satisfactory feelings such as fear and anxiety often appeared suggesting the need for evaluation, and implementation of measures that can stimulate and improve communication and teamwork in order to provide health care with a focus on patient safety.

**Descriptors:** Amputation; Patient Safety; Communication; Health Communication; Nursing.

<sup>a</sup> cintiafassarella@gmail.com

<sup>b</sup> enfa.andressa@gmail.com

<sup>c</sup> stefafi\_fontes@hotmail.com

<sup>d</sup> adriana\_ferreiras@live.com

526

**INSTRUMENT FOR MEASURING PATIENT SAFETY CULTURE IN NURSING**Cintia Silva Fassarella<sup>1,a</sup>, Maria do Céu Barbieri Figueiredo<sup>1,b</sup>, Lolita Dopico da Silva<sup>1,c</sup><sup>1</sup>*Universidade do Grande Rio Professor José de Souza Herdy. Rio de Janeiro, Brasil*<sup>2</sup>*Escola Superior de Enfermagem do Porto. Porto, Portugal; III Universidade do Estado do Rio de Janeiro. Rio de Janeiro, Brasil*

**Introduction:** Surveys on patient safety culture (PSC) are still rarely implemented in hospitals. They consist of a collection of values, attitudes and behaviors that characterize an individual institution. This invaluable instrument aims at assessing aspects of PSC in hospitals of both countries.

**Objective:** To assess the Hospital Survey on Patient Safety Culture (HSOPSC) instrument of the Agency for Healthcare Research and Quality (AHRQ) in its Portuguese and Brazilian Portuguese versions, after respective translation, trans-cultural adaptation, and validation by Eiras (2008) and Reis (2013).

**Methods:** Descriptive survey with qualitative approach. Access to instruments was given with authors' due authorization.

**Results:** Both instruments evaluate SC of each unit; hospital; result variables; malpractice; event notification. The documents consist of 8 (Portuguese) and 9 (Brazilian Portuguese) sections, 42 items and 12 categories. Both versions are practically the same, with one difference observed in section "H" and the inclusion of section "I" in the Brazilian Portuguese version, regarding respondent identification. The instrument is well known for revealing opportunities to improve healthcare in hospitals.

**Conclusions:** There are many reasons to adopt a reliable and globally implemented instrument, and SC is one of the indicators that aid managers to identify areas requiring investments. The importance of assessing PSC in Nursing is that these professionals can help to identify problem areas that are critical to drive improvements in patient safety indicators.

**Descriptors:** Patient Safety Culture; Patient Safety; Nursing; Hospital; Questionnaire.

<sup>a</sup> cintiafassarella@gmail.com<sup>b</sup> ceu@esenf.pt<sup>c</sup> lolita.dopico@gmail.com

527

**AUTONOMIC NERVOUS SYSTEM BALANCE: CLASSIC ANALYSIS VERSUS TIME-FREQUENCY ANALYZES**Luís Bento<sup>1,a</sup>, Rui Fonseca-Pinto<sup>1,III,b</sup><sup>1</sup>*Centro Hospitalar Lisboa Central. Lisboa, Portugal*<sup>II</sup>*Instituto de Telecomunicações. Leiria, Portugal*<sup>III</sup>*Instituto Politécnico de Leiria. Leiria, Portugal*

**Introduction:** The autonomic nervous system balance is classically analyzed with the Fourier Transform, which demands a five minute period of stable biological signal. The short variations in biological signal are impossible to analyze with this methodology like those who happened in intensive care patients.

**Objective:** This work aims to analyze the biological signal from intensive care patients, in five minutes periods using classic analysis and with a time-frequency methodology by Hilbert-Huang Transform (HHT). We also intent to use time-frequency methodology to detect autonomic response related to short time events.

**Methods:** The signal was acquired with Dataplore Software in an Intensive Care Unit with a 500 Hz rate. The Fourier Transform was analyzed with Kubios HRV Software and the Hilbert-Huang transform with a personal application developed in Matlab Software. The results are expressed in Low Frequency/High Frequency ratio.

**Results:** Globally both methods had similar results in the multiples five minutes periods analyzed. The Hilbert-Huang Transform has the advantage of detecting short variations in biological signal in intensive care patients.

**Conclusions:** Comparing with classic methods, time-frequency analysis has similar capacity to detect the autonomic nervous system balance in a long time period and has the advantage of using instantaneous frequency to evaluate short time events

**Descriptors:** Autonomic Nervous System balance; Fourier Transform; Hilbert-Huang Transform.

<sup>a</sup> 1970bento@gmail.com<sup>b</sup> rui.pinto@ipleiria.pt

528

### CHARACTERIZATION AND EVALUATION OF SKIN LESIONS USING SYMBOLIC DYNAMICS

Diogo Baptista<sup>I,II,a</sup>, Ana Mendes<sup>I,b</sup>, Conceição Nogueira<sup>I,III,c</sup>, Jorge Pereira<sup>IV,d</sup>, Rui Fonseca-Pinto<sup>I,IV,e</sup>

<sup>I</sup>Escola Superior de Tecnologia e Gestão. Instituto Politécnico de Leiria. Leiria, Portugal

<sup>II</sup>Centro de Investigação em Matemática e Aplicações. Universidade de Évora. Évora, Portugal

<sup>III</sup>Centro de Matemática. Universidade do Minho. Braga, Portugal

<sup>IV</sup>Instituto de Telecomunicações. Leiria, Portugal

**Introduction:** Early classification of skin lesions in dermoscopy is a major challenge in which the use of technology combined with mathematical theory is powerful. In a previous work we developed an algorithm to remove artifacts such as air bubbles and hairs in dermoscopic images, allowing for automatic and accurate border detection in melanocytic skin lesions. In this work, after extracting an inner time series from the lesion border, we use symbolic dynamics to classify border growth.

**Objective:** The main objective of this work is to quantify border lesion growth path and evolution shape, allowing by this way the feature growth extraction within different types of dermoscopic images.

**Methods:** The methodology uses the information obtained from the border, as a temporal series, allowing the use of symbolic dynamics to compare and classify different type of melanocytic lesions.

**Results and Conclusions:** The proposed methodology was applied in melanocytic lesions showing different pattern when used in melanomas and non-melanomas. The use of symbolic sequences to study this type of lesions constitutes a major income, as by this way is possible to extract measurable features and follow its behavior, avoiding common problems associated to numerical errors.

**Descriptors:** Dermoscopy; Melanoma; Zero-mean-normalization; Symbolic sequences; Rate Entropy.

529

### CONTINUOUS AUTONOMIC NERVOUS SYSTEM EVALUATION AND INERTIAL ANALYSIS

Daniel Jardim<sup>I,a</sup>, João Gil<sup>II,b</sup>, Fernando Martins<sup>I,c</sup>, Lino Ferreira<sup>I,II,d</sup>, Rui Fonseca-Pinto<sup>I,II,e</sup>

<sup>I</sup>Escola Superior de Tecnologia e Gestão. Instituto Politécnico de Leiria. Leiria, Portugal

<sup>II</sup>Instituto de Telecomunicações. Leiria, Portugal

**Introduction:** Autonomic Nervous System (ANS) is composed by two branches (Sympathetic and Parasympathetic Systems) working together to maintain inner homeostasis in the body. The evaluation of ANS is mainly done within hospital environment and limited to a short period of time. To improve diagnose of autonomic dysfunctions, the evaluation out of clinical context in the day-life context is a crucial task.

**Objective:** In this work we use classical spectral approach to detect changes in the Sympathovagal Balance (SVB) whose data were obtained during long periods of the day-life activity.

**Methods:** Classical frequency analysis using Fast Fourier Transform (FFT) applied to Heart Rate Variability (HRV) is used to compute the low frequency content (LF)/ high frequency content (HF) index, assigning HF to the parasympathetic system and LF to Sympathetic System. Inertial parameters using the accelerometer's output were also extracted to identify body positions during the time period under analysis.

**Results and Conclusions:** SVB were obtained in different periods of the day and also during the sleep, revealing consistent results with typical answers associated to autonomic maneuvers/conditions (i.e., post prandial period, standing, isometric contraction, Valsalva Maneuver, etc.). The use of a portable device allows to obtain long records of clinical relevance, as this enables to study the Very-Low Frequency band (VLF) in the spectrum.

**Descriptors:** Autonomic Nervous System Evaluation; Sympathovagal Balance; Spectral Analysis; Inertial Analysis; Autonomic Signal Processing.

<sup>a</sup> diogo.baptista@ipleiria.pt

<sup>b</sup> aimendes@ipleiria.pt

<sup>c</sup> conceicao.veloso@ipleiria.pt

<sup>d</sup> jorge.pereira.01@gmail.com

<sup>e</sup> rui.pinto@ipleiria.pt

<sup>a</sup> 2110326@my.ipleiria.pt

<sup>b</sup> 2110331@my.ipleiria.pt

<sup>c</sup> fernando.martins@ipleiria.pt

<sup>d</sup> lino.ferreira@ipleiria.pt

<sup>e</sup> rui.pinto@ipleiria.pt

530

### UNIVERSITY OF AVEIRO'S ADVANCED VOICE FUNCTION ASSESSMENT DATABASES (AVFAD)

Luis M. T. Jesus<sup>a</sup>

*Institute of Electronics and Informatics Engineering of Aveiro. Escola Superior de Saúde da Universidade de Aveiro. Universidade de Aveiro. Aveiro, Portugal*

**Introduction:** The number of patients with voice disorders has been increasing dramatically over the last decade. Acoustic voice analysis is an effective and non-invasive tool that can be used to confirm an initial diagnosis and provide an objective determination of the impairment.

**Objective:** With an increasing concern to improve the assessment of voice for as many European languages as possible, the first complete and representative Portuguese pathological voice database is currently being collected. This database will be of huge significance for voice clinicians' assessment and for testing and developing innovative, automated methods and devices for voice analysis.

**Methods:** Informed consent from all participants that allows the use of this data in further studies and by others research groups in the field of voice assessment is ensured, allowing future cooperative work. The database is distributed through the Advanced Communication and Swallowing Assessment (ACSA) [acsa.web.ua.pt](http://acsa.web.ua.pt) platform.

**Results:** This Portuguese pathological voice database will provide acoustic data from a group of 500 pathological and 500 controls voice subjects, all matched individually for gender and chronological age. Healthy controls are recruited from the University of Aveiro staff and students, and various institutions that participate in the project. Patients are currently being recruited at three hospitals in Porto and Matosinhos, and their medical diagnosis, socio-demographic and anthropometric information registered.

**Conclusions:** Databases collected by clinicians will enable the interpretation of automatically extracted descriptors of the speech signal and lead to the development of models for their interaction.

**Descriptors:** Voice Disorders; Databases; Acoustics; Assessment; Speech and Language Therapy.

<sup>a</sup> [lmtj@ua.pt](mailto:lmtj@ua.pt)

531

### APHASIA ASSESSMENT BY THE PORTUGUESE SPEECH AND LANGUAGE THERAPISTS

Ana Paris Leal<sup>1,a</sup>, Luis M. T. Jesus<sup>1,III,b</sup>, Ana Allen Gomes<sup>IV,c</sup>, Pedro Sá-Couto<sup>V,d</sup>, Maria Assunção Matos<sup>III,VI,e</sup>

<sup>I</sup>*PIN-Progresso Infantil. Carcavelos, Portugal; SPIC, Lisboa, Portugal; Hospitais Privados de Portugal da Boavista. Porto, Portugal*

<sup>II</sup>*Institute of Electronics and Informatics Engineering of Aveiro. Aveiro, Portugal*

<sup>III</sup>*Escola Superior de Saúde. Universidade de Aveiro. Aveiro, Portugal*

<sup>IV</sup>*Departamento de Educação. Universidade de Aveiro. Aveiro, Portugal; VCenter for Research and Development in Mathematics and Applications. Departamento de Matemática. Universidade de Aveiro. Aveiro, Portugal*

<sup>VI</sup>*Centro Hospitalar e Universitário de Coimbra. Coimbra, Portugal*

**Introduction:** Recently, there have been considerable worldwide changes in the way speech and language therapists (SLT) work with people with aphasia (PWA), and therefore the way its consequences are assessed.

**Objective:** The main goal of this study was to describe how Portuguese SLT currently access and characterise PWA.

**Methods:** A questionnaire was constructed to survey SLT opinions (N=59) about aphasia, its consequences, their actual professional practice, needs, wishes and levels of satisfaction related to different existing intervention approaches and assessment instruments.

**Results:** Results showed dissatisfaction towards the available aphasia assessment instruments for the Portuguese population: 54/59 mentioned that these were not sufficient while 58/59 mentioned the need for new ones. The majority of SLT characterised aphasia focusing on linguistic aspects (83%), recognising, nevertheless, its impact on communicational levels (26%). Their clinical practice was mostly characterised by the rehabilitation model and by focusing on the activity level. Regarding their needs in professional practice, SLT seemed to value the social model as the most relevant, and they considered that the PWA active participation should be the focus of intervention. Significant differences between their current practice versus their needs in a clinical setting arose only for the social model ( $p < 0.001$ ).

**Conclusions:** This discrepancy suggests that the clinical practice and the management of health services should include more principles from the social model and the International Classification of Functioning, Disability and Health (ICF), e.g., active participation and facilitators. There is an urgent need to develop or to adapt new instruments to the Portuguese culture and reality in aphasia.

**Descriptors:** Aphasia; assessment; ICF; Speech and Language Therapy; models of health care services.

<sup>a</sup> [ana.paris.tf@gmail.com](mailto:ana.paris.tf@gmail.com)

<sup>b</sup> [lmtj@ua.pt](mailto:lmtj@ua.pt), [ana.allen@ua.pt](mailto:ana.allen@ua.pt)

<sup>c</sup> [p.sa.couto@ua.pt](mailto:p.sa.couto@ua.pt)

<sup>d</sup> [maria.matos@ua.pt](mailto:maria.matos@ua.pt)

532

### CHILDREN'S AUDITORY PROCESSING PERFORMANCE SCALE: PARENTS VERSUS TEACHERS

Graça Oliveira<sup>1,a</sup>, Ana Paula Amaral<sup>11,b</sup>, Margarida Serrano<sup>111,c</sup>

<sup>1</sup>Centro Hospitalar e Universitário de Coimbra Audiologia. Coimbra, Portugal

<sup>11</sup>Ciências Complementares. Escola Superior de Tecnologia da Saúde de Coimbra. Instituto Politécnico de Coimbra. Coimbra, Portugal

<sup>111</sup>Audiologia, Escola Superior de Tecnologia da Saúde de Coimbra. Instituto Politécnico de Coimbra. Coimbra, Portugal

**Introduction:** Children's Auditory Processing Performance Scale (CHAPPS) can be used to help identify children who have difficulty hearing due to hearing loss or to identify children who are at risk of having disorders of auditory processing. Using this scale aims to assess the perception of parents/guardians and/or teachers regarding hearing child behaviors in six listening conditions: noise, silence, ideal, multiple stimuli, auditory/sequencing memory and auditory attention.

**Objective:** To investigate the correlation in the performance assessment of auditory behavior of children between parents and teachers through the P-CHAPPS.

**Methods:** The sample consisted of 28 children that both parents and teachers met separately, the P-CHAPPS.

**Results:** A statistically significant correlation between the responses of parents and teachers in CHAPPS (0.606) and the sub-scales when listening in noise (0.473), ideal listening situation (0.416), when listening to multiple stimuli was obtained (0.422) and auditory memory (0,673).

**Conclusions:** We conclude that the Portuguese version of CHAPPS has a moderate correlation in responses between parents and teachers, can be applied indiscriminately to parents or teachers of a child, however, as regards the sub-scales of the listening situation in silence and auditory attention, the conclusions to be drawn should be aware that the scale was completed by parents or teachers, since the correlation obtained was very low and not statistically significant.

**Descriptors:** P-CHAPPS; Auditory Processing; Hearing Behaviors; Parents; Teachers.

<sup>a</sup> gracacristina@sapo.pt

<sup>b</sup> anaamaral@estescoimbra.pt

<sup>c</sup> mserrano@estescoimbra.pt

533

### A NOVEL METHOD FOR SKIN LESION SEGMENTATION USING A MULTI-SCALE LOCAL NORMALIZATION

Jorge Pereira<sup>1,a</sup>, Ana Mendes<sup>1b</sup>, Conceição Nogueira<sup>1111,c</sup>, Diogo Baptista<sup>11,IV,d</sup>, Rui Fonseca-Pinto<sup>111,e</sup>

<sup>1</sup>Instituto de Telecomunicações. Leiria, Portugal

<sup>11</sup>Escola Superior de Tecnologia e Gestão. Instituto Politécnico de Leiria. Leiria, Portugal

<sup>111</sup>Centro de Matemática. Universidade do Minho. Braga, Portugal

<sup>1111</sup>Centro de Investigação em Matemática e Aplicações. Universidade de Évora. Évora, Portugal

**Introduction:** Borders segmentation is probably the most important process for morphological analyzes of the skin lesions features. It provides the majority of the required information and also eliminates undesirable data, like artifacts. A mislead segmentation compromises all the process of diagnosis, enhancing their importance.

**Objective:** The main goal is to detect and segment skin lesion borders with a novel method, for further analyzes and clinical prognosis.

**Methods:** The whole method is based on the application of the Local Normalization, which is basically an operation that enhances local contrast between local pixels. Being highly dependent on the gaussian kernel, this operation can be used for different object scales and goals, simply by proportionally modifying the Gaussian sigma. Therefore low sigmas are applied to detect and remove smaller objects like artifacts and higher sigmas to detect the skin lesion shape. The final result is provided by morphological treatment to produce a more accurate result and remove final artifacts like crossing hairs.

**Results and Conclusions:** This method presented very promising results matching real borders expectations. It also showed great robustness against common artifacts like air bubbles and human hairs, removing and ignoring them. The Local normalization proved to be a very universal and suitable method for dermoscopy image processing.

**Descriptors:** Skin cancer, borders segmentation, dermoscopy.

<sup>a</sup> jorge.pereira.01@gmail.com

<sup>b</sup> aimendes@ipleiria.pt

<sup>c</sup> conceicao.veloso@ipleiria.pt

<sup>d</sup> diogo.baptista@ipleiria.pt

<sup>e</sup> rui.pinto@ipleiria.ptm

534

## LANGUAGE DEVELOPMENT IN CHILDREN WITH COCHLEAR IMPLANT

Helena Alves<sup>a</sup>, Graça Oliveira<sup>b</sup>, Marisa Alves<sup>c</sup>, Jorge Martins<sup>d</sup>, Carlos Ribeiro<sup>e</sup>, António Paiva<sup>f</sup>

*Serviço de Otorrinolaringologia. Centro Hospitalar e Universitário de Coimbra. Coimbra, Portugal*

**Introduction:** When problems that limit the child's communication ability arise, the interaction between the child and those around her becomes ineffective. Because deaf or hard of hearing children are deprived of auditory input, their communication abilities and social interaction are diminished. This limitation may affect normal language development. It's in these cases that cochlear implants stand out its importance, enabling a better and more precise sounds perception, and promoting the linguistic and auditory abilities development for these children, especially when cochlear implantation had occurred early.

**Objective:** Check the vocabulary acquisition in children with cochlear implants, depending on their hearing age.

**Methods:** This study analyzed 100 Inventories (Inventory on the Development of Communication - MCDI - WS) completed by parents of children implanted at the Department of Otorhinolaryngology, CHUC, EPE - CHC. The MCDI - WS is an inventory that seeks to check language acquisition between 16 and 30 months of age. The analyzed inventories were divided into 4 groups according to the hearing age of the child. The group data were analyzed and compared.

**Results:** The children who produced more words were the ones who had used the implant for a longer period of time. There was an increasing vocabulary proportional to the auditory age.

**Conclusions:** The results show that there is an increase in vocabulary with increasing the listening experience of the child and consequent exposure to oral verbal language.

**Descriptors:** Cochlear Implant; Children; Language; Hearing Loss; Auditory Abilities.

<sup>a</sup> helenalves29@gmail.com

<sup>b</sup> gracacristina@sapo.pt

<sup>c</sup> marisalves2002@yahoo.com

<sup>d</sup> aud.jorgehumberto@gmail.com

<sup>e</sup> carlosarribeiro@gmail.com

<sup>f</sup> otorrino@huc.min-saude.pt

535

## PROFILE OF NURSING RESEARCH IN INTENSIVE THERAPY ON BRAZILIAN POST-GRADUATION

Camila Santos Pires Lima<sup>1,a</sup>, Ana Cláudia de Oliveira Batista<sup>1,b</sup>, Sayonara de Fátima Faria Barbosa<sup>1,11,c</sup>, Grace Teresinha Marcon Dal Sasso<sup>1,11,d</sup>, Sabrina Guterres da Silva<sup>111,e</sup>, Cilene Fernandes Soares<sup>111,f</sup>, Greize Cristina Rios<sup>111,g</sup>, Renata da Silva<sup>111,h</sup>

<sup>1</sup>*Grupo de Pesquisa em Tecnologias, Informações e Informática em Saúde e Enfermagem. Universidade Federal de Santa Catarina. Florianópolis, Brazil*

<sup>11</sup>*Departamento de Enfermagem. Universidade Federal de Santa Catarina. Florianópolis, Brazil*

<sup>111</sup>*Grupo de Estudos no Cuidado de Pessoas nas Situações Agudas de Saúde. Universidade Federal de Santa Catarina. Florianópolis, Brazil*

<sup>1111</sup>*Núcleo de Extensão e Pesquisa em Educação Popular e Saúde. Universidade Federal de Santa Catarina. Florianópolis, Brazil*

**Introduction:** Increasingly comes to arguing about the quality of health services and the implementation of evidence-based best practices. Thus, combining the practical and scientific knowledge it is essential to know that nurses are researching and the quality of these researches.

**Objective:** To analyze the research in the area of intensive therapy developed in Post-graduation programs in Brazilian Nursing.

**Methods:** Documentary study descriptive and quantitative. The dissertations and theses available have been accessed in the database of the Coordination of Personnel Improvement of higher level, developed between 2008 to 2012. Investigated type of research, methodology and field researched, depicting the profile of nursing research in the field of intensive care.

**Results:** 144 studies were identified, of these 20 (14%) theses, 109 (76%) Academic dissertations of academic master and 15 (10%) professional dissertation master. As to the nature of the research, quantitative studies predominated of descriptive-exploratory type. The subject search more incident was the nurse. The Southeast region stood out as the production of studies. The subjects with the highest prevalence were: Workload of nursing, Nursing care, Infection control, Patient safety and Nursing diagnosis.

**Conclusions:** The research in the area of nursing in intensive care were quantitative, carried out mostly in the form of academic dissertations. We emphasize the importance of research using combination of methods. The themes highlights the concern of nurses with the aspects related to the care and organization of the care process. We identified point gaps for the development of new research the area of nursing in intensive care.

**Descriptors:** nursing; intensive care; nursing research.

<sup>a</sup> camilasp87@gmail.com

<sup>b</sup> anacobatista@gmail.com

<sup>c</sup> sayonara.barbosa@ufsc.br

<sup>d</sup> grace@ccs.ufsc.br

<sup>e</sup> sabrinaguterres@gmail.com

<sup>f</sup> olacilene@gmail.com

<sup>g</sup> greizec@yahoo.com.br

<sup>h</sup> renatadasilvasantana@ig.com.br

536

### CENTRAL AUDITORY PROCESSING EVALUATION – NORMATIVE DATA FOR PORTUGUESE PEDIATRIC POPULATION

Jorge Humberto Martins<sup>a</sup>, Marisa Alves<sup>b</sup>, Susana Andrade<sup>c</sup>,  
Carlos Pereira<sup>d</sup>, António Teixeira<sup>l,e</sup>, Isabel Falé<sup>ll,iv,f</sup>

<sup>i</sup>*Clinica Otorrino & Audiologia. Leiria, Portugal*

<sup>ll</sup>*Departamento de Eletrónica e Telecomunicações.  
Universidade de Aveiro. Universidade de Aveiro.  
Aveiro, Portugal*

<sup>lll</sup>*Centro de Linguística. Universidade de Lisboa. Lisboa,  
Portugal*

<sup>iv</sup>*Universidade Aberta. Lisboa, Portugal*

**Introduction:** The need for central auditory processing assessment tools motivated the authors to develop a battery of tests for this purpose. This battery has 6 tests: SSW, Filtered Speech, Speech in Noise, Gap in Noise, Duration Pattern and Frequency Pattern. To be able to use the battery for the diagnosis of central auditory processing disorders in the pediatric population, it is important to evaluate children with normal development.

**Objective:** To evaluate children with normal development with the central auditory processing test battery.

**Methods:** An audiometer and a computer with software specially developed for the testing was used in these evaluations, that were conducted in a soundproof booth. 216 children between 5 and 11 years were evaluated in 13 different locations in Portugal. The participants were previously evaluated with tonal and speech audiometry, impedance and otoacoustic emissions. The tests were presented at 50 dB SL; half of the participants started the evaluation with the right ear and the other half with the left ear, in order to eliminate the learning effect that could affect the results. Statistical analysis was conducted using SPSS 17.

**Results:** The results obtained in the evaluations of children with normal development allow the definition of the expected performance for each age.

**Conclusions:** The tests are adequate for pediatric evaluation. The results of the children with normal development are an important contribution for the evaluation of central auditory processing disorders in Portugal.

**Descriptors:** central auditory processing; assessment; audiology.

<sup>a</sup> aud.jorgehumberto@gmail.com

<sup>b</sup> marisalves2002@yahoo.com

<sup>c</sup> susanasousaandrade@gmail.com

<sup>d</sup> cepereira@ua.pt

<sup>e</sup> ajst@ieeta.pt

<sup>f</sup> imsfale@gmail.com

537

### SOAP FORMULATION WITH COFFEE GROUNDS. A NEW CONCEPT OF FOOD BY-PRODUCTS VALORIZATION AND HEALTH PROMOTION

Carla S. Silva<sup>a</sup>, Bárbara T. Castro<sup>b</sup>, Sérgio V.P. Barreira<sup>c</sup>,  
Ana F. Vinha<sup>d</sup>

*Faculdade de Ciências da Saúde. Universidade Fernando  
Pessoa. Porto, Portugal*

**Introduction:** Coffee is one of the most consumed drinks in the world, and for this reason, tons of coffee grounds are generated every day. Coffee possesses several molecules with pharmacological action; however the most important of all is, indisputably, caffeine a xantine alkaloid. Besides being a molecule with recognized CNS stimulant effects, caffeine is also used in dermatological formulations for a cosmetic purpose as an active compound in anti-cellulite products because it, supposedly, prevents the excessive accumulation of fats in cells. The content of caffeine varies widely depending on the varieties of coffee bean. During the preparation of the coffee drink, not all the caffeine is extracted from the grain so that grounds still contain significant amounts of the compound. This makes the coffee grounds by-product an interesting source of caffeine for various applications.

**Objective:** The main objective of this work was to quantify caffeine contents in different coffee grounds varieties, in order to develop a soap formulation with intent to prevent or reduce the development of cellulite.

**Methods:** Hot aqueous extracts were prepared with fresh coffee grounds. Caffeine was quantified by HPLC using benzoic acid as internal standard.

**Results:** Different caffeine contents were integrated in soap formulations considering coffee grounds varieties (C. arabica; C. robusta). Furthermore, were incorporated solid coffee grounds to develop natural exfoliants with positive benefits to skin.

**Conclusions:** It was possible to produce soap from coffee grounds. The soaps exhibited levels of caffeine sufficient to have anti-cellulite activity.

**Descriptors:** Coffee grounds; Caffeine; By-products valorization; HPLC; Soap formulation.

<sup>a</sup> sousasilva@ufp.edu.pt

<sup>b</sup> 2147@ufp.edu.pt

<sup>c</sup> barreira@ufp.edu.pt

<sup>d</sup> acvinha@ufp.edu.pt

538

### HAIR EXTRACTIVE AND MICROBIAL CONTAMINATION IN THE SURGICAL PREPARATION OF ANIMAL SKIN

Juan-Fernando Jiménez-Díaz<sup>1,a</sup>, Carmelo Monzón-Moreno<sup>1,b</sup>, Rodrigo Chacón-Ferrera<sup>1,c</sup>, Bienvenida Rodríguez-De-Vera<sup>1,d</sup>, Carla Jiménez-Rodríguez<sup>1,e</sup>, Francisco-José Hernández-Martínez<sup>1,f</sup>, Alexandre Rodrigues<sup>1,g</sup>

<sup>1</sup>Universidad de Las Palmas de Gran Canaria. Las Palmas de Gran Canaria, Spain

<sup>II</sup>Universidad CEU San Pablo. Madrid, Spain

<sup>III</sup>Escola de Enfermagem Cruz Vermelha. Oliveira de Azeméis, Portugal

**Introduction:** The purpose of preoperative skin preparation is to decrease microbial contamination. Traditionally it has been considered that mechanical extraction methods were more aggressive for skin than the chemical extraction.

**Objective:** Determination hair extractive typology and microbial contamination in the surgical preparation of skin in experimental animal.

**Methods:** They conducted an experimental study of the impact of the extraction methodology of hair at dorsal level in white rats, Sprague Dawley strain, in order to determine microbial contamination and the microbial type that develops in the skin. Animals were divided into four groups. Different hair removal techniques were applied to each group: scissors, manual shaving, electric shaving and waxing dermatologist tested (Duo Perfect, Veet)<sup>®</sup>. Samples of skin using hysopo of each group of animals were taken, then seeded and subjected to a bacteriological culture in order to determine the number and type of colonies that developed, following the extractive hair methodology used.

**Results:** The use of an electric shaver was the less contaminant extractive hair method with an average of 4,000 cfu, followed by the use of manual razor with an average of half of 8,000 cfu. The use of scissors shows higher figures (average of 22,000 cfu) as well as the depilatory method (average of 53,000 cfu). The four hair extraction methods used in our experiment were mainly contaminated by strains of coagulase-negative staphylococci.

**Conclusions:** Hair extractive methodology does not change the type of microbial colonization of the skin but its quantification. As a result, chemical methods are more contaminant than mechanical ones.

**Descriptors:** Hair; contamination; microbe; surgery; skin.

<sup>a</sup> jjimenez@denf.ulpgc.es

<sup>b</sup> cmonzon@dcc.ulpgc.es

<sup>c</sup> rchacon@denf.ulpgc.es

<sup>d</sup> brodriguez@denf.ulpgc.es

<sup>e</sup> carlajimenezrodriguez@gmail.com

<sup>f</sup> fjhernandez@denf.ulpgc.es

<sup>g</sup> rodriguesalexandr@gmail.com

539

### HALL EFFECT AS ALTERNATIVE SYSTEM FOR UPPER PROSTHETICS CONTROL- A PRELIMINARY TEST

Luís Rodrigues<sup>a</sup>, Adriana Cavaco<sup>b</sup>

Universidade do Algarve. Portugal

**Introduction:** Currently upper extremity prosthetics have as control system myoelectric and non myoelectric control. Non myoelectric systems tend to be less expensive but cosmetically unappealing and have less effective performance.

**Objective:** Develop a non expensive control system based on Hall Effect and volume variation of the residual muscle for an effective control system.

