

TITLE: Associations between oral and systemic health in long-term care residents

PRESENTER: Summar Amin

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Group Author Abstract:

Objectives: The aim of this study was to test the association between oral and systemic diseases among residents at a long-term care facility in Western New York.

Methods: Dental and medical records of all residents discharged between January 1, 2009 and December 30, 2012 who utilized dental services were reviewed. Information on demographic and socioeconomic variables was extracted from electronic health records. Medical diagnoses at admission were defined using International Classification of Diseases 9 (ICD-9). Information on oral health variables was extracted from patient charts. Oral hygiene (OH, good/fair vs. poor), the number of teeth, root tips, and broken teeth, as well as the presence or absence of periodontal disease (PD), dental caries, dentures, ill-fitting dentures, oral soft-tissue lesions, mouth odor, and pain were assessed by a single dentist. Odds ratios (OR) and 95% confidence intervals (CI) were derived from multiple logistic regression analysis.

Results: A total of 221 residents received dental services, 219 (99.1%) Caucasians, and 167 (75.6%) females. The mean age at admission was 83.34 ± 8.47 years, length of stay 4.79 ± 4.63 years, and body mass index 27.04 ± 7.79 kg/m². After adjustment for age at admission, gender, race, marital status, and body mass index, 1) diabetes mellitus was associated with poor OH (OR=4.67, 95% CI: 1.09-19.95) and PD (OR=6.34, 95% CI: 1.51-26.57); 2) respiratory diseases was associated with full denture (OR=2.89, 95% CI: 1.02-8.18); 3) genitourinary diseases was associated with full denture (OR=8.28, 95% CI: 1.18-58.21) and oral lesions (OR=33.53, 95% CI: 1.20-934.59); and 4) dementia was associated with poor OH (OR=4.74, 95% CI: 1.44-15.65) and PD (OR=3.69, 95% CI: 1.25-10.90). There were no significant associations between remaining oral variables and systemic diseases.

Conclusions: This study suggests that inflammatory oral conditions are associated with dementia, diabetes mellitus, and respiratory and genitourinary diseases in long-term care residents.

PREFERRED PRESENTATION TYPE: Poster

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