



0051

### **Effect of Oral Health Behavior on Life Cycle Age Groups**

B. SHIN<sup>1, 2</sup>

<sup>1</sup>Department of Dental Hygiene, College of Dentistry, Gangneung-Wonju National University, Gangneung city, Korea (the Republic of), <sup>2</sup>Research Institute of Oral Science, Gangneung-Wonju National University, Gangneung city, Korea (the Republic of)

**Objectives** This study aimed to examine the impact of oral health behavior on oral health across different age groups throughout the life cycle in Korea using 2013-2015 data from the Korea National Health and Nutrition Examination Survey (4th KNHANES).

**Methods** This study included 20,336 individuals aged 6 or older who participated in oral examinations. Oral health behavior variables included toothbrushing, use of oral hygiene products, regular dental visits, and not smoking. Practicing all of these behaviors was operationally defined as good oral health behaviors. Oral health status included number of natural teeth, dental caries and periodontal disease. The model also considered socio-economical, psychological, dietary, and systemic health factors. Complex sample general linear model and complex sample logistic regression analyses using SPSS Statistics 28.0 were conducted to examine the impact of oral health behavior according to life cycle age group.

**Results** In children and adolescents, their oral health behavior variables did not have a significant effect on oral health. However, adolescents whose mothers had poor oral health behaviors were 2.95 times more likely to have dental caries than adolescents whose mothers did practice good oral health behaviors (OR 2.95, 95% CI 1.47–5.89). Adults with poor oral health behaviors were also more likely to have dental caries (OR 3.16, 95% CI 2.41-4.13) and periodontal disease (OR 2.03, 95% CI 1.53-2.69). Elderly people who practiced all good oral health behaviors were more likely to have 6.08 more existing natural teeth than the group that did not practice (95% CI 4.51-7.64).

**Conclusions** The study emphasizes that good oral health behaviors in adults not only affect their dental health but also influence the oral health of their children and adolescents. It suggests developing an integrated strategy that promotes the practice of good oral health behaviors across all generations to reduce disease burden and improve overall health.