**Methods:** In order to research and develop a new alternative for prosthetic control two sensors were created, which analyze the muscle volume variation in relax/contract action and were tested on a healthy subject, simulating the use of an upper extremity prosthetic -below elbow amputation. A non magnetic material was used so that Hall Effect wasn't affected. The contact with the skin can be made of biocompatible materials.

**Results:** As a preliminary test, the results of the sensors reading on selected agonist and antagonist muscle arm showed repeatability and stability in 6 cycles for each action: contraction of agonist, antagonist and relaxed position.

**Conclusions:** As conclusion this test can only show the potentiality of this type of sensor, being impossible to state any effective result. It needs adjustments in selection of muscle positioning and needs to be tested on a statistically relevant population to assure an effective performance. As future prospects, the application of this system in the population with amputation, will allow test and ensure the viability of the control system so that the quality of life and well-being can be guaranteed and improved.

**Descriptors:** Prosthetic Control system; upper extremity prosthetics; Hall Effect; Muscle volume variation.

<sup>a</sup> luisjaneirodriguez@gmail.com

<sup>b</sup> aicavaco@ualg.pt



540

### EFFECTS OF INHALED LAVENDER OIL (LAVANDULA ANGUSTIFOLIA) IN RESPONSE TO AGITATION IN PEOPLE WITH DEMENTIA: INTERVENTION STUDY

Sandra Alves<sup>1,a</sup>, Luís Sá<sup>1,b</sup>, Patrícia Coelho<sup>1,c</sup>, João Amado<sup>1,d</sup><sup>1</sup>Mid Essex Hospital. Chelmsford, United Kingdom<sup>II</sup>Instituto de Ciências da Saúde. Universidade Católica Portuguesa. Porto, Portugal<sup>III</sup>Centro de Investigação Interdisciplinar em Saúde. Instituto de Ciências da Saúde. Universidade Católica Portuguesa. Porto, Portugal

**Introduction:** lavender essential oil shows evidence of sedative properties in neurophysiological and animal studies but clinical trials of its effectiveness as a treatment of agitation in people with dementia have shown mixed results.

**Objective:** we hypothesize that the aromatherapy with inhaled lavender oil reduces agitated behaviour in patient with dementia.

**Methods:** we delivered lavender oil (*Lavandula angustifolia*) through an electric diffuser in specified regimen (dose- 5 to 10 drops; exposure time -90 min and 180 min) to ten nursing home residents with dementia who had manifested agitated behaviour. Participants were allocated to 1 of 3 groups who entered into a quasi-experimental design with nonequivalent control group. During six weeks, the intervention was monitored by the nursing staffs and the presence or absence of target behaviours were recorded and rated weekly using two scales: PAS (Pittsburgh Agitation Scale) and CMAI (Cohen Mansfield Agitation Inventory – Inventory Cohen Mansfield Agitation).

**Results:** inhaled lavender oil reduced the frequency of agitated behaviours in these participants in all the regimens explored. Both scales had a reducing in their scores; especially CMAI was decrease between 9% and 29% and PAS between 9% and 30% after the intervention.

**Conclusions:** studies of essential oils are constrained by their variable formulations and uncertain pharmacokinetics and so optimal dosing and delivery regimens remain speculative. This study we delivered inhaled pure lavender oil and the results showed modest efficacy in the treatment of agitated behaviour in patients with severe dementia.

**Descriptors:** dementia, aromatherapy, lavender oil, agitation.

<sup>a</sup>sandra-alves@live.com.pt<sup>b</sup>lsa@porto.ucp.pt<sup>c</sup>sfcoelho@porto.ucp.pt<sup>d</sup>jcamado@porto.ucp.pt

541

### NURSING CARE IN CONTROL OF INFECTION IN NEWBORN INTENSIVE CARE UNIT: SYSTEMATIC REVIEW

Tânia Alves<sup>b</sup>, Ana Castro<sup>c</sup>, Taciana Ribeiro<sup>d</sup>, Tomé Rocha<sup>e</sup>, Simão Vilaça<sup>a</sup>

University of Minho. Minho, Portugal

**Introduction:** According to World Health Organization, one in four children in Newborn Intensive Care Units have an increased risk of acquiring infections associated to health care, so it is a priority for nurses to combat children's morbimortality.

**Objective:** Gather available scientific evidence regarding nursing care in control of infection in Newborn Intensive Care Units and identify appropriate practices.

**Methods:** There was no restriction on the language and the publication period refers to the last 10 years. Expression used in Web of Knowledge ISI database: ((control AND infection) AND ((Neonate OR Newborn OR Premature\* OR Neonatal OR Preterm) AND (Neonatology OR Neonatal Intensive Care OR Newborn Intensive Care Units OR NICU)) AND (NURS\*)).

**Results:** From 214 articles, 7 articles were eligible, after the implementation of the protocol of systematic reviews of literature. The infection's control in newborns depends on human resources, which highlights evidence from studies related to the appropriate number of nurses per child and specialized teams in catheterization (Schelonka et al, 2006; Rogowski et al, 2013). Hand hygiene, proper and systematic monitoring and evaluation of procedures associated to catheterization and the management of the environment in incubators eliminating the presence of potentially pathogenic objects, according to Song et al (2013), Graham et al (2006), Chandonnet et al (2013) and Raginel et al (2009), reduces neonatal infection.

**Conclusions:** Professionals have responsibility to prevent neonates' infection therefore nursing interventions must guarantee the quality and promotion of safe care.

**Descriptors:** Systematic Review; Infection control; Newborn; Premature; Neonatology.

<sup>a</sup>svilaca@ese.uminho.pt<sup>b</sup>a65930@alunos.uminho.pt<sup>c</sup>a65888@alunos.uminho.pt<sup>d</sup>a65919@alunos.uminho.pt<sup>e</sup>a65934@alunos.uminho.pt

542

## UNIVERSITY OF AVEIRO'S STANDARDISED VOICE CASE HISTORY FORM

Maria João A. P. Ferreira<sup>1,a</sup>, Luis M. T. Jesus<sup>2,3,b</sup>, Pedro Sá-Couto<sup>4,5,c</sup>, Helena Vilarinho<sup>3,6,d</sup>

<sup>1</sup>*Centro Hospitalar do Médio Ave. Vila Nova de Famalicão, Portugal*

<sup>2</sup>*Institute of Electronics and Informatics Engineering of Aveiro. Universidade de Aveiro. Aveiro, Portugal*

<sup>3</sup>*Escola Superior de Saúde. Universidade de Aveiro. Aveiro, Portugal*

<sup>4</sup>*Center for Research and Development in Mathematics and Applications. Universidade de Aveiro. Aveiro, Portugal*

<sup>5</sup>*Departamento de Matemática. Universidade de Aveiro. Aveiro, Portugal*

<sup>6</sup>*Hospital S. João. Porto, Portugal*

**Introduction:** Speech and Language Therapists (SLTs) use individual and diverse forms to register the clinical history of vocal pathologies, which hinders cross-comparisons of patients' data.

**Objective:** Thus, this study describes the development and validation of a voice case history form for the Portuguese population.

**Methods:** The instrument development was informed by an extensive literature review of protocols used by SLTs, and from results of an expert panel and a pilot study. A sample of 52 outpatients from the Otolaryngology Service of S. João Hospital, Porto, Portugal, was recruited. Their case history data was collected using the protocol.

**Results:** A factorial analysis was conducted to explore the number of dimensions underlying the 18 items of the instrument. Then internal consistency was measured using Cronbach's alpha. Finally the impact of socio-demographic, occupational and diagnosis (sample characteristics) on the resulting factors was explored using analysis of variance. Results revealed two factors that accounted for 41% of the variance: Factor I – Severity of the voice disorder (5 items); Factor II – occupational voice demands (3 items). Cronbach's alphas for these two factors were 0.847 and 0.650, respectively, which indicated good to high internal consistency values. Analysis of variance results showed, for Factor I no significant differences, and for Factor II significant differences for occupation ( $p=0.013$ ) and education level ( $p<0.001$ ).

**Conclusions:** The analysis of the two factors contributes for an objective and standardised voice case history, which facilitates comparisons across patients and clinical settings. These will help establishing priorities for interventions and enhance evidence based practice in speech and language therapy.

**Descriptors:** Voice Disorders; Case History Form; Speech and Language Therapy; Factorial Analysis; Internal Consistency.

<sup>a</sup> mariajoao.ferreira@chma.min-saude.pt

<sup>b</sup> lmtj@ua.pt

<sup>c</sup> p.sa.couto@ua.pt

<sup>d</sup> f2385@ua.pt

543

## IMPACT OF IONIZING RADIATION ON LYMPHOMA CELL LINE -CELL DEATH, BAX/BCL-2, P53 EXPRESSION

Fernando Mendes<sup>1,2,3,a</sup>, Tiago Sales<sup>1,4,b</sup>, Susann Schugk<sup>1,5,c</sup>, Ana Cristina Gonçalves<sup>3,6,d</sup>, Ana Bela Sarmento<sup>3,6,e</sup>, Maria Filomena Botelho<sup>3,7,f</sup>, Manuel Santos Rosa<sup>7,8,g</sup>

<sup>1</sup>*Unidade de Biofísica. Faculdade de Medicina. Instituto de Imagem Biomédica e Ciências da Vida. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal*

<sup>2</sup>*Escola Superior de Tecnologia da Saúde de Coimbra. Instituto Politécnico de Coimbra. Coimbra, Portugal*

<sup>3</sup>*Centro de Investigação em Meio Ambiente, Genética e Oncobiologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal*

<sup>4</sup>*Faculdade de Ciências e Tecnologia. Universidade de Coimbra. Coimbra, Portugal*

<sup>5</sup>*Sahlgrenska Academy. University of Gothenburg. Gothenburg, Sweden*

<sup>6</sup>*Biologia Molecular Aplicada e Clínica Universitária de Hematologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal*

<sup>7</sup>*Instituto de Imunologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal*

**Introduction:** Diffuse Large B-cell Lymphoma (DLBCL) is a diffuse proliferation of large neoplastic B lymphoid cells with a nuclear size equal to or exceeding the normal macrophage nuclei, representing more or less 25% to 30% of the cases. Radiotherapy (RT) alone or, more frequently, given in association with surgery and medical treatments is one option for DLBCL treatment.

**Objective:** Our aim was to evaluate the response of DLBCL after X radiation (RX) exposure

**Methods:** The assays were performed on FARAGE cells exposed to RX. Cell survival was studied by clonogenic assay. BAX/BCL-2 and cell death were evaluated by flow cytometry, P53 expression by Western-Blot, after an incubation period of 48 hours.

**Results:** Our results suggest that RX induces viability and proliferation decreasing in a dose and time dependent manner. The LD50 calculated for this cell line was 2.2Gy. The majority of cells undergo apoptosis although an increase of necrosis was observed at 60 Gy. We observed an arrestment of cell cycle at G2/M phase. Further, we found greater BAX/BCL-2 ratio in cells submitted to RX. P53 expression increases with radiation doses.

**Conclusions:** According to our results, RX induces cell death mainly by apoptosis, higher doses as 60Gy present also significant necrosis, arresting cell cycle in G2/M phase mostly. The increase of BAX/BCL2 ratio may indicate activation of intrinsic apoptosis pathway via mitochondria.

**Descriptors:** Diffuse large B-cell lymphoma; Ionizing radiation, cell death, P53, BAX/BCL-2.

<sup>a</sup> fjmendes@estescoimbra.pt

<sup>b</sup> tiago\_folgado@hotmail.com

<sup>c</sup> susann2310@hotmail.com

<sup>d</sup> acc.goncalves@gmail.com

<sup>e</sup> ana.belasarmento@gmail.com

<sup>f</sup> filomena@ibili.uc.pt

<sup>g</sup> msrosa@fmed.uc.pt

544

### IONIZING RADIATION INDUCE DNA DAMAGE AND CELL CYCLE ARREST IN A LUNG CANCER CELL LINE

Fernando Mendes<sup>I,II,III,a</sup>, Tiago Sales<sup>I,IV,b</sup>, Susann Schugk<sup>I,IV,c</sup>, Ana Cristina Gonçalves<sup>III,VI,d</sup>, Ana Bela Sarmiento<sup>III,VI,e</sup>, Maria Filomena Botelho<sup>I,III,f</sup>, Manuel Santos Rosa<sup>VII,g</sup>

<sup>I</sup>Unidade de Biofísica. Faculdade de Medicina. Instituto de Imagem Biomédica e Ciências da Vida. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>II</sup>Escola Superior de Tecnologia da Saúde de Coimbra. Instituto Politécnico de Coimbra. Coimbra, Portugal

<sup>III</sup>Centro de Investigação em Meio Ambiente, Genética e Oncobiologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>IV</sup>Faculdade de Ciências e Tecnologia. Universidade de Coimbra. Coimbra, Portugal

<sup>V</sup>Sahlgrenska Academy. University of Gothenburg. Gothenburg, Sweden

<sup>VI</sup>Biologia Molecular Aplicada e Clínica Universitária de Hematologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>VII</sup>Instituto de Imunologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

**Introduction:** Radiotherapy is one of the most common treatments to delay tumor progress. Ionizing Radiation (IR) may induce DNA damage and cell cycle arrestment. After the activation of cell cycle checkpoints the progression of cells to the next phase can be blocked or slowed.

**Objective:** Our aim was to evaluate the response of Small Cell Lung Cancer cell line (H69) after X radiation (RX) exposure.

**Methods:** The assays were performed on H69 cells exposed to RX doses from 0.5 to 60Gy. Cell survival was studied by clonogenic assay, plated immediately after radiation and incubated for 7 days. The effect of RX was studied after 48 hours incubation period using for cell cycle analysis flow cytometry and for DNA damage the comet assay.

**Results:** Our clonogenic results suggest that the survival factor of cells decreases with the increase of IR dose, having this cell line a LD50 of 5.2 Gy. We observed an arrestment of cell cycle in G2/M phase with significance in a dose dependent manner. Comet assay confirm the previous results with an increase of DNA damage at higher doses.

**Conclusions:** High doses IR decreases the survival cells with a LD50 of 5.2 Gy, with cell cycle arrestment in G2/M phase, showing and DNA damage increase with dose.

**Descriptors:** Radiotherapy; Small Cell Lung Cancer; Cell cycle, DNA damage.

<sup>a</sup> filomena@ibili.uc.pt

<sup>b</sup> fjmendes@estescoimbra.pt

<sup>c</sup> acc.goncalves@gmail.com

<sup>d</sup> tiago\_folgado@hotmail.com

<sup>e</sup> susann2310@hotmail.com

<sup>f</sup> ana.belasarmiento@gmail.com

<sup>g</sup> msrosa@fmed.uc.pt

545

### RADIOTHERAPY IN LYMPHOMA AND LUNG CANCER PATIENTS - TNF-ALPHA LEVELS AND T CELL SUBSETS

Fernando Mendes<sup>I,II,III,a</sup>, Inês Nobre Gois<sup>IV,b</sup>, Cátia Domingues<sup>V,c</sup>, Vera Alves<sup>VI,d</sup>, Ana Bela Sarmiento<sup>III,VI,e</sup>, Maria Filomena Botelho<sup>III,VI,f</sup>, Manuel Santos Rosa<sup>VI,g</sup>

<sup>I</sup>Instituto de Imagem Biomédica e Ciências da Vida. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>II</sup>Escola Superior de Tecnologia da Saúde de Coimbra. Instituto Politécnico de Coimbra. Coimbra, Portugal

<sup>III</sup>Centro de Investigação em Meio Ambiente, Genética e Oncobiologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>IV</sup>Departamento de Radiação Oncológica. Centro Hospitalar e Universitário de Coimbra. Coimbra, Portugal

<sup>V</sup>Biologia Molecular Aplicada e Clínica Universitária de Hematologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

<sup>VI</sup>Instituto de Imunologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal

**Introduction:** Radiotherapy (RT) induces inflammation, which results in cytokine concentration variation, leading to different outcomes in treatment. T lymphocytes are important cytokine producers.

**Objective:** The aim of this study was to evaluate TNF- $\alpha$  level, Tregs and other T cell subsets, in Diffuse Large B Cell Lymphoma (DLBCL) and Non-Small Cell Lung Cancer (NSCLC) patients during RT.

**Methods:** Patients (11 DLBCL and 13 NSCLC) were studied immediately before RT (T0), half-treatment (T1) and 30 days after the end of treatment (T2), blood samples were analyzed by flow cytometry for CD3, CD4, CD8, CD19, CD56, CD25, CD127, FoxP3, CD31 and CD45RA expression and to evaluate TNF- $\alpha$  levels an immunoassay (ELISA) was performed. The study was approved by the Ethical Committee.

**Results:** Both groups studied showed a decrease in CD4+ T cells, with significance in NSCLC patients. B cells decreased during treatment, from T0 to T1 in both groups, but recovered significantly only in NSCLC at T2. CD4+CD25brightCD127dimFoxP3+ cells were increased in both groups, although only significantly in NSCLC. At T2, CD45RA+CD31-Tregs presented a distinct behavior in both groups increasing in DLBCL and decreasing in NSCLC, although not statistically significant. There was an increase in TNF- $\alpha$  level in NSCLC patients from T0 to T1 decreasing at T2, while in DLBCL we observed a continuous increase in TNF- $\alpha$  level from T0 to T2.

**Conclusions:** In NSCLC patients we observed significant changes in Tregs, going together with non-significant alterations of NK and DN T cells as well as in TNF- $\alpha$  level after RT.

**Descriptors:** Radiotherapy, Diffuse Large B Cell Lymphoma, Non-Small Cell Lung Cancer, TNF- $\alpha$ , T cells.

<sup>a</sup> fjmendes@estescoimbra.pt

<sup>b</sup> inobregois@hotmail.com

<sup>c</sup> catiascdomingues@gmail.com

<sup>d</sup> valves@fmed.uc.pt

<sup>e</sup> ana.belasarmiento@gmail.com

<sup>f</sup> filomena@ibili.uc.pt

<sup>g</sup> msrosa@fmed.uc.ptm

546

## CONSTRUCTION AND VALIDATION OF INSTRUMENTS FOR SYSTEMATIZATION OF NURSING CARE IN PERSON DURING HEMODIALYSIS

Tais De Oliveira Marques<sup>1,a</sup>, Cristina Arreguy-Sena<sup>1,b</sup>, Luciene Carnevale Souza<sup>1,c</sup>, Luciene Muniz Braga<sup>1,d</sup>, Pedro Miguel Santos Diniz Parreira<sup>1,e</sup>

<sup>1</sup>*Faculdade de Enfermagem. Universidade Federal de Juiz de Fora. Juiz de Fora, Brazil*

<sup>11</sup>*Universidade Federal de Viçosa. Viçosa, Brazil*

<sup>111</sup>*Escola Superior de Enfermagem de Coimbra. Coimbra, Portugal*

**Introduction:** People on hemodialysis experience stressors from the disease, treatment, interpersonal interaction and hemodialysis environment. Gaps on models of nursing care for people on hemodialysis justified this research.

**Objective:** Creating an instrument for historical nursing using Neuman's theory, adjusting the instrument to records of diagnostic, interventions and outcomes nursing and validate the contents (information and clinical reasoning).

**Methods:** Study case in a renal replacement therapy unit of Brazilian hospital. Benchmarks were adopted: Council Resolutions Nursing and taxonomies diagnosis (NANDA I), interventions (NIC), and nursing outcomes (NOC).

**Results:** Steps: preparation of constructs and printed documents for clinical practice of nurses; validation of content, layout and consistency of printed for the profile of the clientele; applying printed in three distinct profiles of people in treatment and clinical validation with expertise using the focus group technique. There was a consensus among the information derived from the application of printed and the opinion of experts regarding the contents obtained. The final version of the reports allowed to confirm 14 diagnoses, 15 interventions and 13 nursing outcomes present in early printed portrayed from the situation of the three cases investigated. Space and content were reconciled in two sheets (data collection and on a list of diagnoses and interventions/outcomes elsewhere).

**Conclusions:** This research provided an opportunity to develop skills and habits of mind contained in the profile when nurses apply clinical reasoning. Faced with the impossibility of rejecting the original diagnoses it is suggested to increase the number of participants in clinical research and confirmation with experts in the field.

**Descriptors:** Nursing; Nursing Care; Chronic Renal Failure; Nursing process.

<sup>a</sup> tais.marques@hotmail.com

<sup>b</sup> cristina.arreguy@ufjf.edu.br

<sup>c</sup> lucienecarnevale@hotmail.com

<sup>d</sup> lucienemunizbraga@yahoo.com.br

<sup>e</sup> pedromiguel.parreira@gmail.com

547

## MODELLING A SOFTWARE FOR QUALITATIVE AND QUANTITATIVE ANALYSIS OF OROPHARYNGEAL SWALLOWING BY VIDEOFLUOROSCOPY

Aida Eduarda Silva<sup>1,a</sup>, Ricardo Jorge Santos<sup>11,b</sup>, Miguel Tavares Coimbra<sup>111,c</sup>, Roberta Gonçalves da Silva<sup>1111,d</sup>

<sup>1</sup>*Faculdade de Medicina. Universidade do Porto. Porto, Portugal*

<sup>11</sup>*Hospital Privado da Trofa. Trofa, Portugal*

<sup>111</sup>*Departamento de Ciências da Computação. Faculdade de Ciências. Universidade do Porto. Porto, Portugal*

<sup>1111</sup>*Departamento de Fonoaudiologia. Universidade Estadual Paulista Júlio de Mesquita Filho. Marília, Brazil*

**Introduction:** Swallowing it's a dynamic, complex and synergistic process, composed of three phases with a refined neuromotor control. A malfunction of this process, denominated dysphasia, can occur in any age like a result of congenital, structural, functional and/or medical problems. The quantitative analysis of this process is crucial to understand the temporal relations between the mechanisms of the oropharyngeal deglutition.

**Objective:** Design a software to support the qualitative and quantitative analysis of swallowing through dynamic images obtained by videofluoroscopy.

**Methods:** The methodology used was divided in two phases. The first phase was a survey of requirements consisting in a research protocol for assessing dysphagia by videofluoroscopy. In a second phase were used best practices in human-computer interaction to design a conceptual model for the proposed software.

**Results:** Two protocols for the assessment of dysphagia by videofluoroscopy were selected, the Protocol of Boston and the protocol used in the Hospital Privado da Trofa. These protocols allowed the identification of several events that are evaluated in the swallowing process and that can be recorded, measured and quantified during ingestion of the bolus. The second phase resulted in a conceptual model for an interactive system embodying the evaluation protocol selected and contemplates the integration of automatic algorithms for qualitative and quantitative evaluation of the parameters of swallowing.

**Conclusions:** The proposed software model has a high potential to be a useful tool for assessing parameters of swallowing.

**Descriptors:** Swallowing; Videofluoroscopy Evaluation; Software; Quantitative Analysis.

<sup>a</sup> aefsilva@gmail.com

<sup>b</sup> ricardosantos\_tf@hotmail.com

<sup>c</sup> mcoimbra@dcc.fc.up.pt

<sup>d</sup> rgsilva@marilia.unesp.br

548

## DISCRIMINATION IN PROFESSIONAL MUSICIANS AND NON MUSICIANS

Cátia Antunes<sup>a</sup>, Cláudia Reis<sup>b</sup>

*Escola Superior de Tecnologia da Saúde de Coimbra. Coimbra, Portugal*

**Introduction:** The hearing is a complex sensory function and involves a process that occurs throughout the auditory system.

**Objective:** This project aims to study the cognitive development of musicians (clarinetists and conductors), through the processes involved the detection of different stimuli that present a paradigm centered on differences in duration, frequency and intensity, analyzing the latency and amplitude of the waves of Mismatch Negativity (MMN), captured, and also understand if the wave results is equal for the different stimuli presented.

**Methods:** After the participants were informed about the study objective and the fulfillment of inclusion factors, an Otoscopy, Timpanometry, search airway with limit method on frequencies 125, 250, 500, 1000, 2000, 4000 and 8000Hz. BERA was tested at 90dB SPL and the long latency potential MMN was performed on every patient. To achieve the MMN, two stimuli were required, where one was a standard and the other was a deviant. We choose two frequencies of 440 and 540 Hz, durations of 300 and 250 ms and intensities of 70 and 50 dB, making pairs.

**Results:** The results indicate a better discrimination in musicians compared with non-musicians, however, the results were not statistically significant.

**Conclusions:** The study of this potencial aimed to contribute to the increase existing knowledge about cognitive development of musicians (clarinetists and conductors) and non musicians. However, some controversy still exist between authors that can be clarified with further research in this area.

**Descriptors:** Discrimination, Musicians, Auditory Brainstem Response (ABR), Mismatch Negativity (MMN), Event Related Potentials.

549

## HAZARD ANALYSIS AND CRITICAL CONTROL POINTS (HACCP): STILL A PUBLIC HEALTH EFFECTIVE TOOL?

Rita Cravidão<sup>1</sup>, Margarida Luz<sup>1</sup>, Bruno Mendes<sup>1,a</sup>

*<sup>1</sup>Escola de Ciências e Tecnologias da Saúde. Universidade Lusófona de Humanidades e Tecnologias. Lisboa, Portugal*

*<sup>11</sup>Grupo de Gestão de Qualidade e Estratégia em Saúde. Escola de Ciências e Tecnologias da Saúde. Universidade Lusófona de Humanidades e Tecnologias. Lisboa, Portugal*

**Introduction:** The EU agri-food sector is currently a €750 billion/year industry, with the food security as a Public Health key issue due to the direct impact that it generates on the consumer until the indirect effects on the economy and competitiveness of companies. There are preemptive tools for establishing quality control and quality assurance, such as HACCP, which has a successful background in its implementation and performance. As we know, evolution is also correlated with the optimization and replication of successes.

**Objective:** In this sense, our priorities and goals are the assessment of the differential value of HACCP, the comparison with other tools and possible application of its principles to other health industries.

**Methods:** The analysis consists in a retrospective cross-study based on scientific, financial, statistical and regulatory data. These were processed by a strategic and logistical instrument, the SWOT (Strengths, Weaknesses, Opportunities, Threats), sustained in intrinsic and extrinsic factors, and revealing what can make-or-break this chain.

**Results:** The SWOT analysis determined that public health factors only account for 53,3% of HACCP strengths and for 20% of opportunities. The remain value as well as 100% of the weaknesses and 66,7% of threats are correlated with management, economic and market-related factors.

**Conclusions:** Despite its structure be health-oriented, the analysis demonstrated that currently the HACCP sustains its opportunities and challenges in the market context. Its application to other industries still have a residual expression, but its projection into the future will depend of versatility.

**Descriptors:** Industry; Technology; HACCP; Health; Market.

<sup>a</sup> catiainesantunes@gmail.com

<sup>b</sup> creis@estescoimbra.pt

<sup>a</sup> bruno.mendes@ulusofona.pt

550

### CLINICAL TRIALS OF BLOOD-BORNE AND VECTOR-BORNE DISEASES: AN EUROPEAN CROSS-ANALYSIS

Raquel Mendes<sup>1</sup>, Bruno Mendes<sup>1,a</sup>

<sup>1</sup>*Escola de Ciências e Tecnologias da Saúde. Universidade Lusófona de Humanidades e Tecnologias. Lisboa, Portugal*

<sup>11</sup>*Grupo de Gestão de Qualidade e Estratégia em Saúde. Escola de Ciências e Tecnologias da Saúde. Universidade Lusófona de Humanidades e Tecnologias. Lisboa, Portugal*

**Introduction:** A general principle of medicines development and present in the International Conference on Harmonisation of technical requirements for registration of pharmaceuticals is that “Patients entering clinical trials should be reasonably representative of the population that will be later treated by the drug” since these populations may respond differently to a given treatment, particularly due to age and pharmacokinetic-related factors.

**Objective:** Regarding its insufficient study, our goal is to evaluate the relationship between pathological incidence, demographics and trials.

**Methods:** Evaluation of 1486 single and multicenter trials conducted in Europe between 2005-2012, related to blood-borne (BBI) or vector-borne infections (VBI). Examination of the reported cases of these pathologies, considering the three age groups with the highest incidence. Results structure: incidence versus pathology; pathological incidence versus trials; trials versus demographics.

**Results:** Regarding the pathologies, 6 of the 9 BBI and VBI present 1 of the 3 age groups with highest incidence underrepresented in trials. Similarly, 1 of the 9 infections shows an underrepresentation of men, not reflecting the same for women. The group further noted the lack of proportionality between pathological incidence and the number of trials accomplished and in accomplishment. For BBI, 83.8% of reported cases correspond to 1% of the trials and the remaining 16.2% of cases to 99% of trials. The same wasn't appointed for VBI, in which 80.6% and 19.4% of cases correspond respectively to 81.3% and 18.7% of the trials.

**Conclusions:** The non-orientation by equity principles lead to low quality of clinical research and pharmaceuticals.

**Descriptors:** Europe; Pharmaceuticals; Trials; Quality; Equity.

<sup>a</sup>bruno.mendes@ulusofona.pt

551

### EXTRUSION PROCESSES TO FABRICATE BIODEGRADABLE 3D SCAFFOLDS FOR TISSUE ENGINEERING\*

Tânia Viana<sup>1,a</sup>, Sara Biscaia<sup>1,b</sup>, Henrique Almeida<sup>1,c</sup>, Paulo Bártoło<sup>1,ii,iii,d</sup>

<sup>1</sup>*Centre for Rapid and Sustainable Product Development. Instituto Politécnico de Leiria. Leiria, Portugal*

<sup>11</sup>*School of Mechanical, Civil and Aerospace Engineering. University of Manchester. Manchester, United Kingdom*

<sup>111</sup>*Manchester Institute of Biotechnology. University of Manchester. Manchester, United Kingdom*

**Introduction:** Tissue Engineering (TE) is an emerging interdisciplinary field that applies biological and engineering principles to develop biological substitutes that restore, maintain or improve tissue function. The biggest challenge in TE lies in the design and fabrication of biodegradable 3D scaffolds with properties that promote cell adhesion and proliferation. Additive manufacturing processes have been investigated for the development of scaffolds. Among them, the extrusion process has attracted significant attention due to the possibility of fabricating 3D scaffolds layer-by-layer with high control of process parameters.

**Objective:** In the present work was used new extrusion systems developed on Centre for Rapid and Sustained Product Development, which fabricate 3D scaffolds for TE applications.

**Methods:** These systems are based on the extrusion of thin filaments from molten materials that passes through a nozzle guided by robotic device controlled by a computer, and deposited in a platform forming layers of strands to obtain the 3D object. These extrusion based systems have been used to produce scaffolds with different porosities and geometries and several materials, such as PCL, PCL/HA, PCL/TCP, PCL/Graphene and PCL/PLA.

**Results and Conclusions:** Morphological, chemical and biological analyses performed on the scaffolds revealed that extrusion systems have potential to produce regular structures with high level of control over the architecture, without generating significant chemical and biocompatibility changes of the material. The extrusion technique has high potential to produce scaffolds with structural and chemical cues which enables cell activity and tissue growth.

