

# Impact of Oral Health Status and Oral Hygiene Practices on Quality of Life Among Low-Income Seniors



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# Background

- > Associations exist between poor oral health status and multiple health conditions among the elderly including:
  - localized infection and pain
  - increased risk of respiratory infections
  - complications of diabetes
  - under-nutrition
  - unplanned weight loss
- Poor oral health status has been associated with challenges in ability to eat, speak clearly, and socialize, all of which negatively impact quality of life.
- Medicare does not cover most dental care, dental procedures or supplies, such as cleanings, fillings, tooth extractions, dentures, dental plates, or other dental devices.
- Medicaid is required to cover comprehensive dental services for children, but coverage for adults is optional. In Kansas, two cleanings/year are covered for adults, but no other dental services are covered and few dentists accept Medicaid patients.
- A large proportion of older adults are unable to follow recommended Oral health research has focused on children and institutionalized older adults, with little attention being given to community-dwelling older adults or low-income older adults.

# Objective

Assess oral health status, access to dental care, oral health quality of life, and oral self-care habits of low-income seniors living in HUD-subsidized housing communities in a Midwest metropolitan area.

#### Methods

- > Observational study three assessment tools:
  - Oral Health Status Assessment Tool for Older Adults -13 indicators from Basic Screening Surveys: An Approach to Monitoring Community Oral Health in Older Adults, Association of State and Territorial Dental Directors, 2010
  - Oral Health Care Access and Oral Self-Care Behaviors Assessment
  - Oral Health Impact Profile (OHIP) 14 oral health quality of life
- Residents of eleven low-income, HUD-subsidized housing communities in a Midwest Metropolitan Statistical Area participated in 15-20 minute appointments scheduled on-site on weekday evenings
- > Extended Care Permit II Dental Hygienists completed the Oral Health Status Assessment
- Nursing students read Oral Health Care Access and Oral Self-Care Behaviors Assessment and OHIP 14 to participants and recorded responses
- > Recruitment: 3/23/17- 4/14/17; Data collection: 3/9/17 4/ 24/17
- > 174 residents consented to participate; 163 (94%) completed assessments
- Oral self-care products provided to participants following completion of assessments; value approximately \$10
- Study approved by University of Kansas School of Medicine Wichita Institutional Review Board

## Results

Race/Ethnicity

Gender

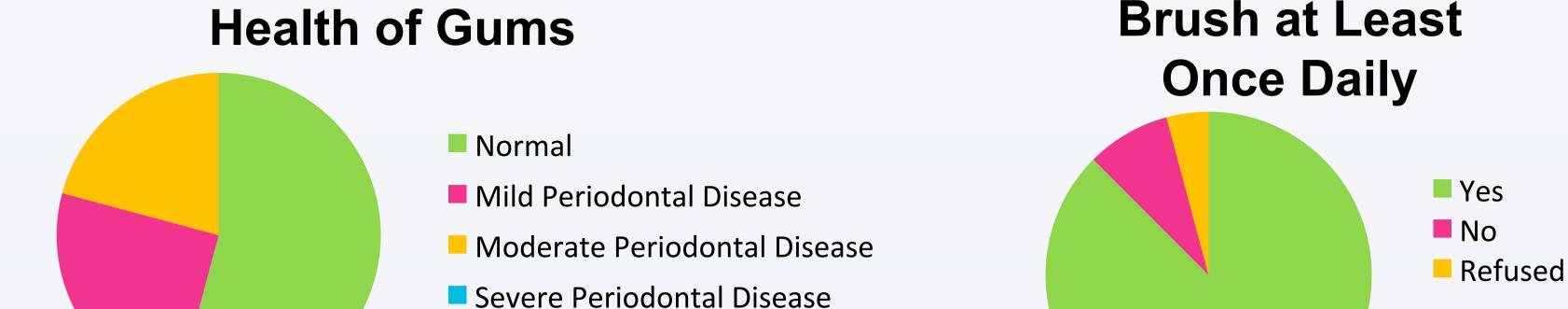
Yes No Unsure

Hispanic

- ❖Removable lower denture: 38%
  ❖Removable upper denture: 47%
  ❖Wear lower denture to eat: 33%
- Wear upper denture to eat: 44%
  Untreated decay: 39%
- Untreated root decay: 25%
- Root fragments: 22%
- ❖Dry cracked lips: 35%
- ❖ Dry cracked lips. 35 /6
  ❖ Dry cracked tongue: 37%
- ❖Dry cracked tongue: 37
  ❖Lack of saliva: 41%
- ❖Need for urgent or early dental care 49% Female Male
- - Yes No Yes No Refused
- aid Enrollment Current Dental Insurance
- Married/ Committed Single
  Education
  < than HS</li>
  High School
  Some College

