

Research in Action: Improving Health, Saving Money

facts about:

Oral Health in Older Adults

"If you think research is expensive, try disease."

- Marv Lasker 1901-1994

What Does the Research Tell Us?

The Issue:

- Recent research suggests ties between poor oral health and diabetes, stroke, heart disease, lung disease, and other serious health issues[#]
- 23% of older adults (adults ages 65 and over) have not seen a dentist in the past 5 years.^{**}
- In 2012, almost 1 in 5 Americans 65 and older had untreated cavities and over 70% had periodontal (gum) disease. ^{+‡}
- In 2011, a quarter of Americans 75 and older were missing all of their teeth.^{*}
- 30,000 new cases of pharyngeal and oral cancer were diagnosed in 2013, resulting in a total of 8,000 deaths.[‡]

SOURCES: * CENTER FOR DISEASE CONTROL AND PREVENTION <WWW.CDC.GOV>
 ** ORAL HEALTH AMERICA, 2013
 + NATIONAL CENTER FOR HEALTH STATISTICS <WWW.CDC.GOV/NCHS>
 # DEPARTMENT OF HEALTH AND HUMAN SERVICES <HHS.GOV>
 ‡ MOYNIHAN, P. & PETERSEN, P.E., PUBLIC HEALTH NUTRITION; 7(1A): 201-226.

The Cost:

- In 2013, an estimated \$111 billion was spent on dental services in the United States. Older adults spend more on dental care than any other age group, averaging \$800 per individual.^{*++}
- Almost 70% of older Americans do not have dental insurance, and Medicaid only covers 1% of dental services an individual might need over the course of a year. In some states, Medicaid solely covers acute, life threatening dental emergencies, not preventative care or quality of life- improving services like root canals or dentures.^{^^**}
- Cost considerations deter two thirds of Americans with an income of less than \$35,000 from seeking dental care.^{**}
- One in three older Americans delay dental care due to the cost of treatment.^{^^}

SOURCES: * CENTER FOR DISEASE CONTROL AND PREVENTION <WWW.CDC.GOV>
 ++ AMERICAN DENTAL ASSOCIATION, <ADA.ORG>
 ** ORAL HEALTH AMERICA, 2013
 ^^ ORAL HEALTH AMERICA, <TOOTHWISDOM.ORG/ACTION>

IMPROVES HEALTH SAVES MONEY

IMPROVING HEALTH:

- Due to research-based improvements in dental care, older adults are rapidly becoming less reliant on dentures. In the 1970s, 46% of those 65 and older were missing all of their permanent teeth, compared to 14% of that age group in 2012. Individuals with missing teeth, particularly those with dentures, are more likely to have a diet of softer foods. Reducing the number of individuals with dentures enables more older Americans to maintain healthier diets, reducing their chances of developing many life threatening chronic diseases.^{*‡}
- Pneumonia is the leading cause of both morbidity and mortality for individuals living in long term care facilities. Research has shown that proper oral health and hygiene reduce the likelihood of an individual developing aspirational pneumonia.[‡]

SAVING MONEY:

- Fluoride treatments have been shown to reduce tooth decay by 25% in populations with consistent exposure. Research shows it can prevent the decay that affects some older Americans who suffer from dry mouth and other age-related oral health issues. For every dollar spent on the fluoridation of community water, \$38 is saved in avoided dental costs.^{^‡**}
- Cost-effectiveness studies have shown that individuals with chronic diseases, like diabetes and cardiac disease, who receive preventative dental care spend less on their overall health care than individuals with the same conditions who did not receive preventative dental care.^{**‡‡}

* SLADE, G.D. ET. AL. J DENTAL RES, 2014; 93(10): 959-965.
 ‡ GRIFFIN, S. ET. AL. AM J PUBLIC HEALTH, 2012. 102(3): 411-418.
 + PACE, CC. AND GH MCCULLOUGH. DYSPHAGIA, 2010. 25(4): 307-322.
 ^ CLOET, W. TOOTH WISDOM, HEALTH RESOURCE FOR OLDER ADULTS, 2014.
 ** CENTER FOR DISEASE CONTROL AND PREVENTION <WWW.CDC.GOV>
 ‡‡ PACIFIC CENTER FOR SPECIAL CARE, 2013.