**Descriptors:** Biofabrication; Biomaterials; Extrusion; Scaffolds; Tissue Engineering.

\*Authors acknowledge the support of the FCT (Strategic Project PEST-OE/EME/UI4044/2013) and the European Commission (IREBID Marie Curie Project).

<sup>a</sup>tania.viana@ipleiria.pt

<sup>b</sup>sara.biscaia@ipleiria.pt

<sup>c</sup>henrique.almeida@ipleiria.pt

<sup>d</sup>paulo.bartolo@ipleiria.pt

552

**BIOMECHANICAL ANALYSIS OF THE CARTILAGE\***Dino Freitas<sup>1,a</sup>, Henrique Almeida<sup>11,b</sup>, Paulo Bártolo<sup>1,11,11,c</sup><sup>1</sup>Centre for Rapid and Sustainable Product Development. Instituto Politécnico de Leiria. Leiria, Portugal<sup>11</sup>School of Mechanical, Civil and Aerospace Engineering. University of Manchester. Manchester, United Kingdom<sup>111</sup>Manchester Institute of Biotechnology. University of Manchester. Manchester, United Kingdom

**Introduction:** The increasing number of injuries and diseases affecting cartilage has somehow contributed to the growth of recent studies. For these reasons, the study of cartilage has been assumed as an emerging field of tissue engineering because of the constant search for solutions to repair and regenerate cartilage, which makes it highly important to characterize and study the behaviour of cartilage.

**Objective:** To recognize the inherent characteristics of articular cartilage, comparison testing was performed between the characterizations carried out in swine cartilage, and the existing finite element models of hyperelasticity, using a 3D model of cartilage.

**Methods:** Ten samples of cartilage from the acetabular cavity of the hip joint from 5 different pigs about the same age were characterized. The water content characterization of the cartilage was determined on the basis of weight loss. The cartilage was detached from the subchondral bone for this analysis and samples of 15x15x1 (mm) were made, being “t” the thickness that varies through the depth between the three layers that characterize the cartilage. The analysis took 9h at a temperature of 37°C and measured every 30 min. The cartilage samples lost about 77% of their weight in water and we obtained a relation between time and the water loss content.

**Results and Conclusions:** With this relation, the porosity of the cartilage along with the elasticity modulus was calculated and then computational simulations with 5 different hyperelastic models were performed, being the Arruda-Boyce the most accurate, obtaining a biomechanical behaviour very similar to real cartilage.

**Descriptors:** Cartilage Tissue; Biomechanical Behaviour; Articular Cartilage; Hyperelastic; Tissue Engineering.

\* Authors acknowledge the support of the FCT (Strategic Project PEST-OE/EME/UI4044/2013) and the European Commission (IREBID Marie Curie Project).

<sup>a</sup> dino.freitas@ipleiria.pt<sup>b</sup> henrique.almeida@ipleiria.pt<sup>c</sup> paulo.bartolo@ipleiria.pt

553

**DEVELOPMENT OF A COMPUTATIONAL TOOL FOR CHARACTERIZATION OF THERMAL IMAGES IN MEDICAL APPLICATIONS\***Ana Duarte<sup>1,a</sup>, Luís Carrão<sup>11,11,b</sup>, Margarida Espanha<sup>11,c</sup>, Tânia Viana<sup>11,d</sup>, Dino Freitas<sup>11,e</sup>, Paulo Bártolo<sup>11,v,11,f</sup>, Henrique Almeida<sup>11,g</sup>, Paula Faria<sup>11,h</sup><sup>1</sup>Escola Superior de Tecnologia e Gestão. Instituto Politécnico de Leiria. Leiria, Portugal<sup>11</sup>Desporto e Saúde. Faculdade de Motricidade Humana. Universidade de Lisboa. Lisboa, Portugal<sup>111</sup>Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal<sup>1111</sup>Centre for Rapid and Sustainable Product Development. Instituto Politécnico de Leiria. Leiria, Portugal<sup>11111</sup>School of Mechanical, Civil and Aerospace Engineering. University of Manchester. Manchester, United Kingdom<sup>111111</sup>Manchester Institute of Biotechnology. University of Manchester. Manchester, United Kingdom

**Introduction:** Medicine is constantly evolving and looking for non-invasive, safer diagnostics and therapeutic techniques. Medical thermography is being used more often, mainly, in the detection of certain diseases in breast screening, also in allergology and pain. Commercial thermography software has some limitations because it is developed for general applications. In this work we develop an application that makes the analysis of thermal images more accessible to the medical community.

**Objective:** The main goal of this research is to develop a user friendly computational application that facilitates the interpretation of thermal images. Starting by isolating Regions of Interest (ROIs), important data can be obtained. Temperature can be interpreted and related to possible abnormalities, such as lesions or pain distribution. Traditional thermal processing software allows the identification of ROIs shapes with rectangular or ellipsoidal forms. As biological ROIs don't have regular shapes, software capable of processing any kind of ROI shape will improve diagnostic and therapeutic techniques.

**Methods:** The thermal images application was created using Matlab and allows the user to select any ROI, independently of its geometric shape. A functionality that optimizes the chosen region, removing areas that don't have any relevant statistic data was also added.

**Results and Conclusions:** After ROI's identification, some statistical measures (such as maximum, minimum, average temperature values) and comparisons of different regions with the aid of histograms or tables may be presented.

**Descriptors:** Thermography; Body heat; Thermal Images; Diagnosis; Therapeutic Techniques.

\* Authors acknowledge the support of the FCT (Strategic Project PEST-OE/EME/UI4044/2013) and the European Commission (IREBID Marie Curie Project).

<sup>a</sup> 2121304@my.ipleiria.pt<sup>b</sup> luis.carrao@ipleiria.pt<sup>c</sup> mespanha@fmh.utl.pt<sup>d</sup> tania.viana@ipleiria.pt<sup>e</sup> dino.freitas@ipleiria.pt<sup>f</sup> paulo.bartolo@ipleiria.pt<sup>g</sup> henrique.almeida@ipleiria.pt<sup>h</sup> paula.faria@ipleiria.pt

554

### IMPLEMENTATION PROJECT OF INFECTION PREVENTION BUNDLE RELATED TO CENTRAL VENOUS CATHETER

Ana Filipa Silva Leite<sup>a</sup>, Telma Margarida Coelho Lopes<sup>b</sup>, Ana Teresa N. Silva Pereira<sup>c</sup>, João Pedro Gomes Pedrosa<sup>d</sup>, Vanda Cristina Lopes Ferreira<sup>e</sup>, Marta Salomé F. Lourenço<sup>f</sup>  
*Hospital de Santa Maria. Lisboa, Portugal*

**Introduction:** 80% of bacteremia and fungemia occur in the hospital setting, where the presence of central venous catheter (CVC) is the most common source. The Hematology/Oncology services and Intensive Care Units are those with higher frequency of nosocomial bloodstream infections (nBSI) increasing the time and costs of internment. The epidemiological surveillance report of the unit where we provide care indicates that in 2011 there were 41 episodes of nBSI, 87.8% of unknown origin and 4.9% originating from the CVC. In 90.2% of nBSI cases, the CVC was an external risk factor. In order to prevent infections associated with CVC, literature recommends the adoption of bundles by the services. Thus, the authors have considered urgent to implement a bundle.

**Objective:** To reduce the number of infections associated with CVC.

**Methods:** review of the literature; research for protocols in the institution; meeting with committee control of hospital infection; development of action protocols; selection of good practice to include in the bundle; conducting training activities; observation of knowledge transference to practice and analysis of nBSI numbers during the 6 months after the bundle implementation.

**Results:** After implementation of the bundle there were 16 episodes of nBSI, less 10 than the previous year, corresponding to a change of -38% of episodes occurred.

**Conclusions:** Despite the complexity of the implementation of the bundle, the commitment of all professionals was crucial to the success of the project, resulting in a significant reduction in the number of nBSI.

**Descriptors:** nosocomial bloodstream infection, bundle, central venous catheter.

<sup>a</sup> anafilipaleite@hotmail.com

<sup>b</sup> Telmalopes@hotmail.com

<sup>c</sup> ana-teresa-p@hotmail.com

<sup>d</sup> joaopgpedrosa@gmail.com

<sup>e</sup> vandinha\_ferreira@hotmail.com

<sup>f</sup> stermarta@gmail.com

555

### EVOLUTION OF DEPENDENCE IN SELF-CARE, IN A SAMPLE OF CUSTOMERS, THREE MONTHS AFTER DISCHARGE

Eloisa Alexandra Ribeiro Maciel<sup>1,a</sup>, Filipe Miguel Soares Pereira<sup>1,b</sup>, Inês Maria Cruz Sousa<sup>1,c</sup>

<sup>1</sup>*Centro Hospitalar Póvoa de Varzim. Vila do Conde, Portugal*

<sup>2</sup>*Escola Superior de Enfermagem do Porto. Porto, Portugal*

**Introduction:** Self-care is a relevant area for nursing. An event generating dependence in self-care limits the person's ability to maintain his self-care and therefore his wellness.

**Objective:** Characterizing the type and level of dependence in self-care and the compromise in body processes at discharge; evaluating the evolution of these variables three months after discharge; and investigating associations between clinical and socio-demographic variables, and the dependence evolution in a sample of self-care dependents.

**Methods:** Longitudinal, descriptive and quantitative study, with a convenience sample comprising 60 people with dependence in self-care. Mostly women, married, retired and with an average of 72 years-old. The dependence in self-care was evaluated using the "Self-care Dependence Evaluation Instrument" (Duque, 2009).

**Results:** At discharge, the sample presented high dependence levels in all domains of self-care and significant compromises of body processes. Three months later, patients improved their dependence level (M=1,06; SD=0,83) (in a 1 to 4 scale). The domains with a higher evolution were: dressing/undressing, self-elevating, using the toilet, bathing, and taking care of personal hygiene. They also improved in the compromise of body processes, such as body balance, muscle strength, and dehydration. We found statistically significant relationships between body balance at discharge and the cause of dependency (acute disease) with the self-care evolution.

**Conclusions:** Three months after discharge, most of the participants (78,6%) improved the level of independency in self-care and in the compromise of body processes. It is urgent that nurses investigate the factors influencing the self-care evolution, so that they can be an aid in the autonomy reconstruction process.

**Descriptors:** dependency; self-care; body processes.

<sup>a</sup> eloisa107@hotmail.com

<sup>b</sup> filipereira@esenf.pt

<sup>c</sup> inescruz@esenf.pt



556

**INTEGRATIVE REHABILITATION DEVICE – EXOSKELETON\***Dino Freitas<sup>1,a</sup>, Henrique Almeida<sup>1,b</sup>, Paulo Bártolo<sup>1,II,III,c</sup><sup>1</sup>*Centre for Rapid and Sustainable Product Development. Polytechnic Institute of Leiria. Leiria, Portugal*<sup>II</sup>*School of Mechanical, Civil and Aerospace Engineering. University of Manchester. Manchester, UK*<sup>III</sup>*Manchester Institute of Biotechnology. University of Manchester. Manchester, UK*

**Introduction:** Neuromotor disabilities are responsible for the lack of movement, i.e., the reduced speed and endurance, as well as reduced walking steps, and toe clearance. The life expectancy of a patient that suffers from this condition tends to decrease, due to the diminishing of their independence.

**Objective:** There are several equipment's like wheelchairs to fulfill the needs of the daily movements of these patients, but they have practical limitations. In order to improve their life quality, a new equipment is proposed taking into account some recent advances in robotics. The novel exoskeleton aims to be an alternative to the existent equipment's that will allow the patients the ability to move around more freely.

**Methods:** With 5 Degrees of Freedom (DOF), more 2 than the conventional ones, it allows the movement of hip abduction/adduction and eversion/inversion of the foot besides the normal movements at the hip, knee and foot that able the gait movement. At the foot there is a spring mechanism that retains the energy of one step of the gait releasing that energy to enhance the next step.

**Results and Conclusions:** The main function of the Exoskeleton is to support the patient in order to help to him walk. Since these kind of patients have partial or complete lack of muscle tension to perform the contraction/retraction of it, resulting in a muscular atrophy, the movements are made by electrical muscle stimulation (EMS) controlled by the patient enabling him to walk on his own pace.

**Descriptors:** Exoskeleton. Muscle Stimulus. Neuromotor Disabilities. Gait Rehabilitation. Lower Limbs.

\*Authors acknowledge the support of the FCT (Strategic Project PEST-OE/EME/UI4044/2013) and the European Commission (IREBID Marie Curie Project).

<sup>a</sup> dino.freitas@ipleiria.pt<sup>b</sup> henrique.almeida@ipleiria.pt<sup>c</sup> paulo.bartolo@ipleiria.pt

557

**STUDY THE HEALING EFFECT OF CREAMS INGA SUBNUDA IN SKIN LESIONS**Geisla Teles Vieira<sup>1,a</sup>, Fábio Teixeira Braga<sup>II,III,b</sup>, Tania Toledo de Oliveira<sup>I,II,III,c</sup>, Cintia Maria Chagas Carvalho<sup>I,d</sup>, Vera Maria Peters<sup>I,e</sup>, Júnia Leonne Dourado de Almeida Lima<sup>III,IV,f</sup><sup>I</sup>*Departamento de Bioquímica e Biologia Molecular. Universidade Federal de Viçosa. Viçosa, Brasil*<sup>II</sup>*Instituto Universitário Italiano de Rosario. Rosario, Argentina*<sup>III</sup>*Faculdade Dinâmica do Vale do Piranga. Ponte Nova, MG, Brasil*<sup>IV</sup>*Departamento de Medicina e Enfermagem. Universidade Federal de Viçosa. Viçosa, Brasil*

**Introduction:** Inga subnuda is a leguminous known for Inga and Inga - vine. Traditionally, the tincture of its bark is used in folk medicine for the healing of open wounds.

**Objective:** Evaluate the healing action of creams prepared from crude extract of the peel of inga in skin lesions in rabbits.

**Methods:** 250g of ground bark were inserted into 1:1 water/ethanol and allowed to stand for 72h, followed by filtration, evaporation and freeze drying. With the crude extract topical creams were prepared at concentrations of 1% and 5%. We used male adult rabbits breed Albino New Zealand. In each animal, two wounds were made on the back: one with cold scalpel and electrocautery with another. Then we were divided into groups of 6 animals each: G1 treated with saline 0.9%, G2: treated with cream 1%, G3: treated with 5% cream; G4: treated with ointment Fitoscar<sup>®</sup>. The experimental period was 14 days. The areas of the lesions were analyzed by macroscopic and scar retraction daily.

**Results:** The G2 group had the highest rate of contraction to the wound with cold scalpel. No group total epithelialization at the end of 14 days there. The wound with electrocautery showed index lower than the wound with cold scalpel contraction in all groups.

**Conclusions:** The creams ingá showed healing action on the tested model, pointing to a potential herbal therapy in cutaneous lesions, requiring, however, additional studies.

**Descriptors:** Inga subnuda. Skin lesion. Rabbits.

<sup>a</sup> geislateles@yahoo.com.br<sup>b</sup> Fabio@estimaclinic.com.br

558

### EFFECTS OF VERNONIA POLYANTHUS' DRY EXTRACT OINTMENT ON WOUND HEALING IN RATS

Fábio Teixeira Braga<sup>I,II,a</sup>, Geisla Teles Vieira<sup>III,b</sup>, Tania Toledo de Oliveira<sup>III</sup>, Cintia Maria Chagas Carvalho<sup>III</sup>, Júnia Leonne Dourado de Almeida Lima<sup>II,IV</sup>

<sup>I</sup>*Instituto Universitário Italiano de Rosario. Rosario, Argentina*

<sup>II</sup>*Faculdade Dinâmica do Vale do Piranga. Ponte Nova, MG, Brasil*

<sup>III</sup>*Departamento de Bioquímica e Biologia Molecular. Universidade Federal de Viçosa. Viçosa, Brasil*

<sup>IV</sup>*Departamento de Medicina e Enfermagem. Universidade Federal de Viçosa. Viçosa, Brasil*

**Introduction:** In Brazil's inner towns, the juice from *Vernonia polyanthus* (VP) leaves has been used by local population as a wound healing, though its benefits hasn't been scientifically proven.

**Objective:** To identify the effects of the VP dry extract ointment on wounds.

**Methods:** The research is a controlled experiment, conducted in 48 female Wistar rats, which were divided into 2 groups of 24 rats. Researchers developed a basic ointment which contained 3% of VP dry extract (PBVP3%) for the experimental group, and another basic ointment, without the VP dry extract, for the controlled group. The wound was surgically made on the animals' dorsi after they were anesthetized, which consisted in removing 1 cm in diameter of the skin, thereby establishing a second-intention wound healing process. The wounds were under observation after 3, 7, 14 and 21 days of post-surgery, where researchers tried to analyze the macroscopic appearance and scar tissue retention thru digital planimetry. The Federal University of Viçosa-Minas Gerais State authorized the research (CEUA-UFV, nº10/2013).

**Results:** From the 9th day on, the surgically made wound on the experimental group showed a scar retraction with 80% significance statistically ( $p=0,0001$ ), being epithelialized completely on the 14th day. The controlled group showed a completely epithelialized wound only on the 18th day ( $p=0,012$ ).

**Conclusions:** We can confirm that the PBVP3% had more therapeutic effects on wound healing on the tested specimen. Therefore, we find essential to hold new trials. Sponsorship: TOXIFAR-FAPEMIG.

**Descriptors:** *Vernonia polyanthus*. Wound healing. Rats.

<sup>a</sup> Fabio@estimaclinic.com.br

<sup>b</sup> geislateles@yahoo.com.br

559

### ADAPTATION AND VALIDATION OF MINI-MENTAL STATE EXAMINATION FOR INDIVIDUALS WITH APHASIA

Ana Almeida<sup>I,a</sup>, Ana Fernandes<sup>I,b</sup>, Ana Graça<sup>I,c</sup>, Joana Carvalho<sup>I,d</sup>, Pedro Sá-Couto<sup>II,e</sup>, Maria Matos<sup>I,III,f</sup>

<sup>I</sup>*School of Health Sciences. University of Aveiro. Aveiro, Portugal*

<sup>II</sup>*Center for Research and Development in Mathematics and Applications. Department of Mathematics. University of Aveiro. Aveiro, Portugal*

<sup>III</sup>*Centro Hospitalar e Universitário de Coimbra. Coimbra, Portugal*

**Introduction:** The Mini-Mental State Examination (MMSE) is a cognitive screening instrument, widely used in clinical practice in Portugal. Nevertheless, this instrument depends on language capacities, which can hamper the performance in individuals with aphasia.

**Objective:** The aim of this study is to validate a new instrument, the MMSE adapted for individuals with aphasia (MMSE\_A).

**Methods:** This process involved several stages: request for authorization, translation, adaptation and validation of the instrument. A comparison with the original MMSE instrument using two clinical groups (group 1: 27 patients with aphasia, PWA; group 2: 10 patients with global cognitive impairment, PCGI), and a reliability analysis study was conducted. Content validity was established by using an independent expert panel and a total agreement between all the experts was achieved. Concurrent validity was established by correlating the scores between MMSE and MMSE\_A.

**Results:** For the PWA group, the correlation result was 0.76 ( $p<0.001$ ) and for the PCGI was 0.93 ( $p<0.001$ ), presenting an excellent correlation between the two scales. The MMSE\_A inter (4 raters)/ intra (test and retest situation) rater reliability was only calculated for the PWA group and presented excellent reliability results, with intraclass correlation values higher than 0.9 ( $p<0.001$ ).

**Conclusions:** Preliminary results reveal that the MMSE\_A has good psychometric properties, and indicate the pertinence of the instrument for a differential diagnosis between both groups. The small sample used implies further studies in order to achieve a more complete validation of the MMSE\_A, allowing results' extrapolation for the Portuguese population with aphasia.

**Descriptors:** MMSE. Aphasia. Validation. Assessment. Instrument.

<sup>a</sup> arsa@live.ua.pt

<sup>b</sup> acdf07@gmail.com

<sup>c</sup> filipagraca@live.ua.pt

<sup>d</sup> joana.margarida.cr@gmail.com

<sup>e</sup> p.sa.couto@ua.pt

<sup>f</sup> maria.matos@ua.pt

560

### POTENTIAL OF THE PLATFORMS FOR ASSESSMENT/MONITORING THE HEALTH OF THE ELDERLY AT DISTANCE

Tânia Costa<sup>a</sup>, Catarina Pinto<sup>b</sup>, Diogo Afonso<sup>c</sup>, Sara Laranjeira<sup>d</sup>, Cláudia Ferreira<sup>e</sup>, João Costa Amado<sup>f</sup>, João Queiróz e Melo<sup>g</sup>

*Institute of Health Sciences. Catholic University of Portugal. Porto, Portugal*

**Introduction:** Aging associated with socio-economic and family changes contributes to the emergence of challenges for elderly/informal carers. Thus, identifying the needs of the elderly and intervene in time are the most relevant advantages of this technology.

**Objective:** Characterize the potential of “True - Kare” service, while evaluation/ monitoring platform the health of the elderly at distance.

**Methods:** Cross interventional pilot study, alternating “cases” and “controls” previously and intentionally selected those who met the inclusion criteria. Data collection was carried out by semi-structured interview followed by descriptive/inferential analysis. The ethics committee evaluated and approved the study.

**Results:** From the 50 elderly studied, 28 (56%) had 80 or more years old. All suffered, at least, one chronic disease and registered an average of 4.9 diseases per individual; 46 ingested drugs, 4 different drugs/day (minimum of 1 and maximum of 9 drugs) on average. However, last year, they acceded on average to 4 consultations (medical/family nurse) in the context of health programs; 30 seniors report that such consultations are not sufficient to eliminate the difficulties associated with the management of therapeutic regimen, highlighting the potential that the True-Kare can take on this area.

**Conclusions:** The elderly become more dependent on health care, that is worrying in the current context. In this sense, ensured the implementation of diagnostic activity and planning interventions gradual/custom mode (related to the evaluation of results), the True-Kare can be assumed as a tool in managing integrated cases in the informal/professional care, contributing to one favorable cost-benefit ratio.

**Descriptors:** Elderly. Mobile. Telemedicine. Health.

<sup>a</sup> tcosta@porto.ucp.pt

<sup>b</sup> Catarina\_p\_pinto@sapo.pt

<sup>c</sup> Diogoo\_afonso@hotmail.com

<sup>d</sup> saralaranjeiraa@gmail.com

<sup>e</sup> claudia\_cristina@hotmail.com

<sup>f</sup> jcamado@porto.ucp.pt

<sup>g</sup> jmelo@porto.ucp.pt

561

### THE NURSE’S EXPERIENCE ABOUT ADOLESCENT’S WITH CF CARE – A QUALITATIVE APPROACH

Conceição Reisinho<sup>a</sup>, Bárbara Gomes<sup>b</sup>

*Escola Superior de Enfermagem do Porto. Porto, Portugal*

**Introduction:** The skills of a nurse are well defined by the Nurses ‘Order, with a special concern for the regulation of the abilities of pediatric specialist, since it is the most peculiar area. The nurse is part of a multi-disciplinary team, therefore it is required to have the knowledge to support a good practice and so fit the interventions to the needs of the population: adolescents with Cystic Fibrosis (CF) and their family in this case.

**Objective:** The perception of the magnitude of this problem led us to develop the present investigation, aiming to understand the nurses ‘experience in providing care to adolescents with CF. These are the preliminary results.

**Methods:** This research is directed to a descriptive, transversal and qualitative type of study. A convenience sample was selected composed by nurses that deal with adolescents with CF. The information was collected through semi-structured interview, choosing the methodology which best suited the research objectives.

**Results:** From the data analysis and interpretation the following analysis units emerged: economic status; lack of information at schools; dysfunctional families; care giving guide.

**Conclusions:** Health professionals in general and nurses in particular should be able to understand and help these teenagers and their families managing the impact of cystic fibrosis in their lives. Nurses should also provide a holistic care in order to respond to all needs and life transitions which result from the confrontation with this problem.

**Descriptors:** Adolescents. Cystic fibrosis. Nursing. Qualitative approach.

<sup>a</sup> creisinho@esenf.pt

<sup>b</sup> bgomes@esenf.pt

562

### INFORMATION AND COMMUNICATION TECHNOLOGY IN HIGHER EDUCATION IN NURSING: FOR AN INNOVATIVE PRAXIS

Anderson Reis de Sousa<sup>1,a</sup>, Ana Margarete Cordeiro da Silva Maia<sup>1,b</sup>, Michelle Teixeira Oliveira<sup>1,c</sup>, Jules Ramon Brito Teixeira<sup>1,d</sup>, Ramon Missias Moreira<sup>1,e</sup>, Jaildo Gomes Rodrigues<sup>1,f</sup>, Rita Jucielma Almeida Carneiro<sup>1,g</sup>

<sup>1</sup>Faculdade Nobre. Feira de Santana. Bahia, Brasil

<sup>11</sup>Universidade Estadual do Sudoeste da Bahia. Jequié, Bahia, Brasil

**Introduction:** The technological innovation when used in favor of health, contributes significantly to the safety of care provided to the individual and to live healthy in the society.

**Objective:** To identify in the literature the potential of information and communication technologies for the formation in nursing as innovative praxis.

**Methods:** It is about a literature review using databases SciELO, MedLine, LILACS e IBECs, being selected Updated national articles published in the last 10 years, being excluded annals of events, letters to readers and editorials. Data was collected in the period of 20 days using the following keywords: nursing, education and technology, resulting in a sample of 55 productions, analyzed and restricted to 20 that met the goal.

**Results:** The studies emphasize that nurses should be in constant theory and practice training, being close to the patients and technological resources, however, it can be seen that training of this person has not contemplated this proposal. The conduct of teaching has been mostly ruled in traditionalism without incorporation of new knowledge and innovative practices and technology in relation to heavy technologies like the contact with electronic medical records, equipment tests, databases and information systems, however, there is progress in the implementation of soft technologies, Notoriously found in primary health care.

**Conclusions:** This study draws attention to the need to expand the nursing actions aimed at health education, and the insertion of new technologies as potentiated of a praxis of health innovation.

**Descriptors:** Nursing. Health Education. Technology.

<sup>a</sup> son.reis@hotmail.com

<sup>b</sup> anamargarete@yahoo.com.br

<sup>c</sup> Michelle@gruponobre.net

<sup>d</sup> julesramon@gmail.com

<sup>e</sup> ramonefisica@hotmail.com

<sup>f</sup> dealmeida\_rodrigues@hotmail.com

<sup>g</sup> ritajucy@hotmail.com

563

### NURSING: REASONS FOR A CHOICE

Cassilda Sarroeira<sup>a</sup>, Clara André<sup>b</sup>, Celeste Godinho<sup>c</sup>, Hélia Dias<sup>d</sup>, Mário Silva<sup>e</sup>

*Instituto Politécnico de Santarém; Escola Superior de Saúde de Santarém; Unidade de Investigação do IPS (UIPS). Santarém, Portugal*

**Introduction:** The decision of a life project integrates a set of dimensions and personal, social, cultural, economic and spiritual values that matter, it's very important to reflect in the identification of the reasons and motivations behind it. Young people need to build an identity, with full integration of their values and projects, in a perspective of future. As teachers, since the beginning of the course, we follow the student throughout his journey, contributing to their development. Aware of the centrality of the student throughout the education process, it's very important to know him (them), in order to meet their expectations.

**Objective:** Analyze the reasons why students choose the Nursing Course.

**Methods:** Qualitative and exploratory study, using a convenience sample of 170 first year nursing students (1st Cycle) from the years 2011/2012 and 2012/2013; data collected by a questionnaire with open questions; analyzed using thematic content analysis.

**Results:** Data analysis emerge essentially the following dimensions: area of knowledge (health); social representation of the profession; access conditions; motivations / vocation; family influence; personal/family experiences; altruism as a value and self-realization.

**Conclusions:** In a time of some uncertainty as the one we live today, decision-making facing a career choice has a particular relevance. This study leads us to a discussion around the personal development of students, propelling us into the design of new investigative processes, highlighting the relationship of these results with the building processes of an identity for nursing throughout the course.

**Descriptors:** Nursing; Students; Choice; Reasons; Nursing course.

<sup>a</sup> cassilda.sarroeira@essaude.ipsantarem.pt

<sup>b</sup> clara.andre@essaude.ipsantarem.pt

<sup>c</sup> celeste.godinho@essaude.ipsantarem.pt

<sup>d</sup> helia.dias@essaude.ipsantarem.pt

<sup>e</sup> mario.silva@essaude.ipsantarem.pt

564

### INTEGRATION IN FAMILY EMERGENCY SERVICE: INTEGRATIVE REVIEW

Fernanda Magalhães<sup>1,a</sup>, Maria Manuela Martins<sup>11,b</sup>, Francisca Lima<sup>1,c</sup>, Henriqueta Fernandes<sup>11,d</sup>, Maria do Céu Figueiredo<sup>11,e</sup>, Lara Oliveira<sup>1,f</sup>, Ana Kelve Damasceno<sup>11,g</sup>

<sup>1</sup>Universidade Federal do Ceará. Ceará, Brasil

<sup>11</sup>Escola Superior de Enfermagem do Porto. Porto, Portugal

**Introduction:** The use of technology in health as tools of assessment, search of information for family integration, may be the facilitating conditions for clinical judgment and decision making by health professionals in emergency situations.

**Objective:** To identify the scientific knowledge about the interventions used for the integration of the family in the emergency department.

**Methods:** Integrative review with a guiding question: what are the interventions used for the integration of the individual family in emergency care? Collection organized in December/2013 in databases: CINAHL, SCOPUS, PubMed, Scielo, Lilacs and Cochrane with descriptors Emergency Medical Services Nursing AND Family. It included articles in Portuguese, English or Spanish. Books, protocols and editorials were excluded. Of the 33 articles found, six were analyzed for their relevance from an adapted form(1) and organized in tables.

**Results:** Most studies (5) were of Latin America with evidence level VI(2). With respect to the integration of family interventions were found three categories: Playful, Protocols and Group Activities.

**Conclusions:** It was concluded that it was possible to identify a range of interventions for family integration, for example, therapeutic play, care and notification of child/adolescent victims of domestic violence, and team training for guide family stabilize the individual until the arrival of the Mobile Service. It is believed that these results may support the practice of nursing with the elaboration, implementation and/or evaluation of the integration of family and team awareness. One observed limitation was the scarcity of studies on this theme.

**Descriptors:** Nursing; Emergency Services and Emergency; Family; Risk of Classification.

<sup>a</sup> fernandajmagalhaes@yahoo.com.br

<sup>b</sup> martins@esenf.pt

<sup>c</sup> ildafernandes@esenf.pt

<sup>d</sup> céu@esenf.pt

<sup>e</sup> felisangela@yahoo.com.br

<sup>f</sup> laraleite@hotmail.com

<sup>g</sup> anakelve@ufc.br

565

### CHARACTERIZATION WOMEN WHO HAD CESAREAN CONDUCTED IN A STATE OF NORTHEAST BRAZIL

Lara Oliveira<sup>1,a</sup>, Igor Mendes<sup>11,b</sup>, Camila Costa<sup>11,c</sup>, Elizian Bernardo<sup>11,d</sup>, Ana Kelve Damasceno<sup>11,e</sup>, Fernanda Magalhães<sup>11,f</sup>, Alexandrina Cardoso<sup>11,g</sup>

<sup>1</sup>Universidade Federal do Ceará. Ceará, Brasil

<sup>11</sup>Escola Superior de Enfermagem do Porto. Porto, Portugal

**Introduction:** Parturition has complex indicators for measuring quality of care. For this, the World Health Organization (WHO) established the appropriate maximum rate of 15% for years cesareans. However, epidemiological data indicate that the majority of Brazilian states have higher rates.

