

Associations between Physical Activity Level and Health Services Use in Spanish Adults

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Abstract

One of the main concerns of governments and organisations worldwide is the cost and burden of health services, with sedentary lifestyles being a significant impacting factor, and physical activity is one of the potential solutions. Therefore, this study aims to analyse the possible associations between the physical activity level, hospitalisation prevalence, and the use and number of visits to emergency services in the Spanish population, examining potential differences between sex and age groups. This is a cross-sectional study based on data from the Spanish National Health Survey 2017 (ENSE 2017), the last one before the COVID-19 pandemic, with 17,199 participants. A descriptive analysis was performed using median and interquartile range (continuous variables) and absolute and relative frequencies (ordinal variables). Intergroup differences were analysed with non-parametric tests: chi-square and z-test for independent proportions (categorical variables), and Kruskal-Wallis and Mann-Whitney U (continuous variables). Spearman's rho was used to study correlations between variables. A multiple binary regression analysis was performed to predict hospitalisations. Hospitalisations and emergency services use showed a dependence relation with the physical activity level ($p < 0.001$): those who performed moderate and/or vigorous physical activity used those services less than sedentary individuals and those whose only activity was walking. Thus, associations could be drawn between the hospitalisation prevalence, the use and number of visits to emergency departments, and the physical activity level in the Spanish population aged 18-69 years in the pre-pandemic period.

Author keywords

health costs; health services; physical activity; physical activity level; sedentariness