

Effect of a dual task exercise program on physical fitness in people with dementia

Rondão C

Universidade da Beira Interior, Portugal

Older people experience a progressive loss of cognitive and physiological functions, comprehending cognitive impairments and loss of functional motricity. It is estimated that by 2050 the number of people with dementia will reach 131.5 million worldwide. Apart from deficits in cognition and behaviour, people with dementia are at increased deficits in balance, gait, and movement coordination, leading to an elevated risk of falls. Exercise improves cognitive and physical functions and is an important contributor to functional independence. The aim of this study was to determine the effect of a tailored dual task exercise program in physical fitness of people with dementia.

Methods: The cross-sectional study included older people ≥ 65 years of age. 36 nursing home residents (mean 79.36 years) from both genders participated in this study; all participants have mild cognitive impairment according to the Mini Mental State Examination. All participants were offered a six-month, individually tailored exercise program. Physical fitness was evaluated at the beginning and end of the trial, using the Rikli & Jones Test.

Results: A general improvement in all tests from the pre-test to the post-test was found. Significant differences were found to dynamic balance test, superior strength, flexion of arms, sitting and walk 2.44m and flexibility test ($P < 0.05$).

Conclusion: This trial of a tailored dual task exercise intervention presents preliminary evidence that this intervention can improve physical fitness in older people with dementia, which can decrease the prevalence of falls, a very common accident among this population.

Keywords: Mild Cognitive Impairment, Physical Fitness, Aging, Rikli & Jones Test.

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Biography

Rondão C is a doctoral student in Sport Sciences, 3rd Cycle, Exercise and Health, at the University of Beira Interior (UBI). Master in Sport Science 3rd Cycle at the University of Beira Interior (UBI). Graduated in Basic Education Teachers, Physical Education Variant at the Polytechnic Institute of Castelo Branco (IPCB). Coordinator of the Memo_Move project at the Fundão Municipality.