Association between dentures and the rate of falls in dementia

ABSTRACT

Background: Poor oral health, chronic diseases, functional decline, and low cognitive ability can increase the risk of falls in the elderly. Objectives: The current study aimed to show the effects of oral health, diabetes mellitus (DM), hypertension (HT), heart disease, functional status, and sociodemographic factors on the risk of falls in elderly with dementia. Materials and methods: The sample comprised 1,210 Malaysian elderly who were demented and noninstitutionalized. This study was a national cross-sectional survey entitled "Determinants of Health Status among Older Malaysians". The effects of age, ethnicity, sex differences, marital status, educational level, oral health, DM, HT, heart disease, and functional status on the risk of falls were evaluated. The multiple logistic regression model was used to estimate the effects of contributing variables on the risk of falls in samples. Results: The prevalence of falls was approximately 17% in subjects. It was found that age (odds ratio [OR] 1.02), non-Malay ethnicity (OR 1.66), heart disease (OR 1.92), and functional decline (OR 1.58) significantly increased the risk of falls in respondents (P<0.05). Furthermore, having teeth (OR 0.59) and dentures (OR 0.66) significantly decreased the rate of falls (P<0.05). Conclusion: It was concluded that age, non-Malay ethnicity, functional decline, heart disease, and oral health significantly affected falls in dementia.