An eight months multicomponent training effect in elderly's functional fitness.

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Introduction

Elderly's physical activity and exercise is a huge concern in fitness instructor to delay physical frailty (Jones & Rikli, 2002). The multicomponent training help to improve the physical condition in different variables such as strength, resistance, flexibility and balance (Carvalho et al., 2009). Thus, the aim of this study was to assess the influence of an eight months multicomponent training program in functional fitness of community-living elderlies..

Methods

Forty-nine elderlies with 64.39 (± 6.33) years old made part of this research, 11 males with 67.45 (± 4.93) and 38 females with 63.50 (± 7.47) years old. All procedures were in accordance to the Declaration of Helsinki and a written consent was obtained from the participants.

The multicomponent training program was applied with the Carvalho et al, (2009) recommendations. The program had 8 months and the training frequency was three times per week.

The elderly's functional fitness was assessed with the functional fitness test (FFT) of Jones & Rikli, (2002). The T-test allowed to assess the differences between the pre and post training program in the body composition. The tests were performed with a significant level of 5%

Results

Table 1 presents the mean and standard deviation (± SD) between the two evaluation moments. The statistical significance is also presented in table 1..

Table 1. Mean and standard deviation (± SD) of the FFT variables between the pre and post-test

FFT Variables	Pre-Test (mean ± SD)	Post-Test (mean ± SD)	Sig.
Upper Limbs Strength (Reps)	27.39 ± 5.27	31.39 ± 6.17	0.005*
Lower limbs Strength (Reps)	20.90 ± 4.68	23.33 ± 4.82	0.041*
Upper Limbs Flexibility (cm)	-7.13 ± 6.95	-5.70 ± 6.22	0.387
Lower Limbs Flexibility (cm)	1.99 ± 7.01	2.54 ± 6.68	0.793
Aerobic Resistance (Reps)	104.63 ± 24.30	112.41 ± 25.03	0.236
Time Up and Go (sg)	4.63 ± 0.63	4.48 ± 0.62	0.345

*p<0.05; **p<0.001

Conclusion

The multicomponent training program improved significantly, elderly's functional fitness in upper and lower limbs strength. The other variables did present significant improvements with the multicomponent training program. However, it is to note that all of them improved their scores. Thus, it is possible to conclude that the multicomponent training program may improve and/or preserve elderlies' functional fitness.

References

Carvalho, M. J., Marques, E., & Mota, J. (2009). Training and detraining effects on functional fitness after a multicomponent training in older women. Gerontology, 55(1), 41-48.

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