Factors related to tooth loss among people with disabilities - A community based study

Mei-Yu Pan
Chang Gung University of Science and Technology & Institute of Medical Sciences, Tzu Chi University, Taiwan

Background: Tooth loss is an implicit disease which may lead to malnutrition and is a serious health problem worldwide. People with disabilities are especially at risk of tooth loss.

Objective: The prevalence of tooth loss and risk factors for Taiwanese adults with disabilities are to be surveyed.

Methods: A community-based, cross-sectional study was conducted in 2013. Participants include 531 adults with disabilities aged 20-80 living in communities nationwide. Statistical analyses, including Chi-squared tests, t-test and logistic regression, were used to identify the relationships between the variables.

Results: Most of the disabled subjects (56% extremity, 19% intellectual, 25% others) could care themselves independently. 45% of them had NRT<20, and 28% ≤10. Regarding the oral hygiene care, 77% reported seldom teeth brushing after meal, 83% said seldom using dental floss, and 78% responded no regular visit to dentists i.e. every 6 months. After adjusting the potential confounding variables, the determinant risk factors for NRT<20 were age (OR=1.08, 95% CI: 1.06-1.10, p<0.001), less educated (OR=1.65, 95% CI: 1.02-2.69; p=0.042), seldom using dental floss (OR=1.92, 95% CI: 1.07-3.45; p=0.028), unbalanced diet (OR=1.53, 95% CI: 1.01-2.32; p<0.044), smoking (OR=1.91, 95% CI: 1.03-3.53; p<0.040), hypertension (OR=1.79, 95% CI: 1.19–2.69; p=0.005), and intellectual disability (OR=2.42, 95% CI: 1.34-4.38; p<0.004).

Conclusions: The association between the high prevalence of tooth loss and poor oral hygiene care among adults with disabilities was identified. Adults with intellectual disability were worse than those with physical disability. Other risk factors like seldom using dental floss, unbalanced diet, smoking, and hypertension were significantly associated with tooth loss, too.

Biography
Mei-Yu Pan is working as a Lecturer in the Nursing Department in Chang Gung University of Science and Technology. She has been teaching courses including community nursing, long-term care, and aroma therapy, etc. for nursing students at different levels for over 15 years. Her research interests include NHS data mining, public health care, community health care, and aroma therapy.

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