**Objective:** To characterize the mothers who underwent caesarean procedure in the State of Ceará.

**Methods:** A descriptive study, document, epidemiological held at Department of Health of Ceará April-May 2013. The information coming the Statement of Live Birth Information System on Live Births. The sample consisted of 576 836 documents of women who underwent cesarean section on the period 2001-2011. Data were statistically analyzed and presented in tables.

**Results:** There was, of all births in the state of Ceará, 39% were caesarean sections. With the highest prevalence in the capital compared to the interior. Most women were single (49%) with age range between 20-34 years (71%) and 8-11 years (40%) of study conducting with 7 or more prenatal consultations (52%).

**Conclusions:** We conclude that the State of Ceará possessed a higher than recommended with young, single and good student level women cesarean rate. Such data can contribute to a critical reflection on the practice of health education and family planning. Among the limitations can note the lack of monitoring specific cause for cesarean section, as well as the determination of the merits of the parturient as to capital or interior.

**Descriptors:** Cesarean section, Obstetrics, Women's Health.

<sup>a</sup> lara.leite@hotmail.com

<sup>b</sup> igormendesufc@yahoo.com.br

<sup>c</sup> milinha\_ita@yahoo.com.br

<sup>d</sup> elizbernardo@hotmail.com

<sup>e</sup> anakelve@hotmail.com

<sup>f</sup> fernandajmagalhaes@yahoo.com.br

<sup>g</sup> alex@esenf.pt

566

## GROWTH AND DEVELOPMENT OF BRAZILIAN CHILDREN AND INSTITUTIONALIZED ASSUMPTI

Fernanda Magalhães<sup>1,a</sup>, Caroline Chaves<sup>1</sup>, Francisca Lima<sup>1,b</sup>, Érica Matias<sup>1,c</sup>, Henriqueta Fernandes<sup>11,d</sup>

<sup>1</sup>Universidade Federal do Ceará. Ceará, Brasil

<sup>11</sup>Escola Superior de Enfermagem do Porto. Porto, Portugal

**Introduction:** Monitoring of child growth and development (GD) is considered the primary indicator of child's health. However, the environment can interfere, so the study is relevant and evident due to the high number of abandoned and institutionalized children in Brazil, as well as the need for theoretical and practical reasons of health professionals on the evaluation of child GD.

**Objective:** To identify the characteristics of GD institutionalized children 0-6 years and compare them with the assumptions of Brazilian Ministry of Health.

**Methods:** Descriptive and quantitative study was approved by the Research Ethics Committee opinion with No 283/10, held in a shelter in the state of Ceará, Brazil. Sample of 44 children aged 0 to 6 years not a carrier of physical or mental changes. The collection was organized in March 2011, with physical and mental, identification of sociodemographic, anthropometric and developmental characteristics of child assessment. The data descriptively analyzed and presented in tables.

**Results:** Prevailed male infants (59,1%) of 24 to 72 months (56,8%) and more than a blissful year (72,7%). All had growth within normal parameters, but 65,9% did not achieve at least one of the milestones of development.

**Conclusions:** We conclude that institutionalized children had satisfactory growth, but significant delays in social and psychological factors of child development. It is believed that these results may support epidemiological data and nursing practice to sensitize health professionals to make use of assessment strategies and continuous health education in order to promote health, reduce and prevent complications resulting from inadequate child GD. Descriptors: Growth and Development, Institutionalization, Child Health.

<sup>a</sup> fernandajmagalhaes@yahoo.com.br

<sup>b</sup> felisangela@yahoo.com.br

<sup>c</sup> ericaoliveira@hotmail.com

<sup>d</sup> ildafernandes@esenf.pt

567

## ILLNESS RISK IN NURSING WORK IN MOBILE EMERGENCY SERVICE

Olvani Martins da Silva<sup>a</sup>, Fabiana Adolf Worm<sup>b</sup>, Márcia Aparecida Oliveira Pinto<sup>c</sup>, Marieli Cristina Ribeiro<sup>d</sup>, Rosana Amora Ascari<sup>e</sup>, Letícia de Lima Trindade<sup>f</sup>, Diego Schiavinato<sup>g</sup>

Centro de Educação Superior do Oeste. Universidade do Estado de Santa Catarina. Chapecó, SC, Brasil

**Introduction:** The labor environment interferes in the life of workers, at times, having repercussion on the health of these individuals.

**Objective:** to identify the risk factors to illness concerning the nursing work in Mobile Emergency Care Service (SAMU).

**Methods:** Cross-sectional study developed from March 2012 to June 2013, including 18 professional nursing technicians and nurses directly related to SAMU main office from Extreme West Region of Santa Catarina. The Inventory of Work and Illness Risks (IWIR) was used to collect the data, which obtained the reliability coefficient of 0.8 by the Cronbach's Alpha. The data was analyzed through descriptive statistics. The research obtained approval from the Research Ethics Committee under no. 181,079/2012.

**Results:** Female genre was predominant (77.78%) and age group between 25 to 31 years old. 50% were married, 38.89% without children, 77.78% are nursing technicians, 38.89% worked in the activity for 04 years, 61.11% worked in three shifts. When evaluating the work context, the "work organization" obtained mean of 2.66 with a standard deviation of +0.03, considered a critical-moderate evaluation. When referring to the indexes of pleasure and suffering at work, the compromised item was "lack of recognition" with mean of 2.12 and standard deviation of +0.16, a critical-moderate evaluation. About "work breakdown", the mean was of 1.66 and the standard deviation was of +0.20, classified as rarely-serious. In the scale of damages related to work, the physical damages obtained mean of 1.95 and standard deviation of +0.54, a critical-moderate evaluation.

**Conclusions:** the nursing work team from SAMU presents risks of illness related to the physical and psychological factor.

**Descriptors:** Nursing in Emergency; Nursing; Occupational Risks; First Aiders.

<sup>a</sup> olvanims@hotmail.com

<sup>b</sup> favorme@gmail.com

<sup>c</sup> titaturatti@hotmail.com

<sup>d</sup> rosana.ascari@hotmail.com

<sup>e</sup> marieli\_mcr@hotmail.com

<sup>f</sup> letindade@hotmail.com

<sup>g</sup> diegoirai@yahoo.com.br

568

## TRAUMA AND LIFE EVENTS: CONTRIBUTION TO A RISK MODEL OF DEPRESSIVE SYMPTOMS IN ADOLESCENTS

Sónia Cherpe<sup>1,a</sup>, Marina Cunha<sup>1,II,b</sup>, Manuela Alvarez<sup>III,c</sup>, José Pinto Gouveia<sup>1,d</sup>

<sup>1</sup>*Cognitive and Behavioural Centre for Research and Intervention. Faculty of Psychology and Education Sciences. Coimbra University. Coimbra, Portugal*

<sup>II</sup>*Instituto Superior Miguel Torga. Coimbra, Portugal*

<sup>III</sup>*Research Centre for Anthropology and Health. Faculty of Sciences and Technology. Coimbra University. Coimbra, Portugal*

**Introduction:** Depression is a major concern of public health. It's expected that by 2030 it'll be the first cause of mortality and morbidity worldwide. Trauma experiences and life events are well known risk factors associated with depression. The occurrence rates of the first depressive episode increase at 15 years old. Depressive symptoms in adolescence, even mild symptoms, may have an impact upon ontogenic development. Therefore, it is important to increase the knowledge of risk factors' accumulative effect associated with depressive symptoms in adolescence.

**Objective:** This study aimed to explore the relationship between trauma and life events with depressive symptomatology and to test which domains of trauma and of life events emerge from the analysis.

**Methods:** A multiple linear regression was conducted (using SPSS, version 20) in a sample of 373 Portuguese adolescents (56% girls: mean age 13.72). Self-report structured questionnaires were used to assess trauma (CTQ; Bernstein & Fink, 2004), life events (DHMS; Seidman et al, 1995) and depressive symptoms (CDI; Kovacs, 1992).

**Results:** Trauma and life events, taken together, account for 48% of the depressive symptoms' variance. Affective Abuse ( $\beta=.34$ ,  $p=.00$ ), Emotional Neglect ( $\beta=.16$ ,  $p=.00$ ) (trauma experiences), Problems at School ( $\beta=.30$ ,  $p=.00$ ), with Peers ( $\beta=.11$ ,  $p=.04$ ) and with Resources ( $\beta=.12$ ,  $p=.02$ ) emerged as significant predictors.

**Conclusions:** The results suggest that some domains of trauma and of life events may have an accumulative predictive effect on depressive symptoms during adolescence and thus can be important variables to include in preventive healthcare technologies. This study needs to be replicated longitudinally and with other predictors (e.g., biologic).

**Descriptors:** Adolescence, Depressive symptoms, Risk, Trauma, Life events.

<sup>a</sup>soniacheppe@fpce.uc.pt

<sup>b</sup>marina\_cunha@ismt.pt

<sup>c</sup>alvarez@antrop.uc.pt

<sup>d</sup>jpgouveia@fpce.uc.pt

569

## PROTOTYPE OF LITTER: TECHNOLOGIES IN HEALTH IN TRANSPORTATION OF PERSONS

Denise Cristina Alves de Moura<sup>1,a</sup>, Nathália Alvarenga-Martins<sup>1,b</sup>, Thaís Mendonça Resende<sup>1,c</sup>, Cristina Arreguy-Sena<sup>1,d</sup>, Pedro Miguel Dinis Santos Parreira<sup>III,e</sup>, Rosângela Greco<sup>1,f</sup>, Betânia Maria Fernandes<sup>1,g</sup>

<sup>1</sup>*Faculdade de Enfermagem. Universidade Federal de Juiz de Fora. Minas Gerais, Brasil*

<sup>II</sup>*Escola Superior de Enfermagem. De Coimbra. Coimbra, Portugal*

**Introduction:** Existing stretchers on the market feature ergonomic hazards for professionals that handle and vulnerability for users transported by them.

**Objective:** Aimed to create an entrepreneurial proposed a prototype of "litter-car" based on deriving methodological foundations of nursing care.

**Methods:** Report of experience in proposal creation of a litter conceived in the discipline of Master in Nursing in 2013 in a Brazilian public university. Product descriptions, and potential target population presented by the technique of a business plan.

**Results:** The proposal litter-car features such as innovative components: materials, size (0,74803X0,27559X0,31496in), quiet motor actionable uphill; manual braking system for slope (like the bicycle), buffer system, side safety bars, seat belts, wheels with material resistant to impacts and action chemicals; removable bracket for hydration; reclining headboard and mattress and elevating feet in two options (1- wrapped by Diapers napa or curvim waterproof and resistant to chemicals with densities of 28 and 33 and 2-coupled with inflatable pillow (distributes pressure for 5 minutes of inflation and deflation cycle, being waterproof/flexible). The product has some advantages for the lack of similar products on the market, its potential to reduce ergonomic hazards for professionals, ability to provide greater safety, comfort, and stability requirements that meet various requirements for transporting people safely and/or state of hemodynamic instability.

**Conclusions:** The prototype is developed product with entrepreneurial capabilities able to contribute to the quality of the transport of litter in-car or on a stretcher within healthcare institutions.

**Descriptors:** Nursing; Occupational Health Nursing; Nursing care; Health Sciences, Technology and Innovation Management; Technology.

<sup>a</sup>denisematipo@yahoo.com.br

<sup>b</sup>nath.alvarenga.martins@gmail.com

<sup>c</sup>mendoncaresende@yahoo.com.br

<sup>d</sup>cristina.arreguy@ufjf.edu.br

<sup>e</sup>pedromiguel.parreira@gmail.com

<sup>f</sup>romagreco@gmail.com

<sup>g</sup>betaniafernandes@uol.com.br

570

## ROBOTIC SURGERY: NEW HORIZONS IN GYNECOLOGICAL SURGERY

Patricia Rodriguez<sup>1,a</sup>, Jose Maria Tena<sup>11,b</sup>, Miriam Vaquerizo<sup>1,c</sup>, Rafael Bravo<sup>11,d</sup>, Francisco Luis Perez<sup>11,e</sup>, Emilia Exojo<sup>1,f</sup>

<sup>1</sup>Hospital Universitario nuestra Señora Del Perpetuo Socorro. Albacete, España

<sup>11</sup>Complejo Hospitalario Universitario de Badajoz. Badajoz, España

<sup>111</sup>Facultad de Ciencias. Universidad de Extremadura. Badajoz, España

**Introduction:** Laparoscopic surgery has revolutionized the concept of minimally invasive surgery for the last 3 decades. Robotic-assisted surgery is a new technology that holds significant promise in the field of minimally invasive surgery.

**Objective:** To review the history, development, and current applications of robotics in gynecological surgery.

**Methods:** A review of the literature was undertaken using Medline. Articles describing the history and development of surgical robots in gynecological surgery were identified as were articles reporting data on applications.

**Results:** Several centers are currently using surgical robots and publishing data. Most of these early studies report that robotic surgery is feasible. There is a paucity of data regarding costs and benefits of robotics versus conventional techniques.

**Conclusion:** Robotic laparoscopy in gynecology, which started in 2005 when the Da Vinci Surgical System was approved for use in gynecologic procedures, represents today a modern, safe, and precise approach to pathology in this field. There is almost no gynecological surgery that cannot be approached with this technology, namely hysterectomy, myomectomy, sacrocolpopexia, oncology and surgery for the treatment of endometriosis. Robot-assisted gynecologic surgery is often associated with longer operating room time but generally similar clinical outcomes, decreased blood loss, and shorter hospital stay. Is an alternative technique to traditional laparoscopy and requires the development of new surgical skills for both the experienced surgeon and trainee. Well-designed, prospective studies with well-defined clinical, long-term outcomes, including complications, cost, pain, return to normal activity, and quality of life, are needed to fully assess the value of this technology.

**Descriptors:** Robotic laparoscopy; Surgery, Ginecología.

<sup>a</sup> patriciarg1985@gmail.com

<sup>b</sup> tenaguerrero@hotmail.com

<sup>c</sup> myriam\_v2@hotmail.com

<sup>d</sup> rbravo@unex.es

<sup>e</sup> franciscoluisper@gmail.com

<sup>f</sup> emiliaexojoserrano@gmail.com

571

## PREVALENCE OF LOW BACK PAIN IN CHILDREN AND ADOLESCENTS FROM THE ALGARVE REGION

Beatriz Minghelli<sup>1,a</sup>, Eduardo Cercal<sup>1</sup>, João Raimundo<sup>11</sup>, Sérgio Palma<sup>11</sup>, Tomás Teixeira<sup>11</sup>

<sup>1</sup>Escola Superior de saúde Jean Piaget/Algarve. Silves, Portugal

<sup>11</sup>Estudantes de fisioterapia da Escola Superior de saúde Jean Piaget/Algarve. Silves, Portugal

**Introduction:** Several factors such as the physiological, anthropometric, psychosocial, genetic and environmental have been associated with Low Back Pain (LBP) in children and adolescents however the role of these factors is still controversial among studies. The influence of several lifestyle factors in the development of LBP, such as hours watching television or playing games becomes very important from public health, since these factors may be subject to change.

**Objective:** This study determined the prevalence of LBP in Portuguese children and adolescents and examined their association with time spent on sedentary activities.

**Methods:** The sample included 188 children and adolescent of soccer team of Algarve region, aged between 6-16 years (16.7±1.98 years), being only 1 girl. The assessments included a Questionnaire, developed and validated by Oliveira et al., to characterize the LBP presence.

**Results:** Only 8 (6.8%) students revealed LPB at the moment, 25 (21.2%) students in the last year, and 14 (11.9%) had lifetime prevalence of LBP. 11 (9.3%) students looked for a health professional because of LBP and 15 (12.7%) underwent treatment. Of students with LBP, 18 (72%) watched television up to 10 hours per week and 7 (22.6%) equal or up to 11 hours per week (p=0.539), 23 (92%) played video games up to 10 hours per week and 2 (10%) in above period to 11 hours (p=0.138).

**Conclusions:** This study found a high prevalence annual of LBP in children and adolescents practicing soccer and found no association with time spent on sedentary activities.

**Descriptors:** low back pain, adolescent, prevalence, risk factors

<sup>a</sup> beatriz.minghelli@silves.ipiaget.pt



572

### EXPERIENCES OF PLEASURE AND SUFFERING IN BRAZILIAN MENTAL HEALTH CARE SERVICES

João de Deus Gomes da Silva<sup>1,a</sup>, Selman Lancman<sup>11,b</sup>, Giovanni Gurgel Aciole<sup>111,c</sup>

<sup>1</sup>Universidade Federal de São Paulo. São Paulo, Brasil

<sup>11</sup>Universidade São Paulo. São Paulo, Brasil

<sup>111</sup>Universidade Federal de São Paulo. São Paulo, Brasil

**Introduction:** We shall address several questions concerning the mental health of professionals within the context of the ongoing psychiatric reform in Brazil. This reform has as its primary goal to replace a hospital-centered system, asylum-manicomial with a decentralized system of community health services.

**Objective:** The contribution aims at analyzing the interface between discourse, expertise and practices, which underlie the mental health politics in Brazil, as well as the dynamics of pleasure and suffering of working in mental health care services.

**Methods:** The research is situated within the theoretical framework of the psychodynamics of work (Dejours, 2000 et seq.) combined with special analytical techniques for focal groups as well as individual interviews with the professionals of the mental health service 'Dr. Candido Ferreira' in Campinas, Sao Paulo State. The research was carried out during August–September 2013.

**Results:** Our research shows that there is, on the one hand, an innovative and creative potential in the diversity of management systems, which may simultaneously reduce the gap between real and prescribed work. On the hand, there is no consensus view on the conceptualization of the 'clinical' and mental disorders, making it difficult to establish rules for collective work. Moreover, the content of the work itself is not problematized during the weekly meetings of the team.

**Conclusions:** The more visible the real work becomes, the more capable the professionals are to position themselves in the battle against the still prevailing traditional methods of administration in public health care and to thereby defend themselves against experiences of suffering.

**Descriptors:** Suffering; mental health; public health care.

<sup>a</sup> jdeusgomes@gmail.com

<sup>b</sup> lancman@usp.br

<sup>c</sup> giovanni@ufscar.br

573

### PSYCHOLOGICAL IMPACT OF DIAGNOSTIC EXAMS

Ana Grilo<sup>1,a</sup>, Filipa Lucena<sup>11,b</sup>, Carla Abreu<sup>111,c</sup>, Paulo Marques<sup>11,d</sup>, Luis Lança<sup>11,e</sup>

<sup>1</sup>Departamento das Ciências Sociais e Humanas. Escola Superior de Tecnologia da Saúde. Instituto Politécnico de Lisboa. Lisboa, Portugal

<sup>11</sup>Departamento de Ciências e Tecnologias das radiações e Biosinais da Saúde. Escola Superior de Tecnologia da Saúde. Instituto Politécnico de Lisboa. Lisboa, Portugal

<sup>111</sup>PET Imaging Centre at St Thomas' Hospital. Division of Imaging Sciences. King's College London. London, England

**Introduction:** Anxiety is a common problem in primary care and specialty medical settings. Treating an anxious patient takes more time and adds stress to staff. Unrecognized anxiety may lead to exam repetition, and impedance of exam performance.

**Objective:** The aim of the study was to examine the anxiety levels of patients who are to undergo diagnostic exams related to cancer diagnostic: PET/CT and mammography.

**Methods:** Two hundred and thirty two patients who undergo PET/CT and one hundred thirteen women who undergo mammography filled out one questionnaire after the procedure to determine their concerns, expectations and perceptions of anxiety.

**Results:** Our results show that the main causes of anxiety in patients who are having a PET/CT is the fear of the procedure itself and fear of the results. Patients who suffered from greater anxiety were those who were scanned during the initial stage of an oncological disease. On the other hand, the diagnostic is the main cause of anxiety in women who are requiring a mammography. 28% of the women reported having experienced pain or intense pain.

**Conclusions:** The performance of diagnostic exams related to cancer diagnostic like a PET/CT and a mammography are important and statistically generators of anxiety. Patients are often poorly informed and present with a range of anxieties that may ultimately affect examination quality. These results provide expertise that can be used in the development of future training programs to integrate post-graduate courses of health professionals.

**Descriptors:** anxiety; positron emission tomography; mammography; diagnostic; health care professional-patient communication.

<sup>a</sup> ana.grilo@estesl.ipl.pt

<sup>b</sup> filipa.lucena@estesl.ipl.pt

<sup>c</sup> carlafabreu@gmail.com

<sup>d</sup> pmarques\_rd@hotmail.com

<sup>e</sup> luis.lana@estesl.ipl.pt

574

## THE EFFECTS OF SMOKING IN THE AUDITORY SYSTEM

Cláudia Reis<sup>1,a</sup>, Sara Luís<sup>1,b</sup>, Alexandra Ramos<sup>1</sup>, Juliana Rodrigues<sup>1</sup>, Ricardo Gregório<sup>1</sup>, Tiago Custodio<sup>1</sup>, Ricardo Cardoso<sup>1</sup>

<sup>1</sup>*Instituto Politécnico de Coimbra. Escola de saúde, Audiologia Portugal. Coimbra, Portugal*

<sup>11</sup>*Curso de Audiologia. Instituto Politécnico de Coimbra. Escola de Saúde. Coimbra, Portugal*

**Introduction:** Tobacco use is a serious public health problem and several studies have shown its harmful effects, and its toxicity is directly proportional to the number of cigarettes smoked. The cigarette and its constituents are also considered risk factors for the development of hearing loss. There is a decrease in hearing sensitivity due to ototoxic hair cell function effects, producing changes in neurotransmission of the auditory stimulus, as well as the reduction of cochlear blood supply, which leads to reduction of available oxygen in the cells. Although most studies only look to study the effects on the peripheral auditory system, recent studies have shown that consumption of nicotine appears to have an inhibitory effect on the outer hair cells, affecting the afferent auditory pathways, decreasing the ability of auditory discrimination and producing changes in the central auditory system.

**Objective:** To study the effects of tobacco on the peripheral and central auditory system in smokers between 18 and 25 years of age.

**Methods:** 16 subjects smokers and 8 non-smokers were studied through the OAE Distortion Product, tonal audiometry, dichotic digit test and high frequency audiometry.

**Results:** Statistically significant differences were found in the results of simple tonal audiogram of the right ear between groups, and non-smokers had higher values in the dichotic digits test.

**Conclusions:** Smokers performed worse in the evaluation of peripheral and central testing system, showing the effect of tobacco in these two systems.

**Descriptors:** auditory system; smoking; dicotic digit test; ototoxic effects.

<sup>a</sup> creis@estescoimbra.pt

<sup>b</sup> audiologia010@gmail.com

575

## VALIDATION OF SCALES OF CHRONIC WOUND HEALING FOR PORTUGAL AND SPAIN: PROJECT OF A SHARED METHODOLOGY

Alexandre Rodrigues<sup>1,a</sup>, Pedro L. Ferreira<sup>1,b</sup>, Maria del Pino Quintana-Montesdeoca<sup>11,c</sup>, Francisco Hernández-Martínez<sup>11,d</sup>, Juan Fernando Jiménez-Díaz<sup>11,e</sup>, Bienvenida Rodríguez-de-Vera<sup>11,f</sup>

<sup>1</sup>*Centro de Estudos e Investigação em Saúde da Universidade de Coimbra, Universidade de Coimbra. Coimbra. Portugal; Escola Superior de Enfermagem da Cruz Vermelha Portuguesa de Oliveira de Azemeis. Oliveira de Azemeis, Portugal;*

<sup>11</sup>*Centro de Estudos e Investigação em Saúde da Universidade de Coimbra, Universidade de Coimbra. Coimbra, Portugal;*

<sup>111</sup>*Departamento de Matemáticas. Universidad de Las Palmas de Gran Canaria; España;*

<sup>1111</sup>*Departamento de Enfermería. Universidad de Las Palmas de Gran Canaria, España*

**Introduction:** The chronic wounds healing process comes as a result of a number of factors that make their evaluation a difficult procedure to accomplish. As a result of this obvious complexity, it is necessary to find measurement instruments to enable the close monitoring this process.

**Objective:** To use a common methodology in Portugal and Spain for the validation scales for the assessment of chronic wounds healing process. To validate to Portugal RESVECH (Restreppo and Verdú, 2012) and DESIGN (Sanada et al, 2004) scales. To validate to Spain the DESIGN and BWAT (Jensen, 2001) scales.

**Methods:** For the creation and validation of the Portuguese and Spanish versions, we use the methodological process Acquadro et al (2004) which includes the following steps: 1) linguistic and semantic equivalence, 2) validation study, 3) Reliability, 4) Construct validity 5) Criteria validity. To reinforce this validation process we use common reference scales to both countries on request authorization to authors of the mentioned scales.

**Results:** Although knowing that until the finalization of this work we will have no concrete results, and we believe, as a result, the construction of a joint project validation of scales wound healing for two different countries.

**Conclusions:** Both validated scales, are the most recent in the area and as a result of evidence-based construction, we aim to contribute positively to the work of health professionals who are dedicated to the evaluation of injuries and also to be used in the improvement decision making of therapeutic options.

**Descriptors:** Wounds Healing; Scale validation, chronic wound.

<sup>a</sup> alexandre.esenfcvpoa@gmail.com

<sup>b</sup> pedrof@fe.uc.pt

<sup>c</sup> mpino@dma.ulpgc.es

<sup>d</sup> fjhernandez@denf.ulpgc.es

<sup>e</sup> jjimenez@denf.ulpgc.es

<sup>f</sup> brodriguez@denf.ulpgc.es

576

**MODULAR BIOMEDICAL SIGNAL REGISTRATION SYSTEM**Daniel Jardim<sup>1,a</sup>, João Gi<sup>1,b</sup>, Fernando Martins<sup>1,c</sup>, Lino Ferreira<sup>1,d</sup><sup>1</sup>*Instituto Politécnico de Leiria. Leiria, Portugal*<sup>11</sup>*Instituto de Telecomunicações. Leiria, Portugal*

**Introduction:** Registration of biomedical signals is often vital in diagnosis and clinical monitoring of patients. This procedure is mainly done in hospital environment, following specific protocol and limited to a short period of time. Thus, it is crucial develop a modular system that can be used out of clinical environment in the day-life context to record biomedical signals.

**Objective:** In this communication we propose a modular, portable and low cost system to accurately measure and record multiple biomedical signals.

**Methods:** The prototype is based on a general-purpose microcontroller associated with an accelerometer, which permits to detect and record patient activity and position. The system also has an interface to record events. All this information is stored in a standard memory card, in a format that allows subsequent reading and analysis by several software applications, such as Excel, Access and Matlab. The healthcare professional can set the signals to be acquired, the time interval during which they intend to carry out the respective registration and the sampling rate.

**Results:** The prototype was tested during 24 hours. In this period, the heart rate, body temperature, as well as, the patient activity and position were recorded, with a one minute interval between samples. The stored information allowed a subsequently and appropriately analysis of the temporal evolution of the recorded signals.

**Conclusions:** The ability of our portable prototype to record continuously various biomedical signals and the information of patient's activity and position makes it an important tool in the diagnosis of different pathologies.

**Descriptors:** Biomedical Signals Collection; Data Analysis; Portable Medical Device; Low Cost Device; Biomedical Technology.

577

**EVALUATING PHOSPHATE CONCENTRATION THROUGHOUT THE PRODUCTION OF DRIED AND SALTED COD**Tiago Simões<sup>1</sup>, Ana Augusto<sup>1</sup>, Carla Tecelão<sup>1,11</sup>, Paulo Marques Nunes<sup>1</sup>, Maria Jorge Campos<sup>1,a</sup><sup>1</sup>*Grupo de investigação em recursos marinhos. Escola Superior de Tecnologia do Mar. Instituto Politécnico de leiria. Peniche, Portugal*<sup>11</sup>*Centro de Biosistemas. Instituto Superior de Agronomia. Universidade de Lisboa. Lisboa, Portugal*

**Introduction:** The production of dried and salted cod (*Gadus morhua*) is carried out under stringent regulations. The permission for phosphates addition to this product (Commission Regulation (EU) No 1068/2013) has been a subject of controversy between governments, retail companies and producers. Recently, Nordic countries started to add these compounds to fresh cod before exportation, and Portugal allowed the addition of phosphates in imported cod from these countries. However, high concentrations of phosphates proved to be correlated with higher mortality in people with chronic renal failure, and with cardiovascular disease in healthy people. Nevertheless, there is lack of legislation concerning this issue.

**Objective:** The present work aimed to evaluate the content of phosphates in cod during its production process (from fresh to dried and salted) up to final consumption.

**Methods:** Phosphorous determination was carried out according to the Portuguese Standard NP 4495:2010 and to AOAC standard methods in two cod batches. The maximum added amount of polyphosphates (E452), imposed by the Regulation (EC) No 1333/2008, is 5g/kg of fish (equivalent to approximately 3.4 g P<sub>2</sub>O<sub>5</sub>/kg). Phosphate values usually found in fresh cod are approximately 4.4 g P<sub>2</sub>O<sub>5</sub>/kg.

**Results and Conclusions:** In this work, phosphate values, oscillated between 4.1 g P<sub>2</sub>O<sub>5</sub>/kg in fresh unsalted cod, 6.7 g/kg in dried salted cod, 2.3 g/kg in soaked cod and 1.8 g/kg in cooked cod. Our data suggests that phosphates values in cod, during its production and consumption, are lower than the maximum allowed added value of phosphates plus the natural content in cod.

**Descriptors:** Cod; Salted cod, Dried cod; Phosphates; Public Health, polyphosphates.

<sup>a</sup> 2110326@my.ipleiria.pt<sup>b</sup> 2110331@my.ipleiria.pt<sup>c</sup> fernando.martins@ipleiria.pt<sup>d</sup> lino.ferreira@ipleiria.pt<sup>a</sup> mcampos@ipleiria.pt

578

### RELATIONSHIP BETWEEN ARTICULATORY DISORDERS AND OROFACIAL ANOMALIES IN ELEMENTARY SCHOOL

Ana Neves<sup>a</sup>, Daniela Belo<sup>b</sup>, Daniela Vieira<sup>c</sup>, Sónia Pós de Mina<sup>d</sup>, Maria dos Anjos Dixe<sup>e</sup>

*Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

**Introduction:** School-age children may still be unable to articulate certain words, due to orofacial functional/structural anomalies or neurophysiological immaturity. A prolonged use of pacifier/bottle may have an implication in oral verbal productions of child when it's used beyond 3 years, having an impact on the development of articulation disorders (AD).

**Objective:** Relate the prevalence of AD in children of the elementary school that maintained a prolonged use of a pacifier and/or bottle.

