

Association between Changes in Physical Activity and Frailty due to COVID-19 pandemic

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The aim of this study is to evaluate the changes in physical activity before and during the COVID-19 pandemic. In 483 older individuals, daytime physical activity and frailty were measured using actigraphy and questionnaire, respectively.

We analyzed the association between the incidence proportion of frailty and pre-frailty and physical activity during COVID-19 pandemic (mean observed period: 56.0 months).

Physical activity levels after the pandemic were significantly associated with lower energy expenditure, lower METs, higher time of light physical activity, lower time of moderate physical activity, and lower vector magnitude counts per minute compared to the levels before the pandemic. The prevalence of frailty and pre-frailty was significantly higher during the pandemic than that before the pandemic. The incidence proportion of frailty and pre-frailty during the observation was 19.1% and 6.8%, respectively.