Abstract

Objective: To explore the association between tooth loss and cognitive functioning among persons 65 years and older. Methods: Data from the Hispanic Established Populations for Epidemiologic Studies of the Elderly (Wave 1: 1993-1994, n= 3,032; Wave 2: 1995-1996, n= 2,424; and Wave 3: 1998-1999, n= 1,967). The dependent variables were the scores from the total Mini-Mental State Examination (MMSE: score 0-30) and its global domains (memory: score 0-6; and no-memory: score 0-24). Independent variables included the number of teeth (0-12 vs. 13-32), socio-demographic characteristics, last dental office visit, medical conditions, depressive symptoms, and functional limitations which were tested for associations with the dependent variables. Results: In bivariate analyses, participants with fewer teeth (0-12) tended to have significantly lower mean scores for memory, no-memory, and total MMSE when compared to those with more teeth (13-32), both at baseline and at follow-up. In fully adjusted longitudinal-mixed models, participants with fewer teeth had a greater decline in total MMSE through five years of follow-up with a decrease of 0.12 fewer points each year (SE ± 0.05, p <0.01), when compared to those with more teeth. Conclusion: Having fewer teeth was associated with greater cognitive decline over time.

Keywords

Tooth loss, cognitive function, Mexican Americans, older, longitudinal analyses.