**Marital Status** 

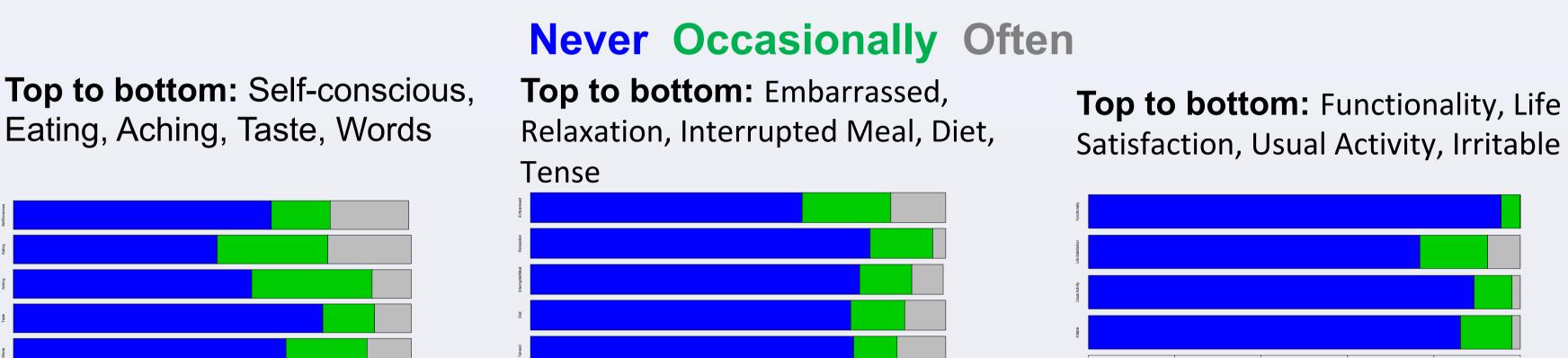
Some CollegeBachelor's or higher



**Oral Health Status & Oral Health Habits** 

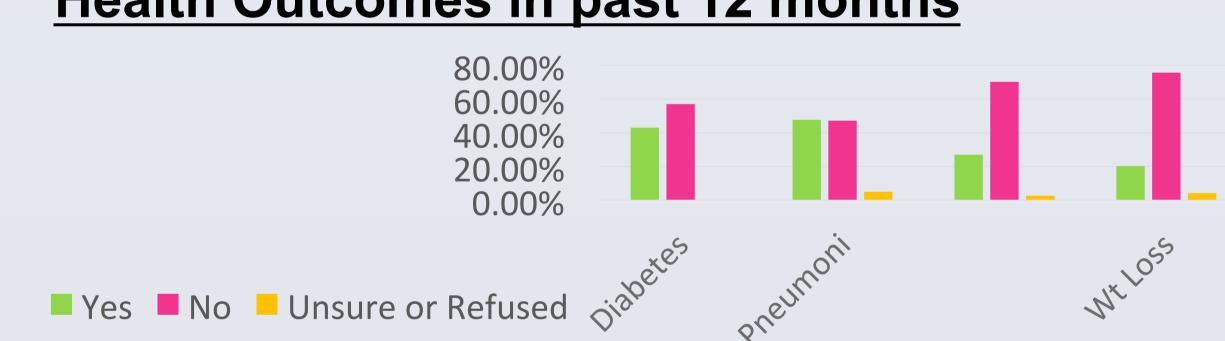


#### Oral Health Impact Profile 14: Oral Health Quality of Life Assessment



- Eating Discomfort correlated with untreated root decay, root fragments & mouth pain.
- > Feeling of embarrassment correlated with denture use.
- Risk of eating discomfort 12% higher among those with untreated root decay compared to those without untreated root decay and 87% higher among patients with painful mouth-ache compared to those without painful mouth-ache
- ➤ Risk of embarrassment 26% lower among denture users compared to those who did not use a denture.
- Risk of pneumonia among participants with "Normal" Miller Mobility 7% lower than "Mobile" Miller mobility
- Risk of "dry mouth" (lack of saliva) 4% higher among participants with untreated root decay compared to those without untreated root decay

## Health Outcomes in past 12 months



### **Limitations and Future Direction**

- Limitations: Study sample accurately represents the racial/ethnic makeup of low income seniors living in HUD-subsidized housing communities in this Midwest Metropolitan Statistical Area, however it does not represent the makeup of low-income seniors living independently or with family members or seniors living in rural/frontier communities.
- Future Directions: Replicate study targeting low-income seniors living independently or with family members in both metropolitan and rural areas, with an emphasis on achieving greater racial/ethnic diversity.

#### Conclusion

- Findings provide an overview of oral health status among low income seniors living in HUD-subsidized housing in a Midwest Metropolitan Statistical Area..
- Preliminary findings suggest quality of life and certain health outcomes could be impacted by oral health status among our study population.

## Acknowledgments

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