

Effects of functional health education on the balance and risk of falls in the elderly with reduced physical mobility

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ABSTRACT

BACKGROUND: Aging is inevitable, which implies a decrease in some physical abilities, such as balance, flexibility, agility, and joint mobility. Decreases in physical abilities lead to a decrease in the functional and cognitive capacity that is fundamental to the activities of daily living^[1,2]. **OBJECTIVE:** The objective of this study is to evaluate the effects of a functional health education program on the functional capacity of a group of elderly enrolled in the "Senior Activity" Program, who attend day centers of the Viseu council. **METHODS:** This is an experimental study, with a sample of 20 elderly people aged 67-91 years (mean of 80.70 +5.992). They were randomly assigned to the experimental group (EG, n= 10) and control group (CG, n= 10). During this study all subjects maintained the physical activity training of the "Senior Activity" Program, the EG had a training with the aerobic, flexibility and strength components associated with the stimulation. The exercise program lasted 12 weeks 3 times per week and the 30 minute session. The entire sample was assessed at the beginning of the program after 4 weeks, after 8 weeks and after 12 weeks with the following Scales: Berg Scale to check the balance and risk of falls and to evaluate the fear that the elderly have to fall was used the questionnaire Falls Efficacy Scale (FES). **RESULTS:** the implemented program demonstrated that physical exercise in general allows global improvements in the elderly. However, these improvements were only statistically significant in the EG, according to the Time Up and Go, obtained the mean initial time 21.10 +10.06 and the final 16.32 ± 7.80 ($p= 0.043$), compared to the CG ($p= 0.436$), in relation to the balance, the initial evaluation was 32.60 +5.27 and final evaluation with an improvement in the balance with 43.38 +7.99 ($p= 0.009$), as compared to the CG ($p= 0.280$). In relation to the self-confidence of the risks of fall, initial evaluation was 49.50 ±18.93 and final evaluation was 62.43 ±19,15, self-confidence has increased, it is verified that there are no significant differences in the EG ($p= 0.158$) and in the CG ($p= 0.853$). **CONCLUSIONS:** Despite some limitations, the introduction of the functional health education program revealed that it could potentiate the effects of physical exercise and demonstrated its importance for functional health. These results are of great interest primarily for physiotherapists and health and sports professionals to promote health in the elderly population.



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