## 研究業績 英文表記

和文	
表題	地域在住高齢者の睡眠の質と身体能力及び身体活動との関連
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英文	
Title	Association of sleep quality with physical ability and activity in community-dwelling older adults
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Abstract	The relationship between sleep disorders and physical ability and activity in older individuals is not well understood. We therefor investigated the relationship between sleep quality and both physical abilities and physical activity in older adults. Participants were community-dwelling adults aged 65+ (N = 455) in Yanai city, Japan. Sleep quality was evaluated with the Pittsburgh Sleep Quality Index (PSQI; maximum score 21, sleep disorders (SD) defined as $\geq$ 6). Physical function measures were Timed Up and Go (TUG) and chair stand tests. Aerobic fitness was examined with an incremental exercise test using a cycle-ergometer, and physical activity was assessed with step counts using a uniaxial accelerometer. Body mass index (BMI) was calculated using height and weight. The Geriatric Depression Scale-Short Version (GDS-S) was administered. The t-test and chi-squared tests were used to compare data with SD group and control groups. Results for the 255 participants (64 men, 191 women) without missing data were analyzed. 90 subjects (35.3%) scored as SD on PSQI. There were no significant differences between the two groups for aerobic fitness. GDS-S, the proportion with fear of falling and TUG were significantly higher (p < 0.001) for SD group. After adjusting for gender, age and BMI, there were still significant differences in GDS-S (p < 0.001), TUG (p < 0.05) and step counts (p < 0.05) between two groups. These results suggest that GDS-S, TUG and step counts are associated with sleep disorders among older adults.
keyword	community-dwelling older adults, sleep quality, physical ability, physical activity