

The effects of sleep quality, physical activity, and environmental quality on the risk of falls in dementia

ABSTRACT

OBJECTIVES: This study aimed to identify the effects of sleep quality, physical activity, environmental quality, age, ethnicity, sex differences, marital status, and educational level on the risk of falls in the elderly individuals with dementia. **METHODOLOGY:** Data were derived from a group of 1210 Malaysian elderly individuals who were noninstitutionalized and demented. The multiple logistic regression model was applied to estimate the risk of falls in respondents. **RESULTS:** Approximately the prevalence of falls was 17% among the individuals. The results of multiple logistic regression analysis revealed that age (odds ratio [OR] = 1.03), ethnicity (OR = 1.76), sleep quality (OR = 1.46), and environmental quality (OR = 0.62) significantly affected the risk of falls in individuals ($P < .05$). Furthermore, sex differences, marital status, educational level, and physical activity were not significant predictors of falls in samples ($P > .05$). **CONCLUSION:** It was found that age, ethnic non-Malay, and sleep disruption increased the risk of falls in respondents, but high environmental quality reduced the risk of falls.

Keyword: Dementia; Elderly; Environment; Falls; Physical activity; Sleep quality