# Impact of a program of infant and young child feeding practices in the reduction of pediatric mortality and nutrition outcomes in emergencies - Easybite Project

Ana Cláudia Lopes, Marisa Lousada

Summary: Optimal breastfeeding and complementary feeding practices could prevent 20% of deaths amongst children less than five years-old. The Speech and Language Therapist is the professional responsible swallowing and related functions, and therefore, breastfeeding. However, no randomized studies were found where this professional has a role in the promotion of breastfeeding in emergency settings. Aims: Explore the effects of two types of breastfeeding interventions in an emergency setting. Methodology: A randomized controlled single-blind clinical trial study will take place in Lesvos Island (n=276). The sample will be randomly divided into an experimental group, which will receive the support regarding breastfeeding and infant and young child feeding, and a control group that will receive standard perinatal care. Expected results: It is expected to see a percent difference between both groups in terms of mortality and morbidity rate, % of children suffering from malnutrition and % of exclusive breastfeeding.

Rehabilitation sciences

## Chronic Pain And Cognitive Function In Patients With Chronic Low Back Pain: Association And Impact On Rehabilitation Outcomes

Ellen Pereira Nery, Anabela G. Silva, Nelson P. Rocha, Vítor T. Cruz

Chronic idiopathic low back pain (cLBP) is highly prevalent and has been increasing as the most common musculoskeletal condition and it is associated with high levels of disability. Evidence suggest an association between cognitive impairment and chronic pain, as neural systems involved in cognition and pain processing are related. However, further evidence for specific pain syndromes, particularly cLBP, is needed. Furthermore, studies exploring the benefits of combining cognitive training to rehabilitation of cLBP patients are scarce. Therefore, this work aims to characterize the association between cLBP and cognitive function and to assess the effectiveness of the best-evidence non-pharmacological intervention and cognitive training for adults with cLBP.

This will be achieved by conducting two systematic reviews, a prospective-observational study on the association between cLBP characteristics and cognitive function, and a randomized assessor-blind clinical trial based on non-pharmacological best-evidence intervention and cognitive training on cLBP. This project's findings will inform clinical practice.

Rehabilitation sciences

# SCIMBIONT – Spinal Cord Injury Rehabilitation: gut dysbiosis and immune biomarkers as functional prognosis tools and new therapeutic targets

Maria Cunha, Sandra Vieira, Ana Margarida Sousa

Spinal cord injury (SCI) is a complex and devastating neuropathology with consequences on multiple organs and systems that reduces patient's functionality and quality of life. No current effective therapy exists for SCI. Although regeneration of the injured spinal cord is pursued worldwide, our society demands viable 'non-spinal centric' alternatives that increase patients' recovery and health status. Among the highly incident complications and comorbidities that greatly impact SCI patients' is gut dysbiosis and chronic immune dysfunction, potentially leading to increased infection rates and decreased spinal cord repair. We hypothesize that restoring gut dysbiosis may improve immune function, decrease comorbidities and improve patients' functionality.

Rehabilitation sciences

Pulmonary rehabilitation during acute exacerbations of chronic obstructive pulmonary disease: a mixed-methods approach

Ana Machado, Alda Marques, Chris Burtin

Acute exacerbations of chronic obstructive pulmonary disease (AECOPD) account for more than 70% of disease-related costs and negatively impact patients' health status. Pulmonary rehabilitation (PR) is a cornerstone intervention for the management of stable disease with the potential to be equally effective in AECOPD. However, studies assessing PR role during/shortly-after AECOPD have been mainly conducted in inpatient settings, despite most AECOPD being managed in the community, and have been delivering PR with different components, intensities, durations and outcome measures, not considering patients' needs/expectations. This has led to controversial results across studies. To overcome these drawbacks, adequately powered studies delivering well-designed community-based PR programmes and exploring patients' perspectives are urgently needed to guide research and clinical practice. This mixed-methods project proposes to design/implement and evaluate a community-based PR programme specifically tailored to patients' self-reported and clinical needs during AECOPD.

Rehabilitation sciences

## Core Outcome Set for pulmonary rehabilitation in patients with chronic obstructive pulmonary disease (COPD)

Sara Souto-Miranda, Martijn Spruit, Alda Marques

Chronic obstructive pulmonary disease (COPD) is a major cause of morbidity and mortality worldwide. Pulmonary rehabilitation (PR) is fundamental however, response to this intervention varies among patients with COPD. One of the main reasons for this differential response is the heterogeneity of outcomes used and reported, hindering bench-marking between and within PR centres, the conduction of meta-analysis and the scientific/clinical advance of a vital treatment to respiratory patients. This problem can be overcome with the development of a Core Outcome Set (COS) - minimum set of outcomes that should be consistently measured and reported. Thus, this thesis aims to develop a COS for PR in patients with COPD. It will be developed in stages, according to the Core Outcome Measures in Effectiveness Trials (COMET) initiative methodology: i) identify existing knowledge – systematic review of the literature, ii) fill gaps in knowledge if needed – observational studies of effects of PR in overlooked outcomes, iii) elicit views about important outcomes in a consensus process – qualitative study with interviews and Delphi survey, iv) hold a face to face meeting to finalise the recommended COS. Finally, a review of the clinimetric properties of the most used measures for the core outcomes will be conducted, to recommend not only the core outcomes, but also the core measures. This COS is expected to facilitate consistency among trials, lessen the risk of outcome reporting bias and inform clinical and research practice.

Rehabilitation sciences

### Environmental sciences and engineering

# Should future cities be compact or sprawled? Development of an eco-indicator to assess future urban planning strategies

Bruno Augusto, Joana Ferreira, Sandra Rafael, sandra.rafael@ua.pt

margarida.coelho@ua.pt

Environmental sciences and engineering

### SKILLS AND EDUCATIONAL CONTEXTS FOR ECOLOGICAL AND ENVIRONMENTAL LITERACY IN TEACHER TRAINING ON 1ST AND 2ND CYCLE OF BASIC EDUCATION

Susana Silveira, Filomena Martins, Filomena Teixeira

#### ABSTRACT

The integration of environmental policies with educational and science policies in teacher training, in formal education and other learning contexts, ensuring the transfer of scientific knowledge "Science for education" and assuring education for sustainable development, both in the initial teachers training, and in the context of continuous training, constitute United Nations Educational, Scientific and Cultural Organization's goals (UNESCO).

Integrated in a school-wide aproach, that promotes the envolvement of schoolar comunity to achive environmental sustainable goals (as required by UNESCO strategic/referential documents transposed to public environmental and educational policies in Portugal), it was