Levels of physical activity and sitting time in elderly people with fragility: results of the 2016-2017 National Health Survey

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## **Abstract**

Background: fragility is characterized by loss of biological reserves and vulnerability to adverse outcomes. An intervention with beneficial effects on the prevention and management of frailty is the regular practice of physical activity (PA). Objective: to determine the association between levels of PA, sedentary time and frailty in older Chileans by sex. Methodology: 232 people over 60 years of age from the metropolitan region participating in the National Health Survey 2016-2017 were included. Frailty was assessed based on the Fried Phenotype Scale criteria and PA level and sedentary time with the Global Physical Activity Questionnaire (GPAQ v2). The association between levels of PA with the different states of frailty was investigated with linear regression analysis. Results and conclusion: elderly people with frailty have less total PA ( $\beta = -292.6 \text{ min/day} [95 \% \text{ CI: } 399.5; -185.7],$ p = 0.001), occupational PA ( $\beta = -5821.8 \text{ min/day } [95 \% \text{ CI: } 8680.8, -2962.8], <math>p = 0.001$ ), transportation ( $\beta = -68.0 \text{ min/day } [95 \% \text{ CI: } 8680.8, -2962.8]$ min/day [95 % CI:-105.4,-30.62], p = 0.001). A lower amount of moderate AF was also found ( $\beta = -137.7$  min/day [95 % CI:-202.0,-73.5], p = 0.001); vigorous ( $\beta$  =-43.4 min/day [95 % CI:-81.6;-5.20], p = 0.026) and longer time seated ( $\beta$  = 3.55 hours/day [95 % CI:-1.97, 5.14], p = 0.001). Frail older people have lower PA levels compared to their peers without frailty. Considering that the Chilean population will experience an increase in the number of older people, it is essential to implement preventive measures to delay the onset of frailty, such as promoting the practice of PA at all levels. © 2023 SENPE y©Arán Ediciones S.L. Este es un artículo Open Access bajo la licencia CC BY-NC-SA.

Author keywords Aged; Frailty; Physical activity