## Effects of adapted physical activity on functional parameters for the elderly people

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## Abstract

*Background*. The research proved the importance of physical activity for the prevention of premature aging, in the maintenance of functional independence and in the improvement of quality of life.

*Aims*. The purpose of the study was to assess the level of elderly people quality of life and to analyze the impact of an adapted physical activity programme on the functional parameters with effect on the quality of life.

*Methods*. The study was conducted over a period of 6 months comprising 58 subjects from Oradea, 27 women and 31 men aged between 60 and 88 years. Subjects participated in various physical activity programmes for 50 minutes twice a week, adapted to individual characteristics. Evaluation included anthropometric data, functional parameters, the Romberg test, functional tests for movements and gait assessment for daily living.

Results. After 6 months of the adapted physical activity programme, the results demonstrated an improvement in the tested parameters. The chest elasticity increased significantly at the end of the study ( $p \le 0.05$ ) in the group of men. Vital capacity increased significantly (p < 0.05) in the group of women. The effects of the physical activities programme were highly visible in the balance tests, functional tests for normal movements and gait assessment.

Conclusions. This study highlights the fact that the elderly people have parameters that indicate an increased risk for cardiovascular diseases, pulmonary diseases, joints diseases, some cancers and diabetes. A constant adapted physical activity programme induced positive effects on the functional parameters and improvement of independence in their active daily living.

**Keywords**: adapted physical activity, aging, functional movements, quality of life.