



NORTHWEST AIDS EDUCATION AND TRAINING CENTER

Basic Oral Health for HIV Patients

Mark M. Schubert, DDS, MSD

Professor, Oral Medicine, University of Washington

Dental Director, NW-AETC

Value of Oral Health

Projects positive image



Social acceptability



Self-confidence



Allows for normal oral function → Quality of life

Dental Disease Can Be Devastating

Can be devastating to patient's self-confidence!! Can project an image that influences how others perceive you!

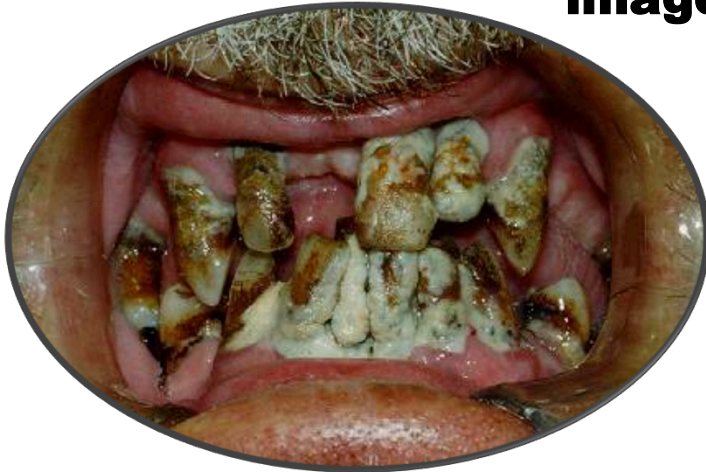
Socially displeasing

BAD BREATH

**Can affect one's
employability**

"Bad Appearance" = lower IQ

**Compromised
oral function**



Impact of Dental Health: The Obvious

- **Ideal basic oral health defined:**
 - No dental decay, fully functional dentition
 - No gingivitis / no periodontitis - No dental abscesses
 - No mucosal lesions / diseases; normal salivary function
- **Benefits of oral health**
 - Adequate oral function: Nutritional intake - speech
 - Prevention of pain and infection
 - Self-image: Esthetics – no bad breath - self-confidence

Poor oral health can adversely affect quality of life and limit career opportunities and social contact as result of facial appearance and odor

Impact of Dental Health: **Less Obvious**

Oral disease  **Systemic disease**

- Periodontal disease (infection) affects **diabetes control**


Poorly controlled diabetes worsens periodontal disease

- **Oral infections:** Deep space infections
Aspiration pneumonias (ICU patients)
Cardiac disease: Endocarditis, CAD?
Heme/Onc disease → systemic spread
Colon cancer associate with oral bacteria
Dental infections → flare of chronic GVHD

- **Dental infections →? Affect HIV replication**

- **SMOKING and Tobacco products**

Oral and Dental Disease

What are the most common dental problems for HIV(+) patients?

- ◆ **Dental Decay**
- ◆ **Gingivitis**
- ◆ **Periodontal Disease**

ORAL HEALTH for HIV(+) PATIENTS

- **Oral health should be integrated with primary care**
 - **Dental assessments and history should be part of primary health assessments: Dentition status / Gingival health status**
- **Referral mechanisms** need to be established between medical and dental providers
- **Dental providers should collaborate with the primary medical care providers: information on the medication regimen, immune status, and health of their patients**
- **Primary care providers need to perform oral health care services: oral health screening, oral health education, and patient referral**

Factors Affecting Access to Dental Care

- **Lack of dental insurance**
- **Limited financial resources**
- **Shortage of dentists trained/willing to treat HIV pts.**
- **Nonexistent adult dental Medicaid services**
- **Patient fear of and discomfort with dentists**
- **Perceived stigma within health care systems**
- **Lack of awareness of the importance of oral health**

Bacteria and Dental Health

Bacterial plaque - Biofilm:

