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## The Effects of Oral Health Knowledge and Behavior on Oral Frailty and General Frailty in the Elderly

Hyejo Keum

Conservative dentistry, Ajou University Hospital, Republic of Korea

### Abstract:

As the population ages, the prevention of frailty has emerged as a critical public health challenge. Therefore, this study aimed to investigate the impact of oral health knowledge and behaviors on oral and physical frailty among older adults. A cross-sectional survey was conducted from March to April 2025 involving 150 older patients who visited dental clinics in Seongnam City, the Republic of Korea. Data on oral health interest, knowledge, practices, and frailty status were analyzed using SPSS 23.0, with frequency analysis, t tests, one-way ANOVA, Pearson correlation, and multiple regression analysis. Results showed that higher oral health interest was significantly associated with greater knowledge ( $p < .05$ ). Oral frailty was more prevalent among older age groups and among those with poor subjective health ( $p < .01$ ). Notably, physical frailty correlated significantly with age, economic status, and subjective health, with a significant negative correlation with oral health behaviors ( $p < .01$ ). Furthermore, a strong positive correlation between physical and oral frailty ( $p < .01$ ) indicates that oral decline may serve as a key indicator of physical frailty. These findings suggest that oral health knowledge and behaviors are protective factors against both oral and systemic frailty. Thus, implementing strategies to enhance oral health awareness and sustained behavioral changes are essential for frailty prevention.

### Keywords:

Oral health knowledge, Oral health behavior, Oral frailty, General frailty.