**Methods:** Was developed a quantitative methodology study of correlational non-experimental type. Were evaluated 307 children from 6 to 10 years, from six Portuguese schools, between February and May of 2013, with TFF-ALPE and PAOF. Was obtained authorization from the NCDP, GDI-CD, Ministry of Education and carers. The data were statistically analyzed using the SPSS.

**Results:** Of the children studied, 256 had used pacifier, of which 58 (12,4%) used it beyond 3 years and 65 (13,9%) used the bottle after 3 years, mainly to 5 years. There's a higher prevalence of orofacial disorders in prolonged use of pacifiers and bottle, in the presence of AD, with 33,3% (n=7) and 18,2% (n=4). The results are not statistically significant (p<0,05).

**Conclusions:** There's a consonance with the literature research regarding the relationship between AD and expected orofacial motricity's changes, notably due to prolonged use of pacifier/bottle. However, this study didn't demonstrate statistically this, due to a small sample that makes extended usage. Would be beneficial a depth study with representativeness of this population.

**Descriptors:** Pacifiers adverse effects; Child; Speech; Prevalence; Articulatory Disorder.

579

### RELATIONSHIP BETWEEN ARTICULATORY DISORDERS AND FAMILY HISTORY IN ELEMENTARY SCHOOL

Daniela Belo<sup>a</sup>, Ana Neves<sup>b</sup>, Daniela Vieira<sup>c</sup>, Sónia Pós de Mina<sup>d</sup>, Maria dos Anjos Dixe<sup>e</sup>

*Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

**Introduction:** In articulation disorder (AD) occurs an incorrect use of one or more sounds of the native language and there is a deviation from the accepted standard articulation by adult linguistic community. The cause may be the existence of a family member with atypical articulatory productions. Contact with linguistic models of parents with a lower education level may be a precipitating factor for the onset of AD.

**Objective:** Relate the prevalence of AD in elementary school children's with the existence of speech problems in the family and parents' education.

**Methods:** Was developed a quantitative methodology study of correlational non-experimental type. Were evaluated 307 children from 6 to 10 years, between February and May of 2013, with TFF-ALPE and PAOF. Was obtained authorization from the NCDP, GDI-CD, Ministry of Education and caregivers. The data were statistically analyzed using the SPSS.

**Results:** The degree of consanguinity with more frequency of speech problems (72%) corresponds to the brothers (3,1%) follow by cousins and parents (2,4% and 1,7%). There's a higher prevalence of mothers with qualifications at higher education level (36%) and parents' level of secondary education (28,4%). There is no scientific evidence linking the level of education with the existence of DA. The results are not statistically significant (p<0,05).

**Conclusions:** In accordance to the literature, the highest prevalence of AD occurs on brothers, which is consistent with results obtained in the present study. However, it hasn't been possible to verify the existence of a relationship between AD and parental education, because n<5.

**Descriptors:** Child; Speech; Prevalence; Articulatory Disorder; Family Health.

<sup>a</sup> ana.neves.tf@gmail.com

<sup>b</sup> daniela\_asb@live.com.pt

<sup>c</sup> vdanyella@hotmail.com

<sup>d</sup> sonia.mina@ipleiria.pt

<sup>e</sup> manjos.dixe@gmail.com

<sup>a</sup> daniela\_asb@live.com.pt

<sup>b</sup> ana.neves.tf@gmail.com

<sup>c</sup> vdanyella@hotmail.com

<sup>d</sup> sonia.mina@ipleiria.pt

<sup>e</sup> manjos.dixe@gmail.com

580

### MEAN LENGTH UTTERANCE IN CHILDREN (3:6 TO 4 YEARS): CONTRIBUTION TO NORMATIVE DATA IN PORTUGUESE LANGUAGE

Márcia Martins<sup>a</sup>, Ana Marta Saraiva Pereira, Mafalda Martins Cardoso, Sónia Pós de Mina

*Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

**Introduction:** The Mean Length Utterance (MLU) provides information about language development, being obtained by morphological analysis of spontaneous speech. Normative data obtained from the MLU are a benchmark, in assessment and to establish the diagnosis and intervention. Language development in children does not take place by itself. It's an acquired system spontaneous and naturally, that identifies the child with a language community, but that is influenced by reciprocal established relationships.

**Objective:** The defined goals are to determine the normative values of the MLU in Portuguese monolingual children, with typical language development and define the relationship between sex and occupation of their free time, with the value of MLU.

**Methods:** This study was based on quantitative descriptive research and not experimental. The sample were 51 Portuguese children with the ages between 3:6 and 4 years old, monolingual. For this study there were used a socio-demographic questionnaire, the "TALC", the linguistic corpus and a morphological analysis. All formal and ethical procedures were followed.

**Results:** The mean age of the children observed is 45 months (SD=2,023), 22 were female and 29 were male. There were allowed to participate in the study 49 children, being analysed 23 linguistic corpus analysis.

**Conclusions:** The establishment of normative data will be an important reference in the evaluation of the language of children, by the speech therapists. The definition of normative data will improve the reliability of the use of the MLU in the evaluation of language speakers of European Portuguese.

**Descriptors:** Mean length of utterance; Language in children; Morphemes; Evaluation of language; Language samples.

<sup>a</sup>projetoinvestigacaommm@gmail.com

581

### THE ECONOMIC-INDUSTRIAL HEALTH CARE COMPLEX IN BRAZIL: CHALLENGES OF CONTEMPORARY HEALTH CARE AND NATIONAL DEVELOPMENT

Carlos Gadelha<sup>1,a</sup>, Laís Silveira Costa<sup>1,b</sup>, José Maldonado<sup>1,c,d</sup>

*<sup>1</sup>Secretaria de Ciência, Tecnologia e Insumos Estratégicos. Ministério da Saúde. Rio de Janeiro, Brazil*

*<sup>II</sup>Fundação Oswaldo Cruz. Rio de Janeiro, Brazil*

*<sup>III</sup>Escola Nacional de Saúde Pública Sérgio Arouca. Rio de Janeiro, Brazil*

**Introduction:** Besides its recognized role as a structuring element of the Welfare State, health care also involves a productive system, known as the Health Care Economic-Industrial Complex<sup>II</sup> (HEIC), that is formed by industrial subsystems (chemical, biotechnological, mechanical, electronics and materials) and the services subsystem. Together, these activities constitute one of the areas of greatest economic dynamism within the economy, accounting, in 2009, for 9% of Brazilian GDP, 10% of the qualified workforce and more than 25% of the investment in R&D. The relevance of studying Brazilian HEIC lies in therecognition that, despite its strategic characteristics, the productive and technological base of health care is still relatively fragile, as expressed by the increasing deficit in the HEIC's trade balance, which increased from US\$ 3 billion in 2003 to US\$ 12 billion in 2013, jeopardizing both the universal provision of health care services and the country's competitive insertion in a globalized economic environment.

**Objective:** From this perspective, this article aims to contextualize the HEIC and the three subsystems of which it is comprised and present perspectives, policies and proposals over the medium and long terms for each one of them.

**Methods:** To achieve this, the paper combines the theoretical framework of the political economy of health care and an institutional view of innovation brought about through the concept of National Innovation Systems.

**Results and Conclusions:** Finally, it summarizes some political-institutional characteristics of the Productive Complex in order to guide the formulation of public policies focused on strengthening the HEIC in the medium to long runs.

**Descriptors:** Health Care Economic-Industrial Complex, National Development, Science and Technology, Health Care Policy, Learning Economy.

<sup>a</sup> glaucy@fiocruz.br

<sup>b</sup> laiscosta@fiocruz.br

<sup>c</sup> jose.maldonado@ensp.fiocruz.br

582

### CHARACTERIZATION OF CHILDREN'S VOCAL PROFILE AGEING BETWEEN 0 TO 9 YEARS AND IDENTIFICATION OF THEIR NORMAL PATTERNS.

Ana Carolina Branco<sup>1,a</sup>, Maria Graça Carvalho<sup>11,b</sup>, Cristiane Nunes<sup>111,c</sup>

<sup>1</sup>*Escola Superior de Saúde. Instituto Politécnico de Leiria. Leiria, Portugal*

<sup>11</sup>*Instituto de Educação. Universidade do Minho. Braga, Portugal*

<sup>111</sup>*Centro de Ensino Profissional Avançado e Pós-Graduado. Lisboa, Portugal*

**Introduction:** The development of voice accompanies an individual in different levels - physically, psychologically and socially. In children, vocal development is particularly intense because voice reflects all the variability of discoverable expressions children achieve during their development. There are some vocal international studies reported, but in Portugal, such studies are sparse especially when related to children.

**Objective:** The present project arises from the neediness of finding normative data for child's voice in the portuguese population, in order to build a voice profile expected for each age and thus assist speech language therapists identifying vocal deviations.

**Methods:** In order to characterize child's vocals, the Praat software will be used to record and perform acoustic analysis of voice parameters; this will allow extraction of fundamental measurement of frequencies, jitter and shimmer and maximum vocalization time. Simultaneously semi-structured interviews of parents, teachers and children themselves will also be conducted. The project's sample consists of twenty-two different groups arranged by age, with equal numbers of male and female. Each group will have at least thirty children and the sample's lowest limit is three hundred and thirty children.

**Results:** Apart from obtaining normative data, it is expected that, after analyzing data obtained from interviews and its related reference rates, will be possible to develop a structured assessment of children with dysphonia for each age group.

**Conclusions:** In this context, it becomes essential to alert children, family and educational professionals which kind of care is needed.

**Descriptors:** vocal health; child voice; child dysphonia.

<sup>a</sup> carolina.branco@ipleiria.pt

<sup>b</sup> graca@ie.uminho.pt

<sup>c</sup> cris.l.nunes@hotmail.com

583

### EXPECTATION OF WOMEN BY CONDUCTING HYSTERECTOMY

Tiago de Sousa Barros<sup>1,a</sup>, Sonia Samara Fonseca de Moraes<sup>11,b</sup>, Jamilly Feitosa Torres<sup>111,c</sup>, Maria Jussara Rodrigues Melo<sup>111,d</sup>, Elizian Braga Rodrigues Bernardo<sup>111,e</sup>, Sofia de Moraes Arnaldo<sup>111,f</sup>, João Paulo Xavier Silva<sup>111,g</sup>

<sup>1</sup>*Universidade Federal de Pernambuco. Brazil*

<sup>11</sup>*Universidade Estadual do Ceará. Brazil*

<sup>111</sup>*Universita Sapienza di Roma. Italy*

**Introduction:** Hysterectomy is one of most common surgeries performed by women of reproductive age. It involves not only the concern of women with surgery, but the post-operative and cultural experiences.

**Objective:** The objective was to understand the experience of women of reproductive age upon the attainment of Hysterectomy on a motherhood reference state of Ceará.

**Methods:** This is a descriptive study with a qualitative approach, where they performed fieldwork. Data were collected through semi-structured interviews in a maternity reference the state of Ceará, Brazil, with the participation of nine women who underwent elective hysterectomy.

**Results:** Through data analysis, the following categories emerged: "The perception of the uterus and reproductive organ and the reaction of women in the withdrawal of the same," "The condition of infertility: how women react on this new situation," and "The relationship x uterus sexuality." Women reacted worried about the surgery, anxious and afraid of dying, but they had a positive view about the procedure, as reported improving health by getting rid of the abnormal symptomatic.

**Conclusions:** The reflections of hysterectomy were found in playing the beliefs and practices of sexual intercourse, where the study help to highlight the need for a multidisciplinary health care team, including educational practices of this nature in the monitoring of women who will experience this surgical procedure.

**Descriptors:** Nursing, Sexual and Reproductive Health, Hysterectomy, Fertility, Sexuality.

<sup>a</sup> tiago\_sousajn@yahoo.com.br

<sup>b</sup> enfsoniasamara@hotmail.com

<sup>c</sup> jamilly.farma@hotmail.com

<sup>d</sup> jussaramelo.farma@hotmail.com

<sup>e</sup> elizbernardo@hotmail.com

<sup>f</sup> sofia-jua@hotmail.com

<sup>g</sup> jp-master17@hotmail.com

584

### IS 18F-FDG UPTAKE AFFECTED BY INCUBATION WITH SODIUM BUTYRATE IN COLON CANCER CELL LINES?

Telmo Gonçalves<sup>1,II,a</sup>, Ana Salomé Pires<sup>1,III,b</sup>, João Encarnação<sup>1,III,c</sup>, Ricardo Teixo<sup>1,d</sup>, Ana Brito<sup>1,e</sup>, Margarida Abrantes<sup>1,f</sup>, Maria Filomena Botelho<sup>1,g</sup>

<sup>1</sup>*Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal*

<sup>II</sup>*Faculdade de Farmácia. Universidade de Coimbra. Coimbra, Portugal*

<sup>III</sup>*Faculdade de Ciências e Tecnologia. Universidade de Coimbra. Coimbra, Portugal*

**Introduction:** Butyrate is produced by decomposition of dietary fiber by intestine's bacteria, being the main energy source of colonocytes. It is related with colon cancer mostly because of its capacity to induce apoptosis and differentiation in contrast to normal cells. Some studies suggest that the Warburg effect may explain that difference.

**Objective:** This study is to evaluate if butyrate interferes with uptake of the radiolabeled glucose analogue (18F-FDG) and the increased glycolysis in colorectal cancer cells.

**Methods:** Cell lines were cultured in DMEM with low glucose content. To perform the uptake studies, cells were incubated with or without butyrate during 1 and 4 hours, before the incubation with 18F-FDG. At different times, duplicate samples of 200µl of cell suspension were collected, centrifuged, separating the pellet from the supernatant. In order to calculate the 18F-FDG uptake percentage.

**Results:** 18F-FDG uptake is greater in WiDr cells than in C2BBE1 cells. In both cell lines, we observed that incubation with butyrate decreases the 18F-FDG uptake. This difference was more pronounced in WiDr cell line however, in C2BBE1 cells there seems to be a trend for a decrease in tracer uptake with increasing exposure time to butyrate.

**Conclusions:** Our study suggests that butyrate can reduce the 18F-FDG uptake and may interfere with the Warburg effect which influences the aggressiveness of the tumor. This also suggests that butyrate can act in cancer cells in an advanced phase of development, and could contribute to the understanding of the importance of our diet in advanced tumor stages.

**Descriptors:** Butyrate, Colon Cancer, Warburg Effect, 18F-FDG.

<sup>a</sup> tjdgonsalves@gmail.com

<sup>b</sup> salupires@hotmail.com

<sup>c</sup> joao\_encarnacao15@hotmail.com

<sup>d</sup> ricardo.teixo@gmail.com

<sup>e</sup> anabrito816@gmail.com

<sup>f</sup> mabrantes@fmed.uc.pt

<sup>g</sup> mfbotelho@fmed.uc.pt

585

### BUTYRATE AND IRINOTECAN: A NEW APPROACH FOR COLON CANCER

João Encarnação<sup>1,II,a</sup>, Ana Salomé Pires<sup>1,III,IV,V,b</sup>, Telmo Gonçalves<sup>1,III,c</sup>, Margarida Abrantes<sup>1,III,IV,d</sup>, João Casalta<sup>1,e</sup>, Anabela Sarmento<sup>IV,VI,f</sup>, Maria Filomena Botelho<sup>1,III,IV,g</sup>

<sup>1</sup>*Unidade de Biofísica. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal*

<sup>II</sup>*Faculdade de Farmácia. Universidade de Coimbra. Coimbra, Portugal*

<sup>III</sup>*Instituto de Imagem Biomédica e Ciências da Vida. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal*

<sup>IV</sup>*Centro de Investigação em Meio Ambiente, Genética e Oncobiologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal*

<sup>V</sup>*Faculdade de Ciências e Tecnologia. Universidade de Coimbra. Coimbra, Portugal*

<sup>VI</sup>*Biologia Molecular Aplicada e Clínica Universitária de Hematologia. Faculdade de Medicina. Universidade de Coimbra. Coimbra, Portugal*

**Introduction:** High levels of dietary fiber are related with a lower risk for developing colon cancer (CC). Gut microbial fermentation of dietary fiber produce butyrate. Butyrate has been reported as a chemopreventive agent. Irinotecan is used as second-line treatment. The use of natural compounds to sensitize the resistant cells to the chemotherapy seems to be a probably solution.

**Objective:** The aim of this study is to evaluate the effect of the combination of butyrate and irinotecan on three colon cancer cell lines (LS1034, WiDr and C2BBE1).

**Methods:** Cells were incubated with different sodium butyrate (1-50 mM) and irinotecan (0,1-100 µM) concentrations. In order to determine the IC50 (half maximal inhibitory concentration) after 48, 72 and 96 hours, cell proliferation was evaluated through MTT assay. Flow cytometry was also performed to study the butyrate effect on cell viability and types of death, apoptosis (evaluating the BAX/BCL-2 ratio) and expression of reduced glutathione (GSH).

**Results:** It was observed that when cells are incubated for a longer time with irinotecan combined with butyrate, cell proliferation decreases significantly, comparatively to monotherapy. Regarding cell viability, preliminary results showed that as the butyrate concentration increases, cell viability decreases in all cell lines. When cells are incubated with higher butyrate concentrations, there is an increase in BAX/BCL2 ratio and a slight increase in GSH expression, comparing to control.

**Conclusions:** The use of natural compounds as butyrate in combination with chemotherapeutic agents can be a new solution for CC treatment.

**Descriptors:** Colon Cancer; Butyrate; Irinotecan.

<sup>a</sup> joao\_encarnacao15@hotmail.com

<sup>b</sup> salupires@hotmail.com

<sup>c</sup> tjdgonsalves@gmail.com

<sup>d</sup> mabrantes@fmed.uc.pt

<sup>e</sup> joaoacasalta@gmail.com

<sup>f</sup> absarmento@fmed.uc.pt

<sup>g</sup> mfbotelho@fmed.uc.pt

586

### CAN PHOTODYNAMIC THERAPY MAKE A DIFFERENCE IN RETINOBLASTOMA?

Gonçalo Brites<sup>1,a</sup>, Mafalda Laranjo<sup>1,b</sup>, Ricardo Teixo<sup>1,c</sup>, Arménio Serra<sup>1,d</sup>, Marta Piñeiro<sup>1,e</sup>, Ana Margarida Abrantes<sup>1,f</sup>, João Casalta-Lopes<sup>1,g</sup>, António Rocha-Gonçalves<sup>1,h</sup>, Maria Filomena Botelho<sup>1,i</sup>

<sup>1</sup>Faculdade de Medicina. Universidade de Coimbra. Portugal

<sup>2</sup>Faculdade de Ciências e Tecnologia. Universidade de Coimbra. Portugal

**Introduction:** Photodynamic therapy (PDT) is a non-mutagenic therapeutic modality in treating cancer. Retinoblastoma (RB) is an aggressive tumor of retina that affect children. Despite existing treatments, secondary neoplasias could arise. Animal models are good tools that allow understanding tumor biology and evaluating new therapeutic approaches like PDT.

**Objective:** Development of a heterotopic model of RB and PDT treatment in animal model.

**Methods:** Y79 cell line was propagated according to standard procedures. 14 Balb/c nu/nu nude female mice were injected subcutaneously with a suspension of 10×10<sup>6</sup> cells. Animals were divided into a control group with 7 animals not submitted to PDT and other group with 7 animals treated with a bromated hydroxyphenyl porphyrin, being injected intraperitoneally (2 mg/kg) when tumor reached 200 mm<sup>3</sup> of volume. After 48 hours animals were irradiated with a laser system. Animals were monitored daily and registered any signs of disease, during 12 days. After that period animals were killed.

**Results:** Heterotopic animal model of RB has proved to be reproducible and of simple obtainment and monitoring. PDT treatment leads to decrease in tumor volume with significant differences between control and treated groups. Observing the tissue affected before and after the irradiation it shows necrosis and differences in the shape of tumors.

**Conclusions:** This model allowed to conclude that photosensitizer used has a significant effect over the growth of retinoblastoma xenografts. These promising results can lead to the testing of new photosensitizers, contribute for the acceptance of PDT in treatment of retinoblastoma, giving a new option for managing retinoblastoma.

**Descriptors:** Heterotopic; Xenotransplant; Model; Retinoblastoma; Photodynamic Therapy.

<sup>a</sup>g.sousabrites3@gmail.com

<sup>b</sup>mafaldalaranjo@fmed.uc.pt

<sup>c</sup>ricardo.teixo@gmail.com

<sup>d</sup>armenio.serra@gmail.com

<sup>e</sup>pineiomarta@gmail.com

<sup>f</sup>mabrantas@ibili.uc.pt

<sup>g</sup>joao.casalta@gmail.com

<sup>h</sup>arg@qui.uc.pt

<sup>i</sup>mfbotelho@fmed.uc.pt

587

### AN ORTHOTOPIC ANIMAL MODEL OF RETINOBLASTOMA

Gonçalo Brites<sup>1,a</sup>, Mafalda Laranjo<sup>1,b</sup>, Ricardo Teixo<sup>1,c</sup>, Ana Margarida Abrantes<sup>1,d</sup>, Rui Daniel Proença<sup>1,e</sup>, Maria Filomena Botelho<sup>1,f</sup>

<sup>1</sup>Faculdade de Medicina. Universidade de Coimbra. Portugal

<sup>2</sup>Centre for Integrated Responsibility in Ophthalmology. Centro Hospitalar Universitário de Coimbra. Portugal

**Introduction:** Retinoblastoma (RB) is a very aggressive tumor that can affect children mainly at the age of 5 years. Animal models are good tools that can allow understanding tumor biology and evaluating new therapeutic approaches.

**Objective:** Development of an orthotopic model of Retinoblastoma that mimetize tumor environment and growth.

**Methods:** Y79 human RB cell line was propagated according to standard procedures. Six Rowett Nude Rat (RNU) female rats were used to develop an orthotopic animal model of RB. Animals were anesthetized with a solution 3:1 of ketamine and chlorpromazine. Half a million cells were injected in the vitreal cavity of the left eye. Right eye was used as the control in all studies. After injection, OCT was performed. The animals were monitored daily. Six days after injection X-ray was performed. After six months of follow-up the animals were killed and eyes and brain were collected and preserved for histological analysis.

**Results:** OCT did not demonstrated alterations in injected eyes immediately after injection and neither X-ray 4 weeks after injection. Macroscopic follow up allowed observing alterations in the eyes comparing to control, a few days after injection. Histological analysis proved existence of tumor in injected eyes and showed its aggressiveness, invasiveness and dependence of its vascularization. It was also observed characteristics of an invasive retinoblastoma like necrotic areas and arrangement of cells in a line and rosettes.

**Conclusions:** This model can allow us to study in vivo the characterization of retinoblastoma and to study new therapeutic approaches like photodynamic therapy.

**Descriptors:** Orthotopic; Animal; Model; Tumor; Retinoblastoma.

<sup>a</sup>g.sousabrites3@gmail.com

<sup>b</sup>mafaldalaranjo@fmed.uc.pt

<sup>c</sup>ricardo.teixo@gmail.com

<sup>d</sup>mabrantas@ibili.uc.pt

<sup>e</sup>rdproenca@gmail.com

<sup>f</sup>mfbotelho@fmed.uc.pt



588

**MANAGEMENT COMPETENCES IN NURSING**Mara Rocha<sup>1,a</sup>, Paulino Sousa<sup>1,III,b</sup>, Manuela Martins<sup>1,III,c</sup><sup>1</sup>*Escola Superior de Saúde. Instituto Politécnico de Viana do Castelo. Portugal*<sup>II</sup>*Escola Superior de Enfermagem do Porto. Portugal*<sup>III</sup>*Center for Research in Technology and Information System. Universidade do Porto. Portugal*

**Introduction:** Health institutions are subjected increasingly to economic/political and social pressure to increase the quality/quantity of services and to reduce costs. The effective management increasingly requires a combination of knowledge, skills, attitudes and behaviors such as leadership, performance management, strategic thinking and planning, negotiation, communication, human resource management and quality improvement. The head nurse is commonly regarded as central to the development of material/financial and human resources and to the quality of care.

**Objective:** To contribute to the understanding of the necessary competences for the exercise of the head nurse's functions and formulate a set of recommendations for training and competences development in the education institutions/work contexts. At this stage, we present the first part of the research we are developing within the PhD in Nursing (Catholic University-Porto).

**Methods:** This exploratory study was based on two data collection tools: literature review and semi-structured interviews aimed at the directors of nursing. The results of the interviews allowed a review of the functions/competences of the head-nurse and to structure the questionnaire aimed at nurses (2nd stage/Descriptive Study)

**Results:** The organizational changes are reflected in the (re)construction of the role/competences of the head nurse; The referential duties/role is built around areas of management such as human resources; material resources; nursing care; organizational management; project management, training of nurses, research and dissemination; The emerging competences are related essentially to leadership/talents management; assertiveness/conflict management; decision-making.

**Conclusions:** Emerges the need to rethink the teaching/training in management; the hospital is considered as promoter of the competences development of their professionals.

**Descriptors:** Competences; Management in Nursing; Leadership, Training.

<sup>a</sup> mararocha@ess.ipvc.pt<sup>b</sup> paulino@esenf.pt<sup>c</sup> mmartins@esenf.pt

589

**THERMAL PROFILE OF THE KNEE AND PAIN LOCATION IN YOUNG PEOPLE WITH AND WITHOUT KNEE PAIN\***Luis Carrão<sup>1,II,a</sup>, M. Espanha<sup>1,b</sup>, Tania Viana<sup>III,c</sup>, Dino Freitas<sup>III,d</sup>, Henrique Almeida<sup>III,e</sup><sup>1</sup>*Department of Sport and Health. Faculdade de Motricidade Humana. Universidade de Lisboa. Portugal*<sup>II</sup>*Escola Superior de Saúde. Instituto Politécnico de Leiria. Portugal*<sup>III</sup>*Centre for Rapid and Sustainable Product Development. Instituto Politécnico de Leiria. Portugal*

**Introduction:** The presence of a disease can locally affect the heat balance resulting in an increase or decrease of the skin temperature (Ts), which is generally associated with changes in blood flow. Moreover Ts can reflect the existence of inflammation in the underlying tissue where blood flow is augmented or diminished.

**Objective:** The purpose of this pilot study was to investigate the symmetry of knee Ts between subjects with and without knee pain using thermography, and to determine the location of anterior knee pain.

**Methods:** Thirty eight young adults (21±2 years), 27 without and 11 with unilateral knee pain participated in this study. Knee mapping was done with Photographic Knee Pain Map (PKPM), and knee Ts measurements were done with an infrared camera Flir T335. Bilateral thermograms were analyzed by Flir Tools® software, in two Regions of Interest (medial and lateral).

**Results:** Temperature symmetry differences (right and left knees) between subjects with (0.12°C±0.20°C) and without knee pain (0.02°C±0.23°C) were not significant (p=0.098). The most common reported pain locations were the medial (11) and lateral (7) joint line, while the quadriceps tendon was never reported. The left knee was the most often reported with pain (64%) and 55% individuals only had pain in one location, 27% in two, and 18% in three.

**Conclusions:** We found a thermal asymmetry not significant of more than 0.10°C when comparing subjects with and without knee pain. The knee map suggests that the joint line, especially the medial one, is the principal knee pain location.

**Descriptors:** Thermography; Thermal symmetry; Knee pain; Pain mapping; Skin temperature.

\*Authors acknowledge the support of the FCT (Strategic Project PEST-OE/EME/UI4044/2013) and the European Commission (IREBID Marie Curie Project).

<sup>a</sup> luis.carrao@ipleiria.pt<sup>b</sup> mespanha@fmh.utl.pt<sup>c</sup> tania.viana@ipleiria.pt<sup>d</sup> dino.freitas@ipleiria.pt<sup>e</sup> henrique.almeida@ipleiria.pt

590

### MASSETER'S ELECTROMYOGRAPHIC ASSESSMENT IN DIFFERENT CONSISTENCIES' FOOD SWALLOWING

Joana Esperança<sup>a</sup>, André Araújo<sup>b</sup>, Ricardo Santos<sup>c</sup>, Paula Faria<sup>d</sup>, Andreia Sousa<sup>e</sup>, Nelson Pereira<sup>f</sup>

*Escola Superior de Tecnologias da Saúde. Instituto Politécnico do Porto. Portugal*

**Introduction:** Orofacial Miology is a clinical and research field of interest for Speech and Language Pathology. Surface Electromyography (SEMG) has been used as a complementary diagnostic method to develop normative data and characterization of different oral motor dysfunctions, including swallowing disorders. One application of this method occurs in monitoring the electrical activity of the muscles involved in swallowing. However, there is a need to standardize the procedures for collecting and analyzing electromyographic study of swallowing.

**Objective:** To develop and test a procedural protocol for S-EMG data collection and analysis, applied to swallowing assessments in research and clinical settings.

**Methods:** The protocol was developed following international standards for swallowing assessment and SEMG signal acquisition, and reviewed by an expert board. The masseter muscle was chosen to test the protocol in an 8 young adults' sample. The protocol included assessing rest, maximum isometric contraction, and swallowing function in liquid, solid and pasty consistencies.

**Results:** Masseter's muscle activity was higher in solid consistency, as expected. However, higher percentage of muscle contraction was observed in liquid consistency swallowing than in pasty consistency.

**Conclusions:** The protocol was shown to be functional and well-adapted to collect SEMG data during swallowing of liquid, pasty and solid food. Future research is needed to test the protocol in different muscles and stomatognathic functions.

**Descriptors:** surface electromyography; swallowing; masseter; stomatognathic functions.

<sup>a</sup> joana.filipa.hope@gmail.com

<sup>b</sup> andrearaujo@eu.ipp.pt

<sup>c</sup> ricardosantos\_tf@hotmail.com

<sup>d</sup> pcf@estsp.ipp.pt

<sup>e</sup> andreia.asps@gmail.com

<sup>f</sup> nelson\_pereira15@hotmail.com

591

### ACOUSTIC AND TEMPORAL ANALYSIS OF SWALLOWING SOUNDS: USE OF ELECTRONIC STETHOSCOPE ON CERVICAL AUSCULTATION

Nelson Pereira<sup>1,a</sup>, Paula Cristina Faria<sup>1,b</sup>, Ricardo Santos<sup>1,c</sup>, André Araújo<sup>1,d</sup>, Joana Esperança<sup>1,e</sup>, Andreia Sousa<sup>1,f</sup>

*<sup>1</sup>Escola Superior de Tecnologia da Saúde. Instituto Politécnico do Porto. Portugal*

*<sup>2</sup>Hospital Privado da Trofa. Portugal*

*<sup>3</sup>Centros de Estudo de Movimento e Atividade Humana. Escola Superior de Tecnologia da Saúde. Instituto Politécnico do Porto. Portugal*

**Introduction:** Swallowing is a physiologic function consisting in the propulsion of the bolus into the stomach, with effective respiratory protection. Clinical intervention of Speech and Language Therapists requires improved and reliable methods of swallowing evaluation. Cervical Auscultation (CA) is especially appreciated as a noninvasive method. However, conventional stethoscopes do not provide quantitative measures to complement the perceptive auditory analysis of the swallowing sounds.

**Objective:** To verify the applicability of the Electronic Stethoscope (ES) in the collecting of swallowing sounds using CA, by means of studying the intra and inter-individual variations in acoustic sound temporal patterns.

