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REPLY TO CHANGES IN INSTITUTIONALIZED OLDER PEOPLE'S DENTITION STATUS IN HELSINKI 2003 TO 2017

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To the Editor: Saarela and colleagues¹ raise an important point—decreases in edentulism do not necessarily imply improved quality of life. Their study found that older adults in assisted living experienced a significant decrease in edentulism, which was accompanied by a significant increase in reported chewing difficulties. The authors posit that this may have been due to significant decreases in denture prevalence among the edentate. Based on these findings, we updated our original study² to examine the percentage of edentate adults, aged 65 years and older, who had no dentures or full removable dentures among community-dwelling and home-limited or long-term care residents.

METHODS

For community-dwelling adults, we again used data from the National Health and Nutrition Examination Survey (NHANES), a nationally representative survey of non-institutionalized persons in the United States. Additional information is available at <http://www.cdc.gov/nchs/nhanes.htm>.

An edentulous person was classified as having full removable dentures if all 28 teeth (second molar to second molar) were scored as missing but replaced with removable restoration and having no dentures if 0 teeth were scored as having removable restorations. For home-limited or long-term care resident adults, we revisited the nine state reports that used the Basic Screening Survey³ to examine the oral health status of adults primarily living in nursing homes or assisted living facilities.

RESULTS

Nationally, 17.3% of community-dwelling adults, aged 65 years and older, were edentate. Among these persons, 5.4% (SE = 0.8%) had no dentures and 85.8% (SE = 1.6%) had full dentures. Unlike edentulism, where there were large disparities in prevalence by

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sociodemographic characteristics, there was little variation in the percentage of edentate community-dwelling adults with full removable dentures (Table 1). Prevalence of having full removable dentures among the edentate ranged from 82.5% to 89.2% for all characteristics, except for being Mexican American (prevalence = 78.2%). Four of nine reports for long-term care residents and home-limited adults included in our original study reported denture use among edentate adults. Two states reported the percentage of edentate adults with no dentures—10% and 25%. Two states reported that 50% and 70% of edentate adults had full dentures.

DISCUSSION

There are limited data on the functional status of older adults' dentition. Although with NHANES we could determine the number of missing teeth and presence of dentures for community-dwelling adults, there was no information on whether dentures were worn or if respondents had difficulty chewing their food. There are no corresponding data for older adults in long-term care at the national level. The Centers for Medicare and Medicaid Services requires all certified nursing homes in the United States to perform a comprehensive assessment of each resident's functional capabilities and health and to report this in the Long-Term Care Minimum Data Set (MDS).⁴ The MDS, however, only includes one dichotomous variable on oral health status. The Basic Screening Survey for older adults,³ which has been used by several states, includes information on number of natural teeth, presence of dentures, and denture use. There is wide variation across states, however, in which groups of older adults are sampled and in reporting standards.

In conclusion, we agree with Saarela and colleagues¹ that the findings of our respective studies highlight the need for better integration of dental and medical care. This is important for both older adults living in long-term care facilities and community-dwelling adults. Older adults are more likely to have chronic disease, and persons with chronic disease have poorer oral health compared to their healthier counterparts.⁵ The two leading causes of tooth loss, dental caries and periodontitis, are preventable with routine receipt of primary and secondary prevention. Primary care providers can play an important role in helping patients maintain their oral health. Providers can educate their patients on how to prevent dental disease (eg, brushing with fluoride toothpaste) and screen patients for common oral conditions and refer them to dental care. Our original study included information on oral health curricula that include a geriatric component designed for medical providers. To increase bidirectional referrals and messaging by primary care providers and dentists for patients with chronic conditions, the Division of Oral Health is currently funding chronic disease and oral health programs in five states to pilot projects that increase these outcomes among patients with prediabetes, diabetes, or hypertension.

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Table 1.

Prevalence (SE) of Edentulism and Having Full Removable Dentures Among Edentate US Adults, Aged 65 Years and Older: National Health and Nutrition Examination Survey 2011 to 2016

Characteristic	Edentate, %	Among Edentate and Aged 65 y, % With Complete/Full Dentures
Total	17.3 (1.3)	85.8 (1.64)
Age, y		
75	22.5 (1.6)	88.5 (1.65)
65-74	13.0 (1.3)	82.5 (3.06)
Sex		
Female	16.9 (1.3)	87.4 (2.42)
Male	17.7 (1.5)	83.8 (2.49)
Race/ethnicity		
Non-Hispanic black	30.7 (2.1)	87.1 (1.90)
Mexican American	16.7 (1.9)	78.2 (5.33)
Non-Hispanic white	15.2 (1.7)	86.5 (2.01)
Income		
<200% Federal poverty level	28.6(1.9)	85.1 (1.85)
200% Federal poverty level	10.7 (1.3)	84.6 (4.02)
Education		
Less than high school	34.8 (2.1)	83.6 (3.35)
High school	21.3 (2.2)	85.2 (3.36)
More than high school	9.3 (1.1)	89.2 (2.68)
Smoking status		
Current	42.8 (3.1)	86.4 (3.32)
Former	18.5 (1.3)	87.6 (1.83)
Never	12.1 (1.1)	83.3 (3.02)