Module 15: Oral Health Across the Lifespan
Part 4: Oral Health and Older Adults

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Healthy People 2020 Objectives

- OH-3.2 Reduce the proportion of adults aged 65 to 74 years with untreated coronal caries
- OH-3.3 Reduce the proportion of adults aged 75 years and older with untreated root surface caries
- OH-5 Reduce the proportion of adults aged 45 to 74 years with moderate or severe periodontitis
Seniors (65 and older)

- Oral health problems can hinder a person’s ability to be free of pain and discomfort, to maintain a satisfying and nutritious diet, and to enjoy interpersonal relationships and a positive self-image.
- Overall, oral health problems are more frequently found in an older adult population for whom other health problems are often a priority.
- 7 percent of adults 65 years and older reported having tooth pain at least twice during the past 6 months.
Seniors (65 and older)

- 92% of seniors have had decay
- 15-25% of seniors have no teeth
- 23% have untreated caries
- 37-60% have periodontal disease
- 75% have at least 1 site of disease
- 90% have income less than or equal to 200% of the poverty level
- The increase in restorative work required by patients between now and 2030 will be in those over the age of 50
• National programs exist to improve the oral health of children
• No such programs exist to reduce the decay rates of the older population.
• Loss of teeth affects a patient's self-esteem, ability to communicate and nutrition. This places a population at risk for generalized disease development.
Loss of Teeth

- Decrease in dietary fiber consumption
- Increase in consumption of saturated fats
- Increased weight loss
- Decreased chewing ability-increases digestive issues
- Impaired speech
- Affects quality of life
- Decreased self-esteem
So What’s the Problem with Aging and Dental Health?

- The population is growing older!
- The growing older population is growing older while retaining their own teeth.
- The teeth that are being retained have more extensive (and older) restorations in them.
- The repair/reconstruction of these older teeth is extremely challenging.
- There is more dentin exposed on these old teeth.
- The mouths of older patients have less potential to remineralize.
- Older populations may be less able to maintain a clean mouth.
Dental Caries

TOOTH

BACTERIA

SUBSTRATE

SALIVA
Dental Caries

- TOOTH
- BACTERIA
- SUBSTRATE

Caries

SALIVA
Miller’s Acid Decalcification Theory

Step 1: Fermentable Carbohydrates → Acids
- Acidogenic Bacteria

Step 2: Tooth Mineral Acids → Calcium + Phosphate Ions
Effects of Medications

• 1000 common medications serve as cholinergic antagonists

(Sreebny & Schwartz 1998)
Root Caries

- Principle cause is inadequate hygiene and alteration of the oral environment.
- Age, in and of itself, does not result in root caries.
Root Caries

- An aging population has a decreasing number of teeth. There is an increasing number of carious lesions on the root.
- Therefore, the percentage of teeth with Class V lesions is radically higher.
- At age 64- 50% have at least 1 root surface with decay
- At age 79- 70% have at least 1 root surface with decay
# Root Caries

<table>
<thead>
<tr>
<th>Age Range</th>
<th># Teeth</th>
<th>Root Decayed Filled Surfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>65-74</td>
<td>19.3</td>
<td>2.2</td>
</tr>
<tr>
<td>75+</td>
<td>16.1</td>
<td>3.1</td>
</tr>
</tbody>
</table>
Consequences of Periodontal Disease

- Increased respiratory infections
- Decreased diabetes control
- Increased systemic inflammation
  - Colonization of intra-vascular plaques with perio pathogens
  - Increased risk of Heart disease and stroke?
Where are our patients found?

- General Dentist AND Interprofessional Team
- Homebound Living
- Independent Living
- Assisted Living Facility
- Skilled Nursing
- Practical Implant Therapy
- Repair of Prior Complex Therapy
- Non-Surgical Treatment
- Periodontal Care/Maintenance
- OMFS
- Restorative Treatment Of The Medically Complex