**Methods:** A transversal observational descriptive study was conducted to test a protocol, designed by an experts' panel, to collect and analyse swallowing sounds using CA with ES. Assessments included swallowing analysis of different quantity and consistencies of food in a sample of 8 young adults with normal swallowing patterns. Results: No statistical differences were found for the intra and inter-subject variations neither for the food quantities and consistencies on the selected acoustic temporal parameters (number of bursts, apnea duration, time of bursts and their respective intervals and intensity peak). Three bursts were found to typically describe normal swallowing patterns. A temporal pattern was also found for the first burst duration and for the first inter-bursts interval, shorter than the second interval.

**Conclusions:** The ES allowed the collecting and acoustic analysis of swallowing sounds, proving to be a viable and capable tool to be applied in CA, with potential applications in research and clinical settings.

**Descriptors:** Cervical Auscultation; Electronic Stethoscope; Swallowing; Acoustic Analysis swallowing sounds; Speech Therapy.

<sup>a</sup> tfala.nelson@gmail.com

<sup>b</sup> pcf@estsp.ipp.pt

<sup>c</sup> ricardosantos\_tf@hotmail.com

<sup>d</sup> paa@estsp.ipp.pt

<sup>e</sup> joana.filipa.hope@gmail.com

<sup>f</sup> andreia.asps@gmail.com

## TECHNOLOGICAL PLATFORMS AND SHARING CONSTRUCTION OF COMMUNICATION

592

### ACUTE CONFUSION IN PORTUGUESE HOSPITAL

Paulo Marques<sup>a</sup>, Paulino Sousa<sup>b</sup>, Abel Silva<sup>c</sup>

*Escola Superior de Enfermagem do Porto. Porto, Portugal*

**Introduction:** Acute confusion has relations with age and worse outcomes. Its characteristics difficult diagnosis, contributing to economic and social disruption. The management of the problem continues to be built on the experience and knowledge of each professional.

**Objective:** For three years, we conducted an action research in a unit of medical care for acute patients to examine the patient with confusion and nursing action. Our purpose was to identify a model that supports the conception of nursing care.

**Methods:** We performed training, nurses' interviews and field notes, used the Strauss & Corbin method to generate a Grounded Theory, appealing to N Vivo 7 application for organizing the content analysis and SPSS version 18.0 for statistical analysis of global data. Neecham confusion scale was applied at the patients' admission.

**Results:** An algorithm of care for patients with confusion emerged from the data obtained. It is composed by conditions that include nursing diagnosis associated with confusion, agitation and fall. These findings led to the introduction of a Decision Support System for nurses at the SAPE application. This documentation system associates diagnostic activities, diagnosis and nursing interventions.

**Conclusions:** After six months of implementing we obtain these results: a) Reduction of underdiagnosis of acute confusion; b) Reduced incidence of acute confusion - 4.3%; c) The nurses focus interventions in patients with mild confusion; d) Confused patients are hospitalized on average five days more than non-confused; and e) The diagnose efficacy of the risk of falls increased from 0% to 50%.

**Descriptors:** Confusion. Nursing Care. Clinical Decision. Support Systems.

<sup>a</sup> paulomarques@esenf.pt

<sup>b</sup> paulino@esenf.pt

<sup>c</sup> abel@esenf.pt

593

### THE INFORMATION SYSTEMS INTEGRATION FOR A BETTER CARING AND CHRONIC PATIENTS' EMPOWERMENT

Yolanda Raquel Lapeña-Moñux<sup>1,a</sup>, M<sup>a</sup> Loreto Maciá-Soler<sup>1,b</sup>, M<sup>a</sup> Isabel Orts-Cortés<sup>1,c</sup>, Azucena Peraz-Marcos<sup>1,d</sup>

*<sup>1</sup>Departamento Enfermería; Facultad Ciencias de la Salud; Universidad Jaume I, Castellón de la Plana, Espana*

**Introduction:** The technology innovation (TI) in the health system has been confirmed as the best format to share information and to facilitate the communication between all the actors involved in the chronic patients' care.

**Objective:** To explore primary health care professionals' experience on information and communications technology (ICT) use in the chronic patients' holistic care, about how the ICT facilitates the information exchange and how it helps in the patients' empowerment and training process.

**Methods:** A qualitative study was performed in the primary health setting, in a Spanish regional health service in 2013. Data were collected through participant observation, in-depth interviews and discussion group with health professionals selected by intentional sampling. The data were analysed following Taylor and Bogdan theoretical frame.

**Results:** Although main themes emerged in the analysis, we observed that ICT resources are old-fashion and incompatible between them. This makes difficult the referral of patients and the interprofessional communication. The participants positively valued the efforts made to improve the communication between health care levels to improve health care coordination and patient self-care.

**Conclusions:** Health administrators should pay attention to ICT updating to meet the needs of users and professionals. Compatible technology would help to get a more efficient health system, to avoid inequities in the access to health services and information, and to facilitate the feedback in the communication in the health care continuum.

**Descriptors:** Medical informatics. Continuity of care. Primary health care. Nurses. Qualitative research.

<sup>a</sup> ylapena@uji.es

<sup>b</sup> loreto.macia@ua.es

<sup>c</sup> isabel.orts@uji.es

<sup>d</sup> azucena.pedraz@uam.es

594

### INFORMATION AND COMMUNICATION TECHNOLOGIES IN CEREBRAL PALSY: WHAT IS ITS RELEVANCE FOR THE DEVELOPMENT OF COMMUNICATION AND LEARNING?

Sílvia Oliveira<sup>1,a</sup>, Catarina Martins<sup>1,11,b</sup>, Célia Ribeiro<sup>1,c</sup><sup>1</sup>Universidade Católica Portuguesa. Portugal<sup>11</sup>Associação Portuguesa de Paralisia cerebral. Portugal

**Introduction:** Information and Communication Technologies (ICT) have been used in the learning process of children with special educational needs, including cerebral palsy (CP), in order to develop communication and learning.

**Objective:** We wanted to assess how ICT can be a contribution to the development of communication and learning in students with CP, as well as in their quality of life.

**Methods:** Data collection consisted of a questionnaire to forty-six mainstream teachers who have CP kids in their classes, and a systematic observation with structured grills, of two students with CP, in interventions using ITC that we compared with the previous period when it was not used. Thus, we applied a quantitative and qualitative methodology in a descriptive and comprehensive approach.

**Results:** The majority of respondent teachers referred that they recur to ITC often in their educational practices, although a significant part, still do not implement the strategy. They also agree that ITCs contribute to the acquisition of new learnings, promote the development of communication and facilitate the process of inclusion of children with CP as well as their quality of life. Both students expressed greater motivation, when the activities were performed on the computer, demonstrating greater autonomy in the tasks and an immediate and self-correcting feedback.

**Conclusions:** ICT assumed to have an important role in the development of psychomotor, communication and social skills. However, we believe that the use of ICT in education, family and social contexts still remains negligible and should be further explored and developed involving the participation of the whole community.

**Descriptors:** Cerebral Palsy. Information & Communication Technologies. Communication.

595

### HEALTHCARE INFORMATION SYSTEM TO ALL HEALTH PROFESSIONALS - PORTUGUESE INSIGHT

Tânia Santo<sup>a</sup>, Marina Olival<sup>b</sup>, Cátia Mateus<sup>c</sup>*Agrupamentos de Centros de Saúde Médio Tejo. Santarém, Portugal*

**Introduction:** Since 1999 there have been discussions on using Healthcare Information Systems, as a software solution, to enable a more efficient communication of patient data between different healthcare professionals, including the ones in primary care. Today, only a handful of countries have implemented such an information system.

**Objective:** This assignment intends to show the reality of health records in Portugal, the effort made to evolve, the barriers and the results until now, since there is not efficient software driven multi-professional healthcare information system in primary care.

**Methods:** Technical debate and discussion between healthcare professionals helped to understand the present state of data collecting and sharing and to set the guidelines to a future information system. The present assignment also includes a brief preview of a pilot multi-professional healthcare information system in primary care developed by a small group of health professionals from health centers of the district of Santarém.

**Conclusions:** The overall contribute of a multi-professional healthcare information system in primary care points to an improved healthcare response and fosters a more informed decision making process by the directing body of the healthcare system.

**Descriptors:** Records. Healthcare. E-health. Information. Communication.

<sup>a</sup> silvia\_o41@hotmail.com<sup>b</sup> cat.martins.form@gmail.com<sup>c</sup> cribeiro@crb.ucp.pt<sup>a</sup> tansanto@gmail.com<sup>b</sup> smolival@gmail.com<sup>c</sup> catia.smateus@gmail.com

596

### VIRTUAL LEARNING ENVIRONMENT: DEVELOPMENT OF MODEL AND SCRIPT FOR SEMI IN PERSON AND DISTANCE LEARNING

Carlos Alberto Seixas<sup>I,II,a</sup>, Isabel Amélia Costa Mendes<sup>c,III,b</sup>,  
Simone de Godoy<sup>I,II,c</sup>, Alessandra Mazzo<sup>I,II,d</sup>, Maria  
Auxiliadora Trevizan<sup>I,II,e</sup>, José Carlos Amado Martins<sup>III,f</sup>

<sup>I</sup>Brazil University of Sao Paulo at Ribeirão Preto. College  
of Nursing. Ribeirão Preto, SP, Brazil

<sup>II</sup>WHO Collaborating Centre for the Development of  
Nursing Research. Ribeirão Preto, SP, Brazil

<sup>III</sup>Portugal Nursing School of Coimbra. Coimbra, Portugal

**Introduction:** The growing demand for expertise in the application of technological tools is one of the clearest findings obtained through research conducted for more than two decades by our research group in the area of communication and humanization in health care. From these findings the group developed a proposal on the use of virtual learning environments.

**Objective:** To propose a script and model for development of online courses that are offered in semi in person format or entirely online.

**Methods:** For the development of the research, descriptive and quantitative cross-sectional methods were used. The development was divided into the following stages: planning, construction and conversion of contents, development of the dynamics of the course, usability evaluation using a questionnaire, analysis of access logs and students' opinion, formulation of the script with technical guidelines and development of online course model.

**Results:** Two products resulted from the process: the using script with the main stages of development for an educational action targeting the use of digital technologies and an online course model.

**Conclusions:** The characteristics of the online course model produced are clarity in content offering, information objectivity, better usability reported by students and professors, feedback of assessment tools and easiness of use of the communication channel among participants.

**Descriptors:** Distance Education, Virtual Learning Environment, Online Course, Nursing, Teaching.

<sup>a</sup> seixas@usp.br

<sup>b</sup> iamendes@usp.br

<sup>c</sup> sig@erp.usp.br

<sup>d</sup> amazzo@erp.usp.br

<sup>e</sup> trevizan@erp.usp.br

<sup>f</sup> jmartins@esenfc.pt

597

### ISSUES AND SPECIFICATIONS ON A PRESCRIPTION SYSTEM FOR CONTROLLING PATIENT TAKES AND DRUGS USAGE

Samuel Martins<sup>I,a</sup>, Luis Borges Gouveia<sup>II,b</sup>, Arminda  
Guerra Lopes<sup>I,c</sup>

<sup>I</sup>Instituto Politécnico de Castelo Branco. Castelo Branco,  
Portugal

<sup>II</sup>Universidade Fernando Pessoa. Porto, Portugal

**Introduction:** We live in an age of increasing digitalization in which companies determine the cost/benefits and how to improve its ability to respond, through the use of computers and networks. The companies, due to a growing digital bias, are obtaining a threshold of dematerialization, which in the context of their documents is for example a "paper-free" working context. On the health domain, although there are specific applications for users and medication prescription management, almost the clinical patient records are made into paper.

**Objective:** Our goal is to propose a platform to support prescription management to be used in different spaces. The platform will allow the input of the patient essential information in the system, to be later accessed through a tablet or a smartphone, either in health clinics, nursing homes or IPSS environments. A family member will be aware of the medical condition, the medication and its dosage of their relatives in order to control drug usage and the what and when information associated with each patient prescription history.

**Methods:** Quantitative and qualitative methods will be used to gather and analyze data considering a user centered design platform. The approach will provide the requirements and the insight to specify such a platform and which issues are involved in dealing with that information sets.

**Results:** The innovation of this platform resides on the information enlarged access and mobility, and the easier management of operational resources and materials as well with the caring issues of the patient and its private information on drug usage and prescription instructions.

**Conclusions:** The paper discusses some of the functional aspects that we need to be address for a viable solution. Such solution needs to take into account that health information is sensitive (restricted access) and critical (subject to verification mechanisms to avoid errors, either in interpretation or in error limits). A user oriented approach is required that has both in consideration the critical issues of information as privacy but allows to those who need to control user drugs.

**Descriptors:** management takes; drugs; users; mobility, communication.

<sup>a</sup> samuel\_martins@hotmail.com

<sup>b</sup> mbg@ufp.edu.pt

<sup>c</sup> aglopes@ipcb.pt

598

### COMFORTING GERIATRIC CARE: WAYS OF BEING/ACTING OF CARE ROLE PLAYERS

Patrícia Ribeiro<sup>a</sup>, Maria Arminda Costa

*Universidade Católica Portuguesa. Lisboa, Portugal*

**Introduction:** Promoting comfort to hospitalized elderly is an integral part of health care as well as the main intention of the nurse intervention, constituting a challenge contextualized in the uniqueness of each person and related to the patterns of think, feel and act (Ribeiro, 2013).

**Objective:** This study focus on knowing the perception of elderly hospitalized patients on how care role players are/act to provide comfort or non-comfort.

**Methods:** The present descriptive study with a qualitative approach was guided by the ethnographic method. Were carried out semi-structured, audio-recorded and submitted to content analysis interviews (Miles & Huberman, 1991), applied to 20 elderly patients, intentionally chosen, admitted to a medical service from a Central Lisbon Hospital. There was participant observation in order to understand the situational experiences, based on previously structured screenplays (Spradley, 1980).

**Results:** In the encounter between the elderly and nurses, gravitates different human qualities: warmth, kindness, love, to be considerate and communicative. However, this encounter also brings out professional qualities such as availability, respect, concern, ability to interact and identify comfort indicators. These qualities are the base for a comforting interaction. In the opposite side appear uncomfortable elements. The comforting geriatric care is a complex process that combines a set of gestures, behaviors and words that mobilize cognitive, affective and psychomotor resources (Ribeiro, 2013).

**Conclusions:** Being “in the situation” is absolutely crucial to develop interpersonal skills that can help the elderly to overcome the situation in a positive way, and, therefore, recognized a comforting effect.

**Descriptors:** Comforting care; elderly patient; hospitalization; Ways of being/acting of care role players.

599

### COMMUNICATION DESIGN A TOOL FOR HEALTH LITERACY PROMOTION: DESIGNING INFORMATION HEALTH TO EMPOWER PATIENT WITH CHRONIC PAIN

Liliana Delfina de Oliveira Fernandes<sup>1,a</sup>, Joana Maria Ferreira Pacheco Quental<sup>1,b</sup>, Sofia Marques<sup>1,c</sup>

*<sup>1</sup>Universidade de Aveiro. Portugal*

*<sup>11</sup>Instituto Politécnico de Coimbra. Portugal*

**Introduction:** The ability to communicate information is the start to the successful health. More than 61% of adults have difficulty understanding and using health information. The WHO affirms that health literacy is a key determinant for self-management our health. Chronic Pain is the major healthcare problem in Europe. It affects 30% of population. The literature has shown a strong relationship between health literacy with the adherence of the treatments.

**Objective:** This study aims to develop a methodology and supports to empower individuals with chronic pain to control the disease.

**Methods:** This project will be incorporated in to rehabilitation program on Viseu Hospital. It was analyzed the communication used in health and your future in order to developer a way to enable effective communication between individuals with different backgrounds in health.

**Results:** There are two distinct publics. People with low literacy and people with quick access the information – they live in a world guided by technology – they suffer more this disease. The new information technologies are a tool for transforming complex information - the future by health.

**Conclusions:** Effective communication is required not only between patients and their providers but all that communicate health information – visual communication. It's important developer information more accessible to individuals understand thus self-making decisions for their welfare. So, this new approach to communicating health information that calls health communication technology and apps that contributes to a more effective self-management of health care by reducing costs. This helps not only the patient but too the doctors.

**Descriptors:** Health communication Technology; Promotion health literacy; Self-management; Self making decisions; Empower patients; Health risk communication; Technology; Chronic Pain.

<sup>a</sup>patriciaps@ics.lisboa.ucp.pt

<sup>a</sup>lilianafernandes10@hotmail.com

<sup>b</sup>joana.quental@ua.pt

<sup>c</sup>fisio.sofiamarques@gmail.com

# **Authors Index**

---

<b>A</b>	
ABELLÁN-PERPIÑÁN, José María .....	245, 246
ABRANTES, Ana Margarida .....	586, 587
ABRANTES, Catarina .....	40
ABRANTES, Margarida .....	515, 516, 584, 585
ABREU, Carla .....	573
ABREU, Edeli Simioni de .....	141
ABREU, Maria Odília .....	394
ABREU, Mónica Martinho .....	64
ABREU, Renato .....	76, 228, 354
ABREU, Rita Neuma Dantas Cavalcante de .....	468
ABREU, Wilson Jorge Correia Pinto de .....	60
ABREU-FIGUEIREDO, Rita .....	82, 101, 103
ACIOLE, Giovanni Gurgel .....	572
ADSUAR, José Carmelo .....	245, 246
AFONSO, Andrea .....	94, 97
AFONSO, Diogo .....	84, 560
AFONSO, Margarida .....	185
AGUADO-DIEZ, Antonio León .....	49
AGUDELO, María Elizabeth .....	90
AGUIAR, Fernanda Burle .....	119
AGUIAR, Iaryn Gomes .....	119
AGUIAR, Waneska Natália .....	451
AIRES, Luísa .....	83
ALARCÃO, Violeta .....	511
ALENCAR, Nadyelle Elias Santos .....	152, 191, 323, 324, 502, 503, 504
ALEXANDRE, Diogo Costa .....	86
ALIJA, Maria José Castro .....	131
ALMEIDA, Ana .....	1, 76, 354, 559
ALMEIDA, Ana Cristina .....	379
ALMEIDA, Ana Margarida .....	2, 197
ALMEIDA, Ana Nunes de .....	78
ALMEIDA, Armando .....	84, 112, 229
ALMEIDA, Daniela .....	337
ALMEIDA, Fernanda .....	155
ALMEIDA, Franciele Moletta .....	51
ALMEIDA, Gabriela .....	20, 21, 344
ALMEIDA, Gilmara de Souza Sampaio .....	304
ALMEIDA, Gilson Holanda .....	468
ALMEIDA, Henrique .....	551, 552, 553, 556, 589
ALMEIDA, Leandro Silva .....	241
ALMEIDA, Maria de Lurdes .....	295, 416
ALMEIDA, Sofia Pereira de .....	64
ALMEIDA-DE-SOUZA, Juliana .....	467
ALMEIDA-SANTOS, Emanuelle de .....	108
ALMEIRA, Josimar M. .....	311
ALMENDRA, Manuela .....	292
ALONSO, María Isabel García .....	49
ALVARELHÃO, Joaquim .....	3, 373
ALVARENGA-MARTINS, Nathália .....	255, 569
ALVAREZ, Manuela .....	568
ALVEIRINHO, Dolores Estrela .....	185
ALVES, Ana Lúcia .....	277, 278, 279
ALVES, Cátia .....	284, 285
ALVES, Cláudia .....	419
ALVES, Helena .....	269, 534
ALVES, José .....	240
ALVES, Liliana .....	296
ALVES, Márcia .....	330
ALVES, Marisa .....	269, 534, 536
ALVES, Marta .....	78
ALVES, Paulo .....	84, 229
ALVES, Sandra .....	52, 362, 540
ALVES, Sara .....	425, 455
ALVES, Susana .....	443
ALVES, Tânia .....	57, 541
ALVES, Thamar .....	23
ALVES, Vera .....	545
AMADO, João .....	540
AMADO, João Costa .....	560
AMADO, Paula .....	338
AMANTE, Maria João .....	33, 34, 351, 352
AMARAL, Ana Paula .....	532
AMARAL, Isabel .....	125
AMARO, Nuno .....	147, 154, 495, 496
AMENDOEIRA, José .....	36, 63, 110, 198, 314, 423, 520
AMORIM, Erico .....	195
AMORIM, Ingrid .....	195
AMORIM, Rosendo Freitas de .....	417
AMORIM, Yasmim Anderson .....	487
ANDRADE, Isabel .....	166
ANDRADE, Isabel Maria .....	161
ANDRADE, João Henrique Araújo de ...	105, 106, 429, 431
ANDRADE, Renato .....	26, 27, 28
ANDRADE, Séfora L. E. .....	119
ANDRADE, Susana .....	536
ANDRÉ, Clara .....	563
ANDRÉ, Maria Clara .....	110
ANDREA, Mário .....	489
ANES, Eugénia Maria Garcia Jorge .....	248
ÂNGELO, Nuno .....	348
ANTUNES, Cátia .....	548
ANTUNES, Maria Teresa Calvário .....	60
ANTUNES, Patrícia .....	280
AQUILANTE, Aline Guerra .....	261
AQUINO, Priscila de Souza .....	243, 491
ARAÚJO, Ana Rikaelle .....	267
ARAÚJO, André .....	590, 591
ARAÚJO, André R. T. S. .....	149, 150
ARAÚJO, Beatriz .....	240
ARAÚJO, Inês .....	188
ARAÚJO, Leydiane Farias de .....	107
ARAÚJO, Lia .....	33, 34, 352, 425, 455
ARAÚJO, Liliane G. .....	313
ARAÚJO, Mariana .....	396
ARAÚJO, Odete .....	92, 95, 96, 99, 292
ARAÚJO, Rosineia .....	358
ARCHE, María-Ángeles .....	91, 93
ARDERIUS, André .....	181
AREIA, Neide Portela .....	505
ARIEIRA, Joana .....	413
ARNALDO, Pâmela .....	275
ARNALDO, Sofia de Moraes .....	137, 267, 275, 583
ARREGUY-SENA, Cristina .....	214, 219, 255, 448, 450, 546, 569
ARRIAGA, Sofia .....	284, 285
ASCARI, Rosana Amora .....	418, 567
ASSEICEIRA, Inês .....	312
AUGUSTO, Ana .....	577
AUGUSTO, Nádia .....	37



AULER, Flavia.....	35, 492
AYORA, Ana.....	249
AZEREDO, Zaida de Aguiar de Sá.....	61, 158, 426, 427
AZEVEDO, Anderson Miranda de.....	152
AZEVEDO, Andreia.....	325
AZEVEDO, Fernando.....	24, 25, 342
AZEVEDO, Larissa Negromonte.....	119
AZEVEDO, Maria João.....	425, 455
AZEVEDO, Sara.....	312
AZUL, Joana.....	217
<b>B</b>	
BAIXINHO, Cristina.....	466
BAJO, Roberto.....	90, 98
BALBY, Mariana.....	173
BALHICO, Rita.....	354
BALTARE, Patrícia.....	178
BALTAZAR, Ricardo.....	87, 88, 440
BAPTISTA, Diogo.....	524, 528, 533
BARATA, Tiago.....	155
BARBOSA, Ana.....	283
BARBOSA, Maria da Conceição.....	376
BARBOSA, Priscilla Mayara Estrela.....	417
BARBOSA, Sayonara de Fátima Faria.....	171, 535
BARREIRA, Sérgio V. P.....	118, 537
BARRETO, Marcelo.....	251
BARRETO, Marcelo Stuart.....	19
BARRETTO, Raquel.....	184
BARRIGA, Carmen.....	288
BARROS, Ana.....	2, 433
BARROS, Liliana.....	24
BARROS, Sofia.....	13
BARROS, Tiago de Sousa.....	137, 243, 316, 583
BARROS, Tiago Sousa.....	318
BARROSO, Isabel.....	353
BARROSO, Isabel Maria A. Rodrigues da Costa.....	66, 392
BARROSO, Marisa.....	433
BÁRTOLO, Paulo J.....	271, 512, 551, 552, 553, 556
BARTOLOMEU, Tânia.....	53
BASTOS, Letícia de.....	354
BASTOS-ALMEIDA, Maria Celeste.....	289
BATISTA, Ana Cláudia de Oliveira.....	171, 535
BATISTA, Marco.....	331, 332
BATISTA, Nildo.....	266
BATISTA, Valeria Cristina Leal.....	122
BAUMAN, Claudiana Donato.....	176, 177
BECERRA, Isabel Alejandra.....	90, 98
BELLÉM, Fernando.....	76, 228, 354
BELO, Daniela.....	578, 579
BENTO, Elizangela.....	43
BENTO, Luís.....	527
BENTO, Teresa.....	217, 368, 438
BERENQUER, Sílvia.....	293
BERNARDES, Miguel.....	496
BERNARDES, Milton Junio Cândido.....	230, 231
BERNARDO, Ana.....	391
BERNARDO, Elizian Braga Rodrigues.....	137, 243, 319, 491, 565, 583
BERNARDO, Sónia.....	120
BERTOLINI, Audrey Andrade.....	277, 278, 279
BERTONCELLO, Kátia Cilene Godinho.....	213
BEZERRA, Karine.....	
BEZERRA, Karine de Castro.....	137, 315, 316, 318, 319
BEZERRA, Leonardo.....	439
BISCAIA, Sara.....	271, 551
BISPO, Miclecia.....	195
BIZERRA, Renata de Lima.....	318
BLANCO, Valeriana Guijo.....	510
BOERY, Eduardo Nagib.....	400, 404
BOERY, Rita Narriman Silva de Oliveira.....	400, 404
BOMFIM, Ana Marlusia Alves.....	124
BORBA, Sofia.....	396
BORGES, Ana.....	267
BORGES, Ana Maria.....	43
BORGES, Caio.....	439, 451
BORGES, Daniela.....	25
BORGES, Juliana.....	356
BORGES, Maria Cristina.....	43
BORGES, Maria Tereza.....	184, 451
BORGES, Maria Tereza Sá Leitão Ramos.....	237, 238, 453
BORGES, Rachel.....	451
BOTELHO, Maria Amália.....	129, 132, 375
BOTELHO, Maria Antónia.....	183
BOTELHO, Maria Filomena.....	515, 516, 543, 544, 545, 584, 585, 586, 587
BOZ, Mariana Macedo.....	317
BRAGA, Fábio Teixeira.....	557, 558
BRAGA, Luciene Muniz.....	214, 219, 448, 450, 546
BRAGA-PONTES, Cátia.....	42
BRAGUEZ, Liliana.....	412
BRANCO, Ana Carolina.....	582
BRANCO, Géssica Spindola Castelo.....	502
BRANCO, Joana Rita Parente.....	454
BRANCO, Sílvia.....	363
BRANDÃO, Ana.....	228
BRANDÃO, Daniela.....	425, 455
BRANDÃO, Mariana.....	473
BRÁS, Manuel.....	156, 327
BRÁS, Manuel Alberto Morais.....	128, 248
BRASILEIRO, Renata Sá.....	472
BRAVO, Rafael.....	98, 288, 570
BRAZ, Nídia.....	382
BRITES, Gonçalo.....	586, 587
BRITO, Ana.....	584
BRITO, Filipa.....	149
BRITO, João.....	331, 332, 340
BRITO, Soraia.....	420
BROOKS, Dina.....	225
BÜCHELE, Fatima.....	19, 250, 251
BUENO, Andressa Aline Bernardo.....	525
<b>C</b>	
CABRITA, José.....	92, 99
CACEIRO, Elisa.....	339
CAEIRO, Maria João.....	178
CAETANO, Liliana Aranha.....	335
CAIRES, Iolanda.....	129, 132
CAIRES, Sofia.....	82
CAIRES, Susana.....	509
CALADO, Paulo G. A.....	124
CALDEIRA, Carolina.....	48
CALDEIRA, Ermelinda.....	70, 73, 402
CALDEIRA, Francisco.....	6

CALHA, António.....	366, 367	CAVACO, Adriana .....	539
CALVO, Maria Cristina .....	242	CAVALCANTE, Aline .....	358
CAMARGO, José .....	263	CAVALCANTE, Laurineide de Fátima Diniz .....	184, 237, 238, 451, 453
CAMPOS, Antônio Carlos Ligocki.....	490	CECCIM, Ricardo Burg.....	291
CAMPOS, Maria Jorge .....	577	CEÑA, Domingo.....	160
CAMPOS, Raelly Ramos.....	471	CERCAI, Eduardo.....	571
CAMPOS, Thamara de Souza.....	122	CERQUEIRA, Margarida .....	373
CÂNDIDO, Anabela Escabelado .....	36, 110, 297	CERTO, Ana .....	128, 464, 465
CAPELAS, Manuel Luís .....	52	CERVERA-GASCH, Agueda .....	236
CAPERUTTO, Erico.....	141	CHACÓN-FERRERA, Rodrigo .....	56, 538
CAPUTO, Juliana.....	135	CHAINHO, Liliana .....	376
CARDOSO, Alexandrina.....	565	CHAREPE, Zaida .....	156, 327
CARDOSO, Clara .....	373	CHAVES, Ana .....	264
CARDOSO, Ilda .....	274	CHAVES, Anne Fayma Lopes .....	318, 319
CARDOSO, Mafalda Martins .....	580	CHAVES, Caroline.....	566
CARDOSO, Mário.....	293	CHERPE, Sónia.....	428, 568
CARDOSO, Marisa.....	190	CHORA, Antónia.....	70
CARDOSO, Pedro Domingues.....	108	CHORA, Maria.....	73, 402
CARDOSO, Ricardo .....	574	CHORDÁ, Víctor.....	249
CARDOSO, Rodrigo.....	164	CIBANAL-JUAN, Luis .....	160
CARDOSO, Susana .....	326	CICHACEWSKI, Camila Roda.....	317
CARMO, Sara O. S. ....	313	CID, Luís .....	438, 443, 446
CARMOI, Bruno Cleiton Macedo do .....	385	CINTRA, Karla Lucila .....	113
CARNEIRO, Rita Jucielma Almeida.....	104, 304, 562	CLARO, Eduarda .....	116
CARNEIRO, Rithianne Frota.....	184, 237, 238, 453	COELHO, André.....	335
CAROLINO, Lara.....	403	COELHO, Joyce Miná Albuquerque .....	472
CARONA, Tatiana.....	364	COELHO, Julyane F. ....	119
CARRÃO, Luís.....	456, 553, 589	COELHO, Luís.....	147, 151, 154, 495, 496
CARREIRA, Teresa Margarida.....	63, 110	COELHO, Patrícia.....	52, 84, 112, 229, 540
CARRILHO, Mónica .....	85	COIMBRA, Miguel Tavares .....	547
CARTEIRO, Dora .....	293	COLARES, João Henrique Freitas .....	417
CARVALHEIRO, Manuela .....	274	CONDE, Monserrat .....	382
CARVALHINHO, Luis.....	298	CONDE, Sílvia V.....	22
CARVALHO, Amanda Raíssa Dantas de.....	304	CORDEIRO, Clara.....	382
CARVALHO, Ana de.....	356, 357, 358, 484	CORDEIRO, Diana.....	443
CARVALHO, Cintia Maria Chagas .....	557, 558	CORDEIRO, Joana.....	376
CARVALHO, Graça S.....	153	CORDEIRO, Marina Sofia Silva .....	328
CARVALHO, Jeanine T. ....	136	CORDEIRO, Nuno .....	220, 221
CARVALHO, Joana .....	559	CORDOVID, Rita .....	20, 21, 344
CARVALHO, Larissa .....	521	CORRÊA, Sonia Cavalcanti.....	141
CARVALHO, Letícia.....	508	CORREIA, Lopes.....	120
CARVALHO, Lucinda Sofia.....	55, 174	CORREIA, Paula .....	77, 80, 81, 406, 409
CARVALHO, Maria Graça .....	582	CORREIA, Raquel.....	121, 424
CARVALHO, Mariana Maia de .....	102, 182	CORREIA, Susana.....	509
CARVALHO, Rui.....	442	CORREIA, Teresa I. G. ....	475, 476
CARVALHO, Teresa .....	212	CORREIA, Vanessa .....	474
CARVALHO, Yara.....	18	CORREIA, Vânia.....	29
CARVALHO, Yara Maria de.....	44	CORTÉS, María Isabel .....	160, 249, 593
CARVALHO, Zuila Maria de Figueiredo.....	471, 472	CORZO, Héctor .....	346, 347
CASALTA, João .....	585	COSTA, Adriana Silveira.....	502
CASALTA-LOPES, João.....	515, 516, 586	COSTA, Camila .....	565
CASAS-NOVAS, Vitória.....	70, 73, 402	COSTA, Filipa.....	89, 414
CASIMIRO, Cíntia Freitas.....	234	COSTA, Francisca Liliane Pereira da.....	468
CASSIANO, Tânia.....	134	COSTA, Francisco.....	345
CASSIMO, Soraia.....	272	COSTA, Joana.....	409
CASTILHO, Paula.....	305	COSTA, Joana Filipa Oliveira e.....	66
CASTILLO, Iraneide da Silva.....	324	COSTA, João Fontes da.....	380
CASTRO, Ana .....	57, 541	COSTA, Laís Silveira .....	581
CASTRO, Bárbara T.....	537	COSTA, Marcélid Berto da .....	117
CASTRO-JUNIOR, Francisco P.....	313	COSTA, Maria .....	15
CATARINO, Helena.....	134, 138		
CATUNDA, Hellen Lúvia Oliveira .....	243, 491		

COSTA, Maria Armanda .....	276	DIAS, Ricardo.....	54
COSTA, Maria Armanda.....	598	DIAS, Sara S. ....	329, 460
COSTA, Maria Suely Alves.....	100, 241	DIAS, Telma.....	74
COSTA, Pablo Carneiro de Oliveira .....	113	DÍAZ, Juan Fernando Jiménez.....	12
COSTA, Santana .....	452	DINIS, Natacha .....	87, 88
COSTA, Suelane C. T. ....	311	DIOGO, Paula.....	178
COSTA, Tânia .....	52, 84, 112, 229, 560	DIXE, Maria dos Anjos.....	138, 186, 144, 145, 460, 466, 479, 484, 493, 498, 506, 507, 578, 579
COSTA, Xavier.....	363	DIZ, Elisabete de Fátima Dinis.....	309
COUTINHO, Paula.....	13, 150, 155, 157, 508	DOMINGUES, Catarina.....	125
COUTINHO, Verónica .....	260	DOMINGUES, Cátia.....	545
COUTO, Camila Santos do.....	234, 417	DOMINGUEZ-MUÑOZ, Francisco .....	346, 347
COUTO, Sabrina .....	134	DÓRO, Patrícia .....	345
CRAVIDÃO, Rita .....	549	DUARTE, Ana.....	553
CRESPO, Sandrina Sofia da Silva .....	61	DUARTE, Cristiana .....	457, 469, 470
CRUZ, Amanda Almeida da .....	492	DUARTE, Natália .....	425, 455
CRUZ, Ana.....	120	DUQUE, Eduardo.....	365
CRUZ, Inês.....	224, 372	DUTRA, Letícia .....	23
CRUZ, Joana .....	45, 210, 225	DUTRA, Letícia Rocha .....	444
CRUZ, João R. ....	147, 151, 154, 495, 496	<b>E</b>	
CRUZ, Karla.....	38, 356, 358	ENCARNAÇÃO, João.....	584, 585
CRUZ, Magda Rosa Ramos da.....	11, 490	ESPANHA, Margarida .....	553, 589
CRUZ, Mário.....	28	ESPERANÇA, António.....	151
CRUZ, Olímpia .....	63, 110	ESPERANÇA, Joana .....	590, 591
CRUZ, Rui.....	483	ESPÍRITO-SANTO, Helena.....	199, 285, 305, 377, 403, 436
CRUZ, Sofia .....	203	ESTEVES, Luana Lopes Neves .....	214
CUBERO, Javier.....	288	ESTEVES, Paula.....	185
CUNHA, Cláudia .....	116	ESTEVES, Raquel .....	83
CUNHA, Fátima .....	297	EVANGELISTA, Joana .....	484
CUNHA, Gilmar da .....	357	EVARISTO, Ana .....	458
CUNHA, I. ....	320	EXOJO, Emilia .....	570
CUNHA, Joana .....	71	<b>F</b>	
CUNHA, Marina .....	212, 386, 398, 428, 568	FAGUNDES, Karolina Vitorelli .....	486
CUSTÓDIO, Filipa Daniela de Oliveira.....	148	FALÉ, Isabel .....	536
CUSTODIO, Tiago.....	574	FANTINATTI, Eliane Nascimento .....	170
<b>D</b>		FARIA, Paula.....	553
D'ÁGUA, Nuno Borda .....	443	FARIA, Paula Cristina .....	590, 591
DALLEGRAVE, Daniela.....	291	FARIAS, Fabio Teixeira .....	492
DALLOT, Fábio S. ....	126	FARIAS, Regina Lucia G. P.....	119
DAMACENO, Karla .....	23	FARIAS, Sílvia.....	13
DAMASCENO, Ana Kelve .....	315, 564, 565	FARO, Mafalda.....	396
DAMASCENO, Simone S. ....	119	FASSARELLA, Cintia Silva .....	525, 526
DANIEL, Ana Marta .....	474	FAVA, Silvana Maria Coelho Leite .....	480
DANIEL, Fernanda.....	199, 274, 403, 405	FEITOSA, Andréa.....	267
DAYS, Daian Cross .....	452	FELGUEIRAS, Miguel.....	218
DÁZIO, Eliza Maria Rezende .....	480, 482	FELICIANO, Cátia.....	456
D'ELBOUX, Maria José.....	79, 408	FELIZARDO, Melissa Joice .....	390
DEMAIN, Sara .....	200	FERLA, Alcindo António .....	51
DENIS, Teresa .....	168	FERNANDES, Adília Maria Pires da Silva.....	248
DESOUZART, Gustavo .....	447	FERNANDES, Ana .....	559
DEZORDI, Flávia.....	317	FERNANDES, Ana Alexandre.....	375
DIAS, Carlos Amaral.....	329	FERNANDES, Ana Fátima .....	315, 316
DIAS, Gisele Monaco.....	277, 278, 279	FERNANDES, António .....	192, 193, 325, 467
DIAS, Hélia .....	63, 563	FERNANDES, Beatriz.....	376
DIAS, Jéssica .....	514	FERNANDES, Betânia Maria.....	569
DIAS, João Canossa .....	5, 72	FERNANDES, Diana .....	102
DIAS, João da Silva.....	11	FERNANDES, Filipa.....	325
DIAS, Manuela .....	54	FERNANDES, Georgia Barros .....	307
DIAS, Maria da Luz Vale.....	111	FERNANDES, Henriqueta .....	564, 566
DIAS, Maria Leonor da Costa .....	127		
DIAS, Marta.....	23		
DIAS, Marta Luiza .....	265		

FERNANDES, Jorge.....	359	FILIFE, Luís.....	362
FERNANDES, José.....	412	FILIFE, Nélia Cristina Lopes.....	287
FERNANDES, Lara.....	325	FILIPINI, Cibelle Barcelos.....	480, 482
FERNANDES, Liliana Delfina de Oliveira.....	599	FIRPO, Renata.....	273
FERNANDES, Marcelo.....	142, 143	FIRPO, Roberto.....	521
FERNANDES, Márcia Astrês.....	152, 324, 501, 502	FIUZA, Maria L. Teles.....	357
FERNANDES, Maria Beatriz.....	64	FLÓRIO, Tiago.....	484
FERNANDES, Maria Susana Nogueira.....	247	FOLCH-AYORA, Ana.....	236
FERNANDES, Marina.....	301	FONSECA, Adélia Dayane Guimarães.....	176, 177
FERNANDES, Milene.....	511	FONSECA, Delba.....	105
FERNANDES, Nuno.....	178, 349	FONSECA, Fabiano.....	141
FERNANDES, Patrícia.....	325	FONSECA, Helena.....	10, 459
FERNANDES, Renata.....	24	FONSECA, Isabel Barahona.....	276
FERNANDES, Rosina.....	33, 34, 351	FONSECA, Luís.....	157
FERNANDES, Susi Mary de Souza.....	141, 142, 143	FONSECA, Marta.....	395, 407
FERRÃO, Sónia.....	268	FONSECA, Susana.....	33, 34, 351, 352
FERRAZ, Marta.....	197	FONSECA, Tânia.....	72
FERREIRA, Amélia.....	499	FONSECA-PINTO, Rui.....	37, 524, 527, 528, 529, 533
FERREIRA, António.....	240	FONTES, Ana Maria Dourado Lavinsky.....	59
FERREIRA, Bela.....	354	FORNERETTO-GOZZI, Alana de Paiva.....	170
FERREIRA, Bruno.....	112, 229	FORTUNATO, Patrícia.....	473
FERREIRA, Catarina.....	85	FRADE, João.....	205, 206
FERREIRA, Célia.....	134	FRADE, Natália.....	207, 208
FERREIRA, Cláudia.....	461, 463, 473, 474, 560	FRAGA, Alex.....	18
FERREIRA, Efigênia Ferreira e.....	180	FRAGOSO, Isabel.....	489
FERREIRA, Hélia.....	76	FRANCISCO, Joana.....	53
FERREIRA, Inês.....	511	FRANCISCO, Susana.....	86
FERREIRA, Joana.....	446	FRANCO, Débora.....	489
FERREIRA, Lino.....	529, 576	FRANCO, Joana.....	513
FERREIRA, Luis Miguel.....	372	FRANCO, João.....	338
FERREIRA, Manuela.....	115	FRANCO, Margarida.....	271
FERREIRA, Maria.....	198	FRANCO, Samantha Luzia Guimarães.....	501
FERREIRA, Maria João A. P.....	542	FRAZÃO, Henrique.....	298
FERREIRA, Maria Manuela.....	203	FREITAS, Cintia de.....	41, 270, 273
FERREIRA, Mônica Taynara Muniz.....	14, 130	FREITAS, Cintia Domingues de.....	277, 278
FERREIRA, Patrícia.....	150	FREITAS, Dino.....	552, 553, 556, 589
FERREIRA, Paulo.....	343	FREITAS, Gregório.....	139, 140
FERREIRA, Pedro L.....	483, 575	FREITAS, Manuella Araújo de.....	107
FERREIRA, Raquel.....	89	FREITAS, Maria.....	264
FERREIRA, Raquel Conceição.....	180	FREITAS, Otília.....	139, 140, 330
FERREIRA, Sofia.....	475	FRIAS, Ana.....	70, 73, 402
FERREIRA, Tânia.....	97	FRIEDRICH, Denise.....	32
FERREIRA, Vanda Cristina Lopes.....	554	FROTA, Mirna Albuquerque.....	117, 234, 417
FERRERA, Rodrigo Chacón.....	12	FROTA, Rithianne.....	439
FERRINHO, Vera.....	126	FURFORO, Érica.....	23
FERRO, Denise.....	282	FURTADO, Iraquelma M.....	322
FERRO-LEBRES, Vera.....	83, 192, 193, 325	FURTADO, Tânia.....	312
FIDÉLIS, Elaine Priscilla Bezerra.....	146	<b>G</b>	
FIERRO, Iolanda M.....	211	GABRIEL, Ana Teresa.....	519
FIGUEIRA, Brisa.....	282	GABRIEL, Raquel.....	45, 370, 374
FIGUEIREDO, Catarina.....	81	GADELHA, Carlos.....	581
FIGUEIREDO, Daniela.....	45, 283, 370, 374	GALÁN, Carmen.....	288
FIGUEIREDO, Laura.....	190	GALHARDO, Ana.....	415
FIGUEIREDO, Maria Carmo.....	36, 520	GALÚCIO, Gláucia.....	313
FIGUEIREDO, Maria do Céu Barbieri.....	476, 526, 564	GALVÃO, Ana Maria.....	128, 309, 464, 465
FIGUEIREDO, Maria Henriqueta.....	156, 302, 327	GALVÃO, Dulce.....	337, 341
FILGUEIRAS, Ernesto.....	447	GALVÃO, Marli.....	357
FILHO, Alcides José Branco.....	490	GAMEIRO, Andreia.....	221
FILHO, Isaac Suzart Gomes.....	107, 113	GARCIA, Andreia.....	50
FILHO, Nicolino Trompieri.....	241	GARCÍA-GORDILLO, Miguel Ángel.....	245, 246
FILIFE, Ana Cláudia.....	7	GARCIA-MATADOR, Judit.....	347

GASCH, Agueda.....	249	GRANADO, Ana Cristina .....	226
GASPAR, Filomena.....	10, 459	GRAVETO, João.....	164
GASPAR, Pedro .....	10, 259, 459, 460	GRECO, Rosângela.....	569
GAVINHA, Sandra.....	207, 208, 209	GREGÓRIO, Ricardo.....	574
GAZOTTI, Thaís de Castro.....	262	GREVE, Júlia.....	41
GERALDO, Inês.....	435	GRILO, Ana.....	573
GI, João.....	576	GUADALUPE, Sónia.....	199, 305, 377, 403, 405, 436
GIL, João.....	529	GUARINO, Maria Pedro.....	22, 42
GIOVANETTI, Gisele.....	170	GUEDES, Magda.....	30
GIR, Elucir.....	357	GUERRA, Inês.....	75
GODINHO, Celeste.....	36, 563	GUERRA, João.....	348
GODINHO, Maria.....	181	GUERREIRO, Catarina.....	350
GODINHO, Maria da Luz.....	522	GUERREIRO, Daniela.....	436
GODOY, Cássia Silva Miranda.....	230, 231	GUERREIRO, Mara Pereira.....	286
GODOY, Simone de.....	596	GUILHERME, Mara.....	437
GODOY, Solange Cervinho Bicalho.....	482	GUIMARÃES, Nuno.....	83
GÓIS, Filipa.....	47	GUIMARÃES, Teresa.....	497
GOIS, Inês Nobre.....	545	GUSI, Narcis.....	346, 347
GOMES, Ana Allen.....	531	GUSKUMA, Érica Mayumi.....	480, 482
GOMES, Ana Maria.....	7, 8	GUTERRES, Marta.....	365
GOMES, Bárbara.....	330, 561	<b>H</b>	
GOMES, Claudia.....	390	HAGEMANN, Luciana Bihain.....	213
GOMES, Eurico.....	91, 93	HAIKAL, Desireé Sant'Ana.....	180
GOMES, Inês.....	290	HENRIQUES, Carolina Miguel da Graça.....	338, 339, 454
GOMES, Ivan.....	18	HENRIQUES, Filipa.....	406
GOMES, Maria Isabel.....	35	HENRIQUES, Sara.....	220
GOMES, Margarida.....	24	HERNÁNDEZ-MARTÍNEZ, Francisco-José.....	56, 306, 371, 538, 575
GOMES, Maria José.....	309	HERNANDEZ-MOCHOLÍ, Miguel.....	346
GOMES, Noélia Cristina Rodrigues Pimenta.....	257	HONÓRIO, Samuel.....	331, 332
GOMES, Ricardo.....	89	<b>J</b>	
GOMES, Rui.....	497	JACOB, Lia Maristela.....	184, 439
GOMIDE, Mariana.....	282	JÁCOME, Cristina.....	45, 361, 370
GONÇALVES, Ana.....	24, 120	JANELA, Sara.....	37
GONÇALVES, Ana Cristina.....	543, 544	JARDAN, Daniel.....	529, 576
GONÇALVES, Ana Rita.....	465	JARDIM, Maria Helena.....	330
GONÇALVES, Cátia.....	350	JESUS, Ana Sofia.....	253
GONÇALVES, Cláudia.....	123	JESUS, Filipa.....	75
GONÇALVES, Cristina.....	157, 515, 516	JESUS, Luis M. T.....	530, 531, 542
GONÇALVES, Filipa.....	85	JESUS, Taline Kings de.....	452
GONÇALVES, Guilherme.....	205, 206	JIMÉNEZ-DÍAZ, Juan Fernando.....	306, 575
GONÇALVES, Juarez Henrique Teixeira.....	105, 106, 431	JIMÉNEZ-DÍAZ, Juan-Fernando.....	56, 371, 538
GONÇALVES, Liliane.....	272	JIMÉNEZ-RODRÍGUEZ, Carla.....	538
GONÇALVES, Luísa.....	101, 103	JOÃO, Ana Lúcia da Silva.....	387
GONÇALVES, Marília.....	97	JORA, Natália.....	343
GONÇALVES, Pedro.....	368	JORGE, Maria Letícia Ramos.....	122
GONÇALVES, Pedro Jorge de Matos.....	172	JORGE, Nelson.....	259
GONÇALVES, Rui.....	68, 260, 440	JORGE, Xavier.....	300
GONÇALVES, Telmo.....	584, 585	JOSÉ, Helena.....	62
GONÇALVES-PEREIRA, Manuel.....	183	JÚNIOR, Joanito Niquini Rosa.....	444
GONZAGA, Luís.....	449	JÚNIOR, José Airton de Freitas Pontes.....	241
GONZALEZ, Michelle Costa.....	481	JÚNIOR, Reginaldo Santos e Silva.....	429
GONZÁLEZ-ALONSO, María Yolanda.....	49	JUNQUEIRA, Janaína.....	170
GONZÁLEZ-CHORDÁ, Víctor Manuel.....	236	<b>K</b>	
GORDO, Clementina.....	134	KARBAGE, Sara Arcanjo Lino.....	184, 237, 238, 439
GORDO, Sara.....	199	KEMPFER, Silvana Silveira.....	254
GOUVEIA, José Pinto.....	568	KRAUZER, Ivete Maroso.....	418
GOUVEIA, Luis Borges.....	597	KREMPSE, Paula.....	219, 255, 450
GOUVEIA, Márcia Teles de Oliveira.....	146	KRUGER, Amanda.....	488
GRAÇA, Ana.....	559	KURAHASHI, Maikol.....	317
GRAÇA, Patrícia.....	204		
GRACIANI, Zodja.....	142, 143		

**L**

LACATIVA, Mariana Kátia Rampazo .....	79, 408
LACERDA, Josimari Telino de .....	242
LADISLAU, José R. V. ....	322
LAGE, Isabel .....	92, 95, 96, 99, 292
LAGO, Rafaela .....	365
LAMDIM, Fátima Luna Pinheiro .....	117
LANÇA, Luis.....	573
LANCMAN, Selman .....	572
LANDIM, Fátima Luna Pinheiro.....	184, 234, 453
LAPA, João .....	69
LAPEÑA-MOÑUX, Yolanda Raquel .....	160, 236, 593
LARANJEIRA, P. ....	320
LARANJEIRA, Sara .....	560
LARANJO, Mafalda .....	515, 516, 586, 587
LASKA, Fernanda.....	487
LEAL, Ana Paris.....	531
LEAL, Filipe .....	201, 202
LEANDRO, Engrácia.....	379
LEBRE, Renata Lopes de Andrade e Silva .....	324
LEIRAS, Elsa.....	89
LEITÃO, Ana Almeida Céu.....	228
LEITÃO, Catarina.....	147, 151, 483, 496
LEITÃO, Célia.....	393
LEITÃO, Céu .....	76, 354
LEITÃO, Dina .....	517, 518
LEITÃO, João.....	150
LEITE, Ana Catarina .....	445
LEITE, Ana Filipa Silva .....	554
LEITE, Bruna .....	38
LEMOS, Laura .....	199, 285, 403, 436
LEONE, Mariléia.....	255, 450
LIMA, Ana .....	157
LIMA, Antônio Moacir de Jesus.....	444
LIMA, Camila Santos Pires.....	171, 535
LIMA, Francisca.....	564, 566
LIMA, Francisca Fabiana Fernandes .....	152, 323, 324, 501, 502, 503, 504
LIMA, Joana.....	364
LIMA, Júnia Leonne Dourado de Almeida.....	162, 163, 557, 558
LIMA, Kamila Ferreira.....	234, 417
LIMA, Luiza Nobre.....	247, 477
LIMA, Margarida Pedroso de .....	102
LINO, Tiago .....	523
LOBÃO, Ana Raquel .....	87, 88, 440
LOBÃO, Catarina .....	87, 88, 260, 440
LOBO, Ana Carolina Ferrer.....	494
LOPES, Ana Isabel .....	312
LOPES, Ângela .....	228
LOPES, Arminda Guerra .....	294, 597
LOPES, Cátia .....	157, 475
LOPES, Daniela.....	475
LOPES, Figueiredo.....	148
LOPES, Ivo .....	190
LOPES, Maria da Saudade de Oliveira Custódio .....	148
LOPES, Maria Helena .....	162, 163
LOPES, Renata Miranda de Araújo Laet .....	494
LOPES, Sónia.....	204
LOPES, Telma Margarida Coelho .....	554
LOUREIRO, Isabel.....	326
LOUREIRO, Luis Manuel de Jesus.....	61, 183

LOURENÇO, Cristina.....	150
LOURENÇO, Joana .....	48
LOURENÇO, Marta Salomé F. ....	554
LOURENÇO, Tânia.....	101, 103
LOURO, Maria Clarisse.....	144, 145
LUCAS, Cláudia.....	82
LUCAS, Hugo Manuel Oliveira.....	247, 321
LUCAS, Isabel.....	253
LUCAS, Mariana.....	284, 377
LUCENA, Filipa .....	573
LUÍS, Rita .....	6
LUÍS, Sara.....	574
LUZ, Carlos .....	20, 21, 344
LUZ, Leonardo G. O. ....	385
LUZ, Margarida .....	549
LUZ, Maria Helena Barros Araújo.....	504

**M**

MACHADO, Pedro .....	165
MACHADO, Priscila do Vale .....	191, 323, 501, 503, 504
MACHADO, Winner Gomes .....	471
MACIÁ-SOLER, Maria Loreto.....	160, 236, 593
MACIEL, Eloisa Alexandra Ribeiro .....	224, 555
MADEIRA, Ana.....	118
MADEIRA, André .....	173
MADURO, Inês .....	396
MAFRA, João.....	76
MAGALHÃES, Ana .....	437
MAGALHÃES, Bruno.....	372
MAGALHÃES, Carlos Pires .....	248
MAGALHÃES, Cátia .....	33, 351, 352
MAGALHÃES, Fernanda .....	564, 565, 566
MAGALHÃES, Samira Rocha .....	471
MAIA, Ana Margarete Cordeiro da Silva .....	104, 107, 109, 113, 562
MAIA, Paulo Henrique .....	486
MAJOR, Sofia .....	505
MALDONADO, Inês .....	17
MALDONADO, José .....	581
MAMEDE, Lino.....	414
MANARTE-MONTEIRO, Patrícia.....	207, 208, 209
MANIVA, Samia Jardelle Costa de Freitas .....	472
MANSO, Maria Conceição.....	207, 208, 209
MAQUES, Paula Rocha.....	272
MARÇAL, Mariana .....	37
MARCELINO, Ana .....	433
MARCOLINO, Taís Quevedo.....	169, 170
MARCOS, Azucena .....	593
MARIZ, Ana .....	28
MARQUES, Adilson.....	17
MARQUES, Alda .....	45, 46, 200, 210, 225, 283, 361, 369, 370
MARQUES, Augusta .....	233
MARQUES, Cláudia .....	39
MARQUES, Fernanda .....	23
MARQUES, Inês .....	75
MARQUES, Lúcia.....	166
MARQUES, Márcia.....	186, 493, 506
MARQUES, Mariana.....	284, 285, 305, 377, 436
MARQUES, Paulo.....	280, 573, 592
MARQUES, Ricardo .....	518
MARQUES, Rita .....	365

MARQUES, Rosália .....	115	MEDEIROS, Filipa .....	386
MARQUES, Sara .....	523	MEDEIROS, Nadja Beatriz Saraiva de .....	304
MARQUES, Sofia .....	599	MEDEIROS, Renata Firpo R. ....	277, 278, 279
MARQUES, Tais de Oliveira.....	546	MEDINA, Orelbe.....	24, 25, 342
MARQUES, Tiago .....	310	MEDINA, Pablo .....	249
MARQUES-SANTANA, Glagys .....	108	MELEIRO, José.....	25
MARTÍN, Inmaculada Zango .....	16	MELLO, Amanda K. ....	136
MARTINELLI, Siliani .....	170	MELO, Ana Sofia .....	509
MARTÍNEZ-MARTÍNEZ, Ariadna .....	160	MELO, Filipe .....	447
MARTINHO, Ana .....	473	MELO, João Queiróz e .....	560
MARTINS, Aline Barbosa Teixeira .....	237, 238	MELO, Laércio Deleon .....	448
MARTINS, Ana Paula.....	80, 81, 409, 410	MELO, Maria Jussara Rodrigues .....	316, 318, 583
MARTINS, Ana Rita .....	30	MELO, Pedro .....	156
MARTINS, Anabela.....	39, 166	MELO, Ricardo.....	31
MARTINS, Anabela Correia .....	161	MENA-TUDELA, Desirée.....	236
MARTINS, Andréa Maria E. de B. Lima.....	176, 177, 180	MENDES, Ana .....	68, 129, 132, 524, 528, 533
MARTINS, Catarina .....	594	MENDES, Anabela.....	430
MARTINS, Cátia .....	244	MENDES, Ausenda .....	512
MARTINS, Clara .....	101, 103	MENDES, Bruno .....	6, 173, 222, 549, 550
MARTINS, Cristina .....	11	MENDES, Eugénia .....	281, 299, 419, 432
MARTINS, Daniela .....	192	MENDES, Fernando.....	543, 544, 545
MARTINS, Emília.....	33, 34, 351	MENDES, Francisco.....	33, 34, 351
MARTINS, Fernando.....	489, 529, 576	MENDES, Igor .....	315, 316, 565
MARTINS, Hugo.....	178, 349	MENDES, Isabel .....	426, 427
MARTINS, Iolanda.....	518	MENDES, Isabel Amélia Costa .....	596
MARTINS, Isabel Catarina .....	252, 355	MENDES, Letícia Ricci .....	130
MARTINS, João Paulo .....	218, 232	MENDES, Lino.....	312
MARTINS, Jorge H.....	269	MENDES, Maria Angélica.....	486
MARTINS, Jorge Humberto.....	534, 536	MENDES, Raquel.....	222, 356, 358, 550
MARTINS, José Carlos Amado .....	260, 499, 500, 596	MENDES, Romeu .....	40, 65, 359, 389
MARTINS, Júlio .....	331, 332	MENDES, Sandrina.....	467
MARTINS, Lara.....	272	MENDES, Valéria Monteiro.....	44
MARTINS, Manuela.....	588	MENDONÇA, Ana .....	195
MARTINS, Márcia .....	580	MENDONÇA, Paula .....	29, 345, 517, 518
MARTINS, Maria do Rosário de Jesus .....	510	MENEGOTTO, Ana Luíza Savaris .....	490
MARTINS, Maria João .....	182	MENESES, Raíla Tórres de.....	501
MARTINS, Maria José Rosado.....	189	MENÊZES, Janaina Medeiros Macêdo.....	429, 431, 494
MARTINS, Maria Manuela.....	564	MENINO, Eva.....	144, 145
MARTINS, Matilde D. S. ....	476	MENINO, Maria João .....	155
MARTINS, Paula Cristina .....	116	MESA, Mónica.....	288
MARTINS, Pedro .....	129, 132	MESQUITA, Ingrid Nascimento da Silva F. de .....	468
MARTINS, Rui .....	20, 21	MESSIAS, Norberto.....	306
MARTINS, Samuel.....	597	MILLARES, Pedro Moruno .....	16
MARTINS, Sylvia Christine Pinto .....	130	MINA, Sónia Cristina de Sousa Pós de.....	186, 481, 493, 506, 578, 579, 580
MARTOS, Juan Antonio Flores .....	16	MINGHELLI, Beatriz.....	571
MASSON, Igor.....	270	MIRANDA, Cláudia .....	149
MATA, Maria Augusta Pereira da.....	248	MIRANDA, Leonor .....	384
MATEUS, Cátia.....	595	MISHIMA, Silvana Martins .....	59
MATEUS, Gonçalo .....	519	MIÚDO, Catarina.....	517
MATEUS, Joana .....	436	MOHAMED-LEHBIB, Nafee .....	371
MATIAS, Alexandra .....	197	MÓNICO, Lisete dos Santos Mendes.....	247, 477
MATIAS, Érica .....	566	MÓNICO, Lisete Mendes .....	321
MATIAS, Joana .....	449	MONTEIRO, Ana Paula .....	196
MATOS, Liliana .....	25	MONTEIRO, Carina .....	149
MATOS, Marcela .....	457	MONTEIRO, Catia .....	342
MATOS, Maria Assunção.....	531, 559	MONTEIRO, Cristine Hirst .....	119
MATOS, Rui .....	147, 151, 154, 447, 495, 496	MONTEIRO, Diogo .....	438, 443, 446
MATOS, Teresa .....	336	MONTEIRO, Iolanda .....	497
MAURÍCIO, Cezarina Santinho .....	394	MONTEIRO, Isabel.....	72
MAYORAL, Vania F. de Sá.....	279	MONTEIRO, Lidiane Aparecida.....	264, 482
MAZZO, Alessandra.....	596		

MONTEIRO, Maria João F. Santos Pinto.....	66, 223, 353, 392	NICOLA, Paulo.....	511
MONTEIRO, Victor.....	359	NOBRE-LIMA, Luiza.....	321
MONZÓN-MORENO, Carmelo.....	538	NOGUEIRA, Amanda.....	319
MORAIS, Carminda.....	89, 201, 202	NOGUEIRA, Andreia.....	508
MORAIS, Célia.....	166	NOGUEIRA, António.....	94, 97
MORAIS, Mayara Lívia Magalhães de.....	468	NOGUEIRA, Conceição.....	524, 528, 533
MORAIS, Nuno.....	210	NOGUEIRA, Daniela.....	433
MORAIS, Rafael.....	195	NOGUEIRA, Liviane L.....	311
MORAIS, Sonia Samara Fonseca de.....	137, 583	NOGUEIRA, Patrícia.....	158
MORAIS, Zilda.....	485	NOGUEIRA, Rita.....	354
MORAIS, C.....	320	NOLAN, Mike.....	283
MORATO, Pedro.....	194	NOVAIS, Rui.....	292
MOREIRA, Ana Catarina.....	312	NOVAIS, Sónia.....	303, 397
MOREIRA, Camila.....	315, 316	NOVO, André.....	281, 299, 419, 432
MOREIRA, Denis S.....	390	NOVO, Sara.....	435
MOREIRA, Fátima.....	94	NUNES, Carla.....	205, 206, 326
MOREIRA, Iracélia Munhoz.....	277, 278, 279	NUNES, Cristiane.....	582
MOREIRA, Mário.....	310	NUNES, Filipe.....	29
MOREIRA, P.....	381	NUNES, Lucília.....	78
MOREIRA, Pedro.....	83	NUNES, Marisa Sofia da Silva.....	454
MOREIRA, Ramon Missias.....	104, 400, 404, 562	NUNES, Patrícia Almeida.....	312
MOREIRA, Thereza Maria Magalhães.....	468	NUNES, Paulo Marques.....	577
MORENO, Natacha.....	25	NUNES, Selma.....	356
MORGADO, Alice Murteira.....	111	<b>O</b>	
MORGADO, Cláudia.....	253	OLIVAL, Marina.....	595
MORGADO, Lina.....	259	OLIVARES, Pedro.....	346, 347
MORGADO, Sónia Maria Aniceto.....	239, 434, 438, 449	OLIVEIRA, Aline L.....	311
MORGADO, Tânia.....	183	OLIVEIRA, Ana.....	46, 369
MORGADO, Tiago.....	512	OLIVEIRA, Ana Sofia.....	286
MORIMOTO, Ivone Ikeda.....	317	OLIVEIRA, Armando Mónica de.....	252
MORNA, Clementina.....	139, 140	OLIVEIRA, Cláudia.....	62, 383
MOROUÇO, Pedro G.....	126, 147, 151, 348, 433, 495, 496	OLIVEIRA, Daniele Barbosa Costa.....	324
MOTA, Adriana.....	467	OLIVEIRA, Débora.....	89
MOTA, Liliana.....	303, 397	OLIVEIRA, Ellen Hilda Souza Alcântara.....	452
MOURA, Denise Cristina Alves de.....	569	OLIVEIRA, Gervanilson.....	109
MOURA, Elma Pereira de.....	223	OLIVEIRA, Giovanna.....	382
MOURA, Helena.....	165	OLIVEIRA, Graça.....	269, 532, 534
MOURA, Nayla Raabe Venção de.....	494	OLIVEIRA, Helena.....	54
MOURÃO, Cláudia.....	175	OLIVEIRA, Jeisiane da Silva.....	255
MOUTÃO, João.....	438, 443, 446	OLIVEIRA, José.....	40, 384
MUSSI, Fernanda Carneiro.....	404	OLIVEIRA, Lara.....	564, 565
<b>N</b>		OLIVEIRA, Lara Leite de.....	243, 491
NABAIS, António.....	78	OLIVEIRA, Manuela.....	158
NAKASHIMA, Alike.....	35	OLIVEIRA, Maria.....	266
NARDELLI, Andressa.....	136	OLIVEIRA, Maria Alice da Rocha.....	468
NASCIMENTO, Angélica Soares do.....	64	OLIVEIRA, Maria Conceição.....	121
NASCIMENTO, Carla.....	268, 308, 462	OLIVEIRA, Michelle Teixeira.....	104, 107, 109, 113, 562
NASCIMENTO, Eliane Regina Pereira do.....	213	OLIVEIRA, Mirna Fontenele de.....	243, 491
NASCIMENTO, Katia Rodrigues do.....	307	OLIVEIRA, Palmira.....	156, 302, 327
NASCIMENTO, Luciana Maria Oliveira.....	491	OLIVEIRA, Palmira C. M.....	256
NASCIMENTO, Luís Miguel.....	190, 320, 437	OLIVEIRA, Rafael.....	340
NASCIMENTO, Tânia.....	58, 74, 91, 93, 108	OLIVEIRA, Roberta Grangeiro de.....	237, 238
NAZARÉ, Cristina.....	296, 301	OLIVEIRA, Saionara Nunes de.....	254
NEIVA, Maria de Jesus Lopes Mousinho.....	191	OLIVEIRA, Sara.....	411
NERI, Anita Liberalesso.....	399	OLIVEIRA, Sarah Carolinne Mazza.....	323
NETO, Antonio Francisco Luz.....	152	OLIVEIRA, Saulo.....	14
NETO, Ezequiel Novais.....	176, 177	OLIVEIRA, Sílvia.....	594
NEUPARTH, Nuno.....	129, 132	OLIVEIRA, Stephanie Fontes e.....	525
NEVES, Ana.....	578, 579	OLIVEIRA, Tamires Limeira Magalhães.....	109
		OLIVEIRA, Tania Toledo de.....	557, 558
		OLIVEIRA, Teresa Carla Trigo.....	287, 380



OLIVEIRA, Tiago.....	4	PEREIRA, Rosa.....	24, 25, 342
OLIVEIRA, Wellington de .....	265	PEREIRA, Ruben .....	512
OLIVEIRA-FILHO, Aldemir B. ....	311, 313, 322	PEREIRA, Vanessa .....	270
OLIVEIRA-MIRANDA, Adriana M. ....	311, 313, 322	PÉREZ, Bienvenida Rodríguez .....	12
ORÍÁ, Mônica Oliveira Batista.....	315, 316, 318, 319	PEREZ, Francisco Luis.....	90, 98, 570
ORNELAS, Haline .....	23	PÉREZ, Francisco Santana.....	12
ORTS-CORTÉS, María Isabel .....	160, 236, 593	PÉREZ, José Mairia Jiménez .....	131
<b>P</b>		PERINI, Carla Corradi .....	487, 488
PADILHA, José Miguel.....	179	PESSOA, Maria Emanuelle Freire .....	100
PAIS, Juliana .....	26	PESTANA, Filipa .....	290
PAIS, Sandra .....	382	PETERS, Vera Maria .....	557
PAIS-RIBEIRO, José Luís.....	289	PILLON, Sandra.....	343
PAIVA, António .....	269, 534	PILÓ, Denise.....	305
PAIVA, Pâmela Campelo .....	117	PIMENTA, Ana Rita.....	365
PAIVA, Vera .....	342	PIMENTA, Graça Maria Ferreira.....	392
PALETOT, Yolanda Abrantes .....	119	PIMENTA, Rui .....	201, 202, 381
PALMA, Sérgio .....	571	PIMENTEL, Helena .....	299
PALMEIRA, Lara .....	461, 474	PIMENTEL, Luísa .....	394
PALMEIRO, Teresa .....	129, 132	PIMENTEL, Maria Helena.....	248
PALMINHAS, Edgar.....	70, 73, 402	PINCINATO, Eder.....	141
PAMPLONA, Ysabely.....	38, 358	PIÑEIRO, Marta.....	515, 516, 586
PAQUETE, Patrícia.....	375	PINHEIRA, Vítor .....	48, 53, 67
PARENTE, Carina.....	413	PINHEIRO, Ana Karina Bezerra .....	243, 491
PARRAÇA, José Alberto .....	245, 246	PINHEIRO, Arminda.....	114, 115
PARRACHO, Tiago .....	485	PINHO, Cátia .....	46, 369
PARREIRA, Paula .....	37	PINTO, Ana.....	462
PARREIRA, Pedro Miguel Santos Diniz .....	214, 219, 546, 569	PINTO, Catarina .....	84, 229, 560
PASSARELLI, Graciette F. R. ....	273, 277, 278, 279	PINTO, Francisco .....	356
PATRAQUIM, Catarina .....	518	PINTO, Inês Rosendo .....	64
PAUL, Constança.....	455	PINTO, Ione .....	282
PAUL, Maria Constança.....	425	PINTO, Isabel C.....	320, 435, 437
PAZ, Solange Santos da .....	429	PINTO, José Simão de Paula .....	11, 490
PECHLIYE, Magda Medhat .....	141	PINTO, Márcia Aparecida Oliveira .....	567
PEDRAS, Susana.....	442	PINTO, Maria do Rosário .....	297
PEDRO, Luísa.....	75	PINTO, Marta .....	165
PEDROSA, João Pedro Gomes .....	554	PINTO, Paulo Ferreira .....	448
PEDROSA, Samyla .....	357	PINTO, Rafaela.....	438
PEDROSO, Igor .....	317	PINTO-GOUVEIA, José .....	212, 386, 398, 415, 428, 457, 469, 470
PERALTA, Patrícia Pereira.....	211	PIO-ABREU, José Luís.....	272
PEREIRA, Alexandra.....	500	PIRES, Ana Rita Quintino de Matos .....	55
PEREIRA, Alexandre .....	55, 174	PIRES, Ana Salomé .....	584, 585
PEREIRA, Ana Hortêncina Cavalcante Cardoso .....	106	PIRES, Bruno .....	94, 97
PEREIRA, Ana Marta Saraiva .....	580	PIRES, Cristiana .....	165
PEREIRA, Ana Teresa N. Silva.....	554	PIRES, Regina M. F.....	256, 441
PEREIRA, Carlos .....	536	PIRES, Tânia .....	364
PEREIRA, Cátia .....	336	POÇAS, Ilda Maria .....	29, 30
PEREIRA, Daylis Fifth.....	452	PONTE, Carolina.....	411
PEREIRA, Debora de Sousa.....	106	PONTE, Thaianie Vieira da .....	453
PEREIRA, Diogo.....	240	PORDEUS, Isabela Almeida.....	180
PEREIRA, Filipe Miguel Soares.....	179, 224, 372, 441, 555	PORTELADA, Bruno .....	215, 216
PEREIRA, Ilídio .....	384	PORTELINHA, Rita .....	97
PEREIRA, Jorge .....	524, 528, 533	POZO-CRUZ, Borja del.....	245, 246
PEREIRA, Keila .....	521	PRADO, Janina Manzieri .....	142, 143
PEREIRA, Keila Cristina Rausch.....	242	PRADO, Marta Lenise do .....	254
PEREIRA, Maria da Conceição A. R. Soares ....	66, 223, 392	PREBIANCHI, Helena.....	262, 263
PEREIRA, Maria Graça.....	379, 442	PRESADO, Maria Helena .....	293
PEREIRA, Maria Lúcia.....	38	PRETO, Leonel .....	281, 299, 419, 432
PEREIRA, Nelson .....	590, 591	PRÍNCIPE, Fernanda .....	240
PEREIRA, Olívia R. ....	363, 364	PROENÇA, Rui Daniel .....	587
PEREIRA, Orlindo Gouveia.....	172	PRÓSPERO, Sara .....	412
PEREIRA, Patrícia.....	362	PURCARU, Marionescu.....	234, 417

**Q**

QUARESMA, Cláudia.....	519
QUEIRÓS, Alexandra.....	3, 215, 216
QUEIROZ, Cinthia Medina.....	450
QUEIROZ, Mara Joyce de.....	468
QUENTAL, Joana Maria Ferreira Pacheco.....	599
QUERIDO, Ana.....	498, 507
QUINTAL, Aldora.....	77, 81, 406, 409
QUINTAL, Patrícia.....	82
QUINTANA-MONTESDEOCA, Maria del Pino.....	12, 56, 306, 371, 575

**R**

RAIMUNDO, João.....	571
RAIMUNDO, Maria.....	343
RAINHO, Conceição.....	353
RAMALHO, Sónia.....	339, 341
RAMOS, Alexandra.....	574
RAMOS, André.....	86
RAMOS, Cândida.....	166
RAMOS, Daniela.....	269, 300
RAMOS, Ester.....	101, 103
RAMOS, Liliana.....	340
RAMOS, Luís.....	285
RAPOSO, Vera.....	182
RAYMUNDO, Gisele Pontaroli.....	135, 136
REALI, Aline Maria de Medeiros.....	169
REBELO, Cristiana.....	337
REBELO, Filipa.....	193
REBELO, José Eduardo.....	445
REBELO-NEVES, Catarina.....	329
REGO, Carla.....	38
REGUENGA, José.....	25
REIS, Alcinda.....	15
REIS, Ana Rita.....	186, 493, 506
REIS, Anaís.....	384
REIS, Cláudia.....	548, 574
REIS, Joana.....	58
REIS, Melissa.....	435
REIS, Renata.....	357
REIS, Victor Machado.....	65, 389
REISINHO, Conceição.....	561
RELVAS, Ana Paula.....	505
REPAS, Diogo.....	173
RESENDE, Thaís Mendonça.....	569
RIBEIRO, Adenize.....	266
RIBEIRO, Andrea.....	28, 365
RIBEIRO, Carlos Fontes.....	269, 300, 483, 534
RIBEIRO, Célia.....	594
RIBEIRO, Cilene da Silva Gomes.....	487, 488, 492
RIBEIRO, Cláudia.....	69, 71, 181, 233, 310
RIBEIRO, David.....	86
RIBEIRO, Jaime.....	523
RIBEIRO, João Henrique M.....	486
RIBEIRO, Jorge Manuel.....	153
RIBEIRO, José.....	83
RIBEIRO, Liliane da Consolação Campos.....	122, 258
RIBEIRO, Luciana.....	195
RIBEIRO, Maria I.....	120, 123, 435
RIBEIRO, Maria João.....	22
RIBEIRO, Marieli Cristina.....	418, 567
RIBEIRO, Maximiano P.....	13, 155

RIBEIRO, Maximiano Prata.....	157, 508
RIBEIRO, Michelly E.....	486
RIBEIRO, Mirtes.....	258
RIBEIRO, Nathalia.....	14
RIBEIRO, Nuno.....	2
RIBEIRO, Oscar.....	425, 455
RIBEIRO, Patrícia.....	478, 598
RIBEIRO, Sandra.....	342
RIBEIRO, Taciana.....	57, 541
RICO, Juliana Sá.....	5
RIMES, Thalita Soares.....	117
RIO, Rute.....	181
RIOS, Ana.....	396
RIOS, Greize Cristina.....	535
RIOS, Luciana Lopes.....	109
ROBAZZI, Maria Lúcia do Carmo Cruz.....	146
ROCCI, Josélia.....	343
ROCHA, Ana.....	345
ROCHA, Daniela.....	435
ROCHA, Mara.....	588
ROCHA, Nelson.....	3
ROCHA, Priscila.....	32
ROCHA, Rebeca.....	319
ROCHA, Regina Lunardi.....	122
ROCHA, Ricardo Nuno Silva.....	479
ROCHA, Sara.....	364
ROCHA, Tomé.....	57, 541
ROCHA-GONÇALVES, António.....	515, 516, 586
RODRIGUES, Abel.....	48, 67, 68
RODRIGUES, Alexandre.....	56, 306, 371, 538, 575
RODRIGUES, Andreia.....	94
RODRIGUES, Ângela Maria Uchôa.....	117, 468
RODRIGUES, Bárbara.....	310
RODRIGUES, Carla.....	75
RODRIGUES, Cláudio Eduardo.....	307
RODRIGUES, Cristiana.....	123
RODRIGUES, Étria.....	142, 143
RODRIGUES, Eva.....	187
RODRIGUES, Fanne.....	82
RODRIGUES, Fernanda.....	250
RODRIGUES, Francisco Rafael de Araújo.....	14, 130, 264
RODRIGUES, Jaildo Gomes.....	104, 304, 562
RODRIGUES, Joana.....	178
RODRIGUES, João.....	200
RODRIGUES, José Pedro.....	281
RODRIGUES, Juliana.....	574
RODRIGUES, Luís.....	344, 539
RODRIGUES, Luís Paulo.....	153
RODRIGUES, Nadine.....	228
RODRIGUES, Rogério Manuel Clemente.....	61, 426, 427
RODRIGUES, Solange Domingues.....	454
RODRIGUES, Vítor.....	274
RODRÍGUEZ, Ana Beatriz.....	90, 288
RODRÍGUEZ, Patricia.....	90, 98, 288, 570
RODRÍGUEZ-DE-VERA, Bienvenida.....	56, 306, 371, 538, 575
ROHLFS-DOMÍNGUEZ, Paloma.....	347
ROLDÃO, Olinda.....	80, 85, 290, 406
ROQUE, Fátima.....	13, 157, 508
ROQUE, Maria Fátima.....	155
ROSA, Manuel Santos.....	543, 544, 545

ROSA, Marlene .....	200	SANTOS, Paula Dayanna Sousa.....	453
ROSA, Raquel .....	478	SANTOS, Renata Dias da Silva .....	152, 323, 501, 503, 504
ROSADO, Sara Rodrigues.....	480, 482	SANTOS, Ricardo.....	590, 591
RUA, Marília .....	31	SANTOS, Ricardo Jorge .....	547
<b>S</b>		SANTOS, Rui.....	218, 226, 232
SÁ, Luís .....	52, 393, 423, 540	SANTOS, Sofia .....	17, 194, 333, 334
SÁ-COUTO, Pedro .....	531, 542, 559	SANTOS, Teresa.....	376
SACRAMENTO, Joana .....	22	SANTOS, Zélia Maria de Sousa Araújo .....	237, 238, 439, 451, 453
SALAS-MEDINA, Pablo.....	236	SANTOS-ROCHA, Rita.....	217
SALDANHA, Camila Trevisan .....	418	SANTOS-SILVA, Filipe .....	2
SALERNO, Gisela Rosa Franco .....	142, 143	SANZ, Tamara Raquel Velasco .....	227
SALES, Leila.....	253	SARDO, Dolores .....	114, 115, 133
SALES, Tiago.....	543, 544	SARMENTO, Ana Bela.....	543, 544, 545
SALES, Zenilda Nogueira.....	400, 404	SARMENTO-RIBEIRO, Anabela .....	515, 516, 585
SALVADO, Gonçalo .....	48	SARROEIRA, Cassilda.....	297, 563
SALVADOR, Maria do Céu .....	187, 244	SASSO, Grace Teresinha Marcon Dal.....	535
SALVADOR, Rogério .....	348, 433	SCHETINGER, Maria Rosa.....	43
SÁNCHEZ-MARTÍNEZ, Fernando Ignacio.....	246	SCHIAVINATO, Diego.....	567
SANTAMARINHA, Carlos.....	340	SCHUGK, Susann.....	543, 544
SANT'ANA, Ana Rita .....	365	SEABRA, Paulo .....	423
SANTANA, Madalena.....	67	SECO, Graça Maria .....	362, 394
SANTANA, Nathália .....	452	SEIXAS, Carlos Alberto .....	596
SANTANA-PÉREZ, Francisco-José.....	371	SEQUEIRA, Joana .....	420, 422
SANTIAGO, Barbara.....	186, 493, 506	SERRA, Arménio.....	515, 516, 586
SANTIAGO, Conceição.....	110	SERRA, Sara Raquel Granjeiro .....	481
SANTIAGO, Luiz .....	483	SERRANO, Ana Maria .....	204
SANTIAGO, Maria Conceição.....	63	SERRANO, Margarida.....	167, 396, 522, 532
SANTO, Flávia.....	345	SERRANO, Pilar .....	282
SANTO, Helena Espirito .....	272	SEVERO, Amanda Holanda .....	471
SANTO, Margarida .....	58, 74, 93	SFREDO, Nathalia .....	488
SANTO, Tânia .....	595	SILVA, Abel.....	592
SANTO, Teresa Espirito.....	56	SILVA, Adriana.....	192
SANTOS, Almira Alves .....	124	SILVA, Adriana Ferreira da .....	525
SANTOS, Ana H. ....	381, 432	SILVA, Aida Eduarda.....	547
SANTOS, Ana Marta.....	50	SILVA, Alexandre .....	403
SANTOS, Ana Rita.....	77	SILVA, Ana.....	27, 166
SANTOS, Catarina.....	405	SILVA, Ana Cristina Soares.....	106
SANTOS, Célia.....	31, 372, 421	SILVA, Ana Elisa Bauer Camargo.....	230, 231
SANTOS, Cristiane Melo da Silva .....	146	SILVA, Ana Júlia.....	306
SANTOS, Diana .....	396	SILVA, Ana Patrícia .....	497
SANTOS, Edige .....	275	SILVA, Anabela G. ....	215, 216
SANTOS, Élia .....	437	SILVA, Anna Karolinne de O.....	152, 191, 324, 501, 503
SANTOS, Gorete .....	388	SILVA, Carla .....	54
SANTOS, Helder S. ....	119	SILVA, Carla Matos .....	47, 276, 378
SANTOS, Isabel.....	233	SILVA, Carla Sousa .....	118, 537
SANTOS, Joana Pedrosa .....	481	SILVA, Carolina .....	75
SANTOS, Joselayne Corrêa dos.....	317	SILVA, Catarina A. Gomes da.....	161
SANTOS, Lana E. S.....	390	SILVA, Cátia.....	102, 360
SANTOS, Lara .....	30	SILVA, Cristiana Filipa Ribeiro da.....	61
SANTOS, Lenira Maria Wanderley dos .....	146	SILVA, Daisy Maria.....	471, 472
SANTOS, Livia Maria Damasceno dos.....	318	SILVA, Dorvalina R. ....	126
SANTOS, Luísa .....	153, 413	SILVA, Eduardo Araújo da.....	494
SANTOS, Margarida.....	352, 391	SILVA, Elizabeth .....	350
SANTOS, Maria .....	339, 401	SILVA, Elizabeth F. ....	211
SANTOS, Maria João Seabra.....	424	SILVA, Fabiana.....	94
SANTOS, Mariana.....	456	SILVA, Gabriela .....	275
SANTOS, Marisa .....	193	SILVA, Geovana Gallas Ferreira da.....	191
SANTOS, Nuno .....	147, 154	SILVA, Geovani da.....	261
SANTOS, Osvaldo.....	326	SILVA, Grazielle Roberta Freitas da.....	191, 323, 503, 504
SANTOS, Patrícia Isabel Valente dos .....	477	SILVA, Gustavo.....	83
SANTOS, Paula Clara .....	381		

SILVA, Isabel.....	139, 140
SILVA, Izabela Rocha Dutra .....	444
SILVA, João.....	43, 267, 275
SILVA, João de Deus Gomes da .....	572
SILVA, João Paulo Xavier.....	137, 583
SILVA, José Vítor .....	486
SILVA, Joseane Gomes da .....	452
SILVA, Liliane Lacerda .....	176, 177
SILVA, Lolita Dopico da.....	526
SILVA, Maíza Sandra Ribeiro Macedo.....	113
SILVA, Manuel João Coelho e .....	385
SILVA, Marília Alonso Piva da.....	146
SILVA, Mário .....	563
SILVA, Mayara da.....	270
SILVA, Mônica.....	422
SILVA, Olvani Martins da.....	418, 567
SILVA, Raiana Soares de Sousa .....	105, 106, 429, 431, 494
SILVA, Raimunda.....	439
SILVA, Raissa Soares de Sousa .....	106
SILVA, Renata da .....	535
SILVA, Rita.....	321
SILVA, Roberta de Araújo e.....	472
SILVA, Roberta Gonçalves da.....	547
SILVA, Rosa .....	84, 112, 229
SILVA, Sabrina Guterres da .....	171, 213, 535
SILVA, Sara .....	523
SILVA, Sílvia Manuela Dias Tavares da .....	61
SILVA, Tânia .....	166
SILVA, Tiago Manuel Jordão.....	454
SILVA-OLIVEIRA, Gláucia C. ....	311, 313, 322
SILVEIRA, Flávia Dayana Ribeiro da .....	191, 323, 503, 504
SILVEIRA, Maria Goretti Alves de Oliveira da .....	234
SILVEIRA, Teresa .....	253
SIMEÃO, Maria de Lurdes .....	78
SIMÕES, Cristina .....	333, 334
SIMÕES, Dora .....	378
SIMÕES, Luciana Leite Pineli.....	230, 231
SIMÕES, Mariana .....	444
SIMÕES, Nahdia.....	29
SIMÕES, Rui.....	511
SIMÕES, Sônia .....	272, 284, 285, 305, 377, 436
SIMÕES, Tiago.....	577
SIMÕES-DIAS, Sara .....	42
SIM-SIM, Margarida.....	70, 73, 402
SOARES, Ana.....	134
SOARES, Antonia Lidiany .....	451
SOARES, Cilene Fernandes .....	535
SOARES, Edson Silva .....	241
SOARES, Kelly .....	35
SOARES, Rui .....	342
SOARES, Viviane Antunes Rodrigues.....	258
SOEIRO, Raquel.....	433
SOLER, Maria Loreto .....	160, 249, 593
SOURCES, Evilin Feitosa.....	452
SOUSA, Ana.....	345
SOUSA, Ana Sabrina .....	235
SOUSA, Anderson Reis de.....	104, 107, 109, 113, 304, 400, 404, 562
SOUSA, Andreia.....	590, 591
SOUSA, Andreia de.....	1
SOUSA, Carlos.....	446
SOUSA, Carolina.....	13
SOUSA, Clementina .....	421
SOUSA, Eva .....	82, 101, 103
SOUSA, Geziel.....	356
SOUSA, Inês Maria Cruz .....	555
SOUSA, Isabel.....	97
SOUSA, Juliana Evaristo .....	429, 494
SOUSA, Liliana .....	283, 374, 388
SOUSA, Maria Filomena Greló de.....	248
SOUSA, Mariana Xavier de .....	444
SOUSA, Merian S. ....	322
SOUSA, Nathalia Ribeiro Pinho de.....	130
SOUSA, Nelson.....	40, 65, 359, 389
SOUSA, Patrícia .....	360
SOUSA, Paulino .....	179, 588, 592
SOUSA, Pedro.....	9
SOUSA, Vanessa.....	123
SOUZA, Ana Mariele de.....	480, 482
SOUZA, Cassia Regina Santana.....	431
SOUZA, Dayse Neri de .....	445
SOUZA, João Gabriel Silva.....	176, 177, 180
SOUZA, Luciene Carnevale de.....	448, 450, 546
SOUZA, Priscila .....	14
SOUZA, Rafael.....	340
SPÍNOLA, Ana Cristina.....	314
SPITZ, Elisabeth.....	395, 407
SPOSITO, Giovana .....	399
STAHl, Lilia .....	134
SUCENA, Ana.....	513
SURENKHOLOO, Altanbagana .....	159
<b>T</b>	
TABOADA, Xavier .....	190
TAKAYAMA, Gabriela Mitiê.....	170
TAMBORIL, Bruna Caroline Rodrigues .....	117
TAVARES, Diana.....	513
TAVARES, Jorge .....	4
TAVARES, Margarida .....	290
TAVARES, Maura .....	150
TAVARES, Raquel .....	508
TECELÃO, Carla .....	577
TEIXEIRA, António.....	536
TEIXEIRA, Gabriela.....	186, 493, 506
TEIXEIRA, Geraldo M. ....	124
TEIXEIRA, José.....	160, 174
TEIXEIRA, Jules Ramon Brito.....	104, 400, 404, 562
TEIXEIRA, Laetitia.....	425, 455
TEIXEIRA, Luciana Barcellos.....	51
TEIXEIRA, Maria da Luz F. Figueira Chaves .....	257
TEIXEIRA, Marlene .....	43, 267
TEIXEIRA, Salete.....	204
TEIXEIRA, Tomás.....	571
TEIXO, Ricardo.....	515, 516, 584, 586, 587
TELES, Júlia.....	489
TELES, Soraia.....	165
TENA, José María .....	90, 98, 570
TERUYA, Dirceu Y. ....	211
TESTA-VICENTE, Henrique.....	199, 403
THEMUDO-BARATA, José Luís.....	65, 389
TIBES, Chris.....	514
TOLETTI, Glória .....	183
TOMÁS, Helena Margarida .....	185

TOMÁS, Maria Teresa .....	50, 64	VIANA, Sara .....	26
TOMASIAK, Fabiane de Cássia Savi .....	487, 488	VIANA, Tânia .....	271, 551, 553, 589
TORGA, Jorge .....	329	VIANNA, Denise Loureiro .....	142, 143
TORIJA, Maria José Cao .....	131	VICENTE, Henrique Testa .....	405
TORO, Francisco .....	98	VIEIRA, Ana Cristina .....	116
TORRES, Ana .....	13	VIEIRA, Arminda Maciel .....	421
TORRES, Jamilly Feitosa .....	137, 315, 319, 583	VIEIRA, Daniela .....	578, 579
TORRES, Michelle Vicente .....	429	VIEIRA, Geisla Teles .....	557, 558
TORRES, Rui .....	190	VIEIRA, Joana .....	82, 103
TORRES-PENA, Inês .....	199	VIEIRA, Margarida .....	430
TRAVIESU, Daniel .....	346	VIEIRA, Pedro .....	519
TREVIZAN, Maria Auxiliadora .....	596	VIEIRA, Sandra .....	182
TRINDADE, Inês Almeida .....	461, 463, 473, 474	VILAÇA, Simão .....	57, 95, 96, 292, 541
TRINDADE, Letícia de Lima .....	567	VILARES, Joana .....	165
TUDELA, Desirée .....	249	VILARINHO, Helena .....	542
<b>V</b>		VILAS-BOAS, Sophia .....	363
VALE, Mafalda .....	337	VILELA, Rosana .....	266
VALE-DIAS, Maria da Luz .....	182	VILELA, Talyta Carmo .....	219
VALENTE, Tiago .....	215, 216	VINHA, Ana F. ....	118, 537
VALENTIM, Bruno .....	174	VIRELLA, Daniel .....	78
VALÉRIO, Bruno Miguel .....	454	VIRGÍLIO, Joana .....	523
VALPUESTA, Esperanza Rayón .....	227	VITAL, Emanuel .....	37, 484
VAQUERIZO, Miriam .....	570	VITORINO, Anabela .....	434, 438, 443, 446
VASCONCELOS, Ana .....	155	<b>W</b>	
VASCONCELOS, Carlos .....	233	WARREN, Eliane M. C. ....	124
VASQUES, Ricardo .....	437	WILDAUER, Egon .....	490
VAZ, Ana Maria Baptista Oliveira Dias Malva .....	60	WORM, Fabiana Adolf .....	567
VAZ, Daniela C. ....	512, 456	<b>X</b>	
VAZ, Isabela .....	282	XAVIER, Ana .....	386, 398, 428
VÁZQUEZ, Rocío de La Puerta .....	91, 93	XAVIER, Luiz Fernando de Matos .....	390, 486
VEIGA, Nélio .....	69, 71, 181, 233	XAVIER, Paula .....	34, 351, 352
VELUDO, Filipa .....	383, 411, 412, 414	<b>Y</b>	
VENDEIRO, L. ....	320	YABASHI, Yuka .....	159
VENTURA, Mauricio .....	270	YASSUDA, Mônica Sanches .....	399
VERISSÍMO, Cláudia .....	456	YOSHIDA, Thais .....	230
VESCO, Natália .....	38	YOSHINO, Yae .....	159
VIANA, Carla .....	38, 358	<b>Z</b>	
VIANA, Cláudia .....	353	ZAMITH, Fernando .....	164
VIANA, Rui .....	26, 27, 28	ZEM-MASCARENHAS, Silvia .....	514

# RSP

# Revista de Saúde Pública

Volume 48  
Special Number  
May 2014

Universidade de São Paulo  
Faculdade de Saúde Pública  
Avenida Doutor Arnaldo, 715  
01246-904 São Paulo, SP – Brasil