Influence of physical activity and aerobic fitness on the variation in quality of life of elderly women

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ABSTRACT

BACKGROUND: With aging and menopause, women experience important changes in body composition, aerobic fitness, levels of habitual physical activity and functional physical fitness, with implications for their quality of life. A better understanding of the relationship between these variables is very important when designing exercise programmes that are better adapted to the needs of this population. **OBJECTIVES:** This study aimed to analyze the isolated and interactive effect of physical activity and aerobic fitness in different domains of quality of life. **METHODS:** The sample included 54 women, aged between 67 and 94 years. The levels of habitual physical activity were evaluated by accelerometry (Actigraph GT1M, Ford Walton Beach, Florida, USA) and the aerobic fitness by the Walk 6-minute test[1]. The anthropometric variables included the weight, height and waist circumference that were used to characterize the sample. The quality of life was assessed through the SF-12 questionnaire[2]. Anova with two fixed factors was used in the data analysis, considering a degree of statistical significance of 5%. **RESULTS:** In a sample with high levels of total and central adiposity, only 17 women showed moderate to vigorous physical activity levels recommended for health (at least 150 minutes of moderate physical activity) and 83,3% showed limited performance in the Walk 6-minute test. Any of the factors considered showed a significant interaction in the variation of the dependent variables and, in relation to emotional function and mental health, no significant isolated effects were recorded either. Aerobic fitness has shown a significant effect on overall health (p=0,01), physical function (p<0,01), pain (p=0,05), vitality (p=0,02) physical functioning (p<0,01). **CONCLUSIONS:** The results suggest that, regardless of the levels of physical activity, better aerobic fitness contributes to a better quality of life for elderly women.

Keywords: *aging, quality of life, physical fitness, physical activity*

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