Perspectives:



Judith Jones, DDS, MPH, DScD

Boston University Henry M. Goldman School of Dental Medicine

Assistant Dean for Faculty Development; Director of the Center for Clinical Research; Professor, Department of Health Policy & Health Services Research; and Professor Department of General Dentistry

"Oral health is essential to overall health... Inclusion of dental care in Medicare will go a long way to improving elders' access to dental care and their oral health."

facts about: } Oral Health

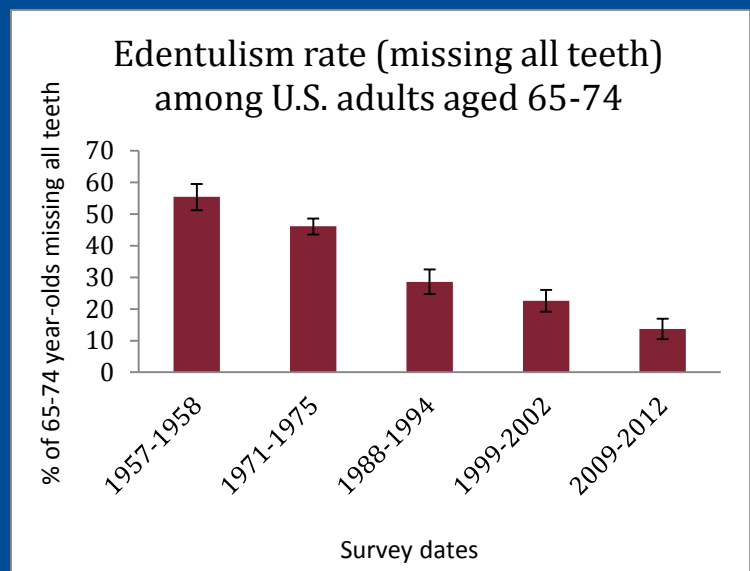
Hope for the Future:

- Despite being one of the most common diseases in the United States, Type 2 diabetes is often unrecognized in patients. Consequently, approximately 1 in 4 cases remain undiagnosed, preventing patients from seeking the treatment necessary to prevent or mitigate complications from the disease. Researchers have found that adding dental factors to a common blood test when examining individuals with at least one self-reported diabetes risk factor increased the sensitivity of the test in diagnosing diabetes or pre-diabetes from 73% to 92%.*
- With funding support from the National Institutes of Health, researchers at Harvard University are using low power lasers to encourage the growth of stem cells within teeth. While only in pre-clinical stages, the researchers have managed to successfully form dentin, the strong tissue that makes up the majority of the tooth, from dental pulp cells. The treatment would use the patients' existing cells and boost them using lasers to regenerate tissue and repair decay and degradation.†

* LALLA, E. ET. AL. J DENTAL RES, 2011. 90(7):855-860.

† KUSEK, K. HARVARD SCHOOL OF ENGINEERING AND APPLIED SCIENCES, 2014.

Rate of Missing Teeth in Older Americans, 1957 - Present



SOURCE: SLADE, G.D. ET. AL. J DENTAL RES, 2014; 93(10): 959-965.



Putting Research into Action: Wisdom Tooth Project

Oral Health America (OHA), a leading advocacy organization working to make oral health disease a part of our nation's past, not its future, is translating research into action through its *Wisdom Tooth Project*. This multi-faceted initiative aims to connect older Americans with the information and care they need to confront oral health challenges.

As part of this initiative, OHA has developed a web portal – toothwisdom.org – tailored to the specific needs of older adults and caregivers. This user-friendly portal connects to education and access to care resources on both a national and regional basis.

The Wisdom Tooth Project also aims to increase awareness at the community level, with *Tooth Wisdom: Get Smart About Your Mouth* education workshops for older adults taking place in community settings. Further community level awareness happens in the form of communications like the *Wisdom Tooth Insider* email newsletter, and OHA's *Fall for Smiles* national messaging campaign.

Finally, the project looks to the future by bringing together health professionals and community leaders in regional symposia and in research publications. These efforts generate new knowledge about the oral health of older Americans and aim for new strategic initiatives designed to end access barriers and improve care.

The Bottom Line: *Research focused on oral health issues and their cofactors, including diabetes and other chronic conditions, can create opportunities for new clinical interventions. Public health initiatives are also crucial to address significant gaps in access to dental coverage and oral health care. More research, both to prevent and treat oral health conditions, and to identify interventions that improve access, can significantly improve health and quality of life for older Americans.*

Research!America

1101 King Street, Suite 520
Alexandria, Virginia 22314

703.739.2577

www.researchamerica.org
info@researchamerica.org

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