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Keywords

Normative values, Functionality, Quality of Life, Portuguese healthy older people.

O18

Relationship between balance and functionality, gait speed, physical activity and quality of life in community-dwelling older people

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Background

Balance is a modifiable risk factor for falls which represent a major public health problem for healthy ageing [1]. Predictors of healthy ageing in older people (i.e., functionality, gait speed, physical activity (PA) and health-related quality of life (HRQoL)) have been correlated with balance measures [2-5]. However, most balance measures do not assess the different components of balance hindering the design of interventions. To overcome this difficulty the Balance Evaluation System Test (BESTest) [6] and its short versions [7, 8] (new comprehensive measures of balance) were developed. Nevertheless, the relationship between the BESTest [6] and its short versions [7, 8] with functionality, gait speed, physical activity and health-related quality of life older people living in the community is still unknown.

Objective

To explore the relationship between the BESTest, Mini-BESTest and Brief-BESTest with functionality, gait speed, PA and HRQoL in community-dwelling older people.

Methods

An exploratory cross-sectional study was conducted. Community-dwelling older people (> 60 yrs) were recruited. Balance was assessed with the BESTest, Mini-BESTest and Brief-BESTest, functionality with the 5STS [9], gait speed with the 10MWT [10], PA with the Brief-PA questionnaire [11] and HRQoL with the WHOQoL-Bref [12]. Descriptive statistics was used to characterize the sample. Correlations were explored with the Spearman correlation coefficient. By convention, the interpreting size of a correlation coefficient was negligible (0.00-0.30), low (0.30-0.50), moderate (0.50-0.70), high (0.70-0.90) and very high (0.90-1.00) correlation [13].

Results

One hundred and eighteen older people living in the community (76.2 ± 8.9 years; $n = 79$, 66.9% female) participated in this study. On average participants were overweight, with high body mass index (male: 26.9 ± 4.2 kg/m²; female: 26.8 ± 4.3 kg/m²) and fat-free mass (male: 29.5 ± 6.3 %; female: 37.6 ± 6.2 %). BESTest, Brief-BESTest and Mini-BESTest were I) low and negatively correlated with intense (-0.34; -0.37; -0.32, respectively) and moderate (-0.37; -0.37; -0.35, respectively) PA; II) moderate and negatively correlated with the 5STS (-0.51; -0.61; -0.59, respectively); III) moderate to high and negatively correlated with the 10MWT (-0.69; -0.77; -0.78) and IV) negligible to moderate and positively correlated with the WHOQoL-Bref domains (I-Physical health 0.46; 0.57; 0.53; II-Psychological 0.47; 0.52; 0.53; III-Social relationships 0.32; 0.36; 0.28; IV-Environment 0.46; 0.51; 0.46).

Conclusions

This study shows that there is a relationship between the BESTest and its short versions with functionality, gait speed and HRQoL in community-dwelling older people. Higher correlations were found in the short versions, especially with functionality measures. This is useful for clinical practice since these versions are simpler, require less material and are quicker to apply.

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Keywords

Correlations, Balance, Healthy ageing predictors, Older people.

O19

Trends of hospitalization for chronic obstructive pulmonary disease in Brazil from 1998 to 2016

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Background

Chronic Obstructive Pulmonary Disease (COPD) is a major public health problem. In Brazil, it is the fifth largest cause of hospitalization