

Summary

Physical activity and selected aspects of body structure and posture as well as holistic self-esteem of women in the sixth and seventh decade of life

Introduction: According to of the growing elderly population in recent years, more and more research has focused on the aspects of harmless aging. The aim of the presented research was to verify the relations between physical activity and selected elements of body structure and posture, as well as the global self-esteem of women over 60. It was assumed that the physical activity of women over 60 years is at a low level, which leads to the intensification of involuntal changes in body structure and posture. It was also assumed that the holistic self-esteem of women over 60 years of age significantly decreases with age.

Material, methods: The study group consisted of 104 women aged 60-79 years, participants of universities of the third age. Women were divided into two age groups - 60-69 years and 70-79 years. The methods of direct participant observation and diagnostic survey were used. The level of physical activity (pedometers, IPAQ questionnaire), somatic parameters (BM, BH, WC, %BF, BMI, WHR) and global self-esteem (Rosenberg's SE scale) were assessed. The differentiation of mean values of the measured parameters between women in the 6th and 7th decade of life was assessed (ANOVA analysis of variance, Mann-Whitney U-test). The concatenation between the level of PA in quantitative terms (number of steps) and the parameters of body structure and posture (in quantitative terms) and self-esteem was verified, depending on the distribution, by the Pearson or Spearman correlation. The percentage of people meeting the norms for each variable for the total number of respondents and in the age category was recorded. The differentiation was assessed by age category (chi square test). To assess the concatenation between the level of physical activity in qualitative terms and self-esteem, the analysis of variance supplemented with post hoc analysis (Tukey's test) was used. The concatenation between the level of PA in qualitative terms and the categorized parameters of the body structure and posture was assessed with the chi- square test.

Results: The majority of women (64%) had a sedentary lifestyle or low physical activity, excess body weight (76%) and android-type obesity (83%). Sagittal posture defects occurred in 58% of respondents. There was no statistically significant difference between the groups

in any of the analysed parameters. Negative, weak and low correlations between the level of physical activity and somatic parameters were demonstrated, as well as a low positive correlation between the level of physical activity and the Rosenberg scale. The study results did not show any concatenation between physical activity and the angle of thoracic kyphosis and lumbar lordosis.

Conclusions: The obtained results have indicated the necessity to undertake educational activities promoting a healthy lifestyle in the elderly.

Key words: elderly women, physical activity, body structure and posture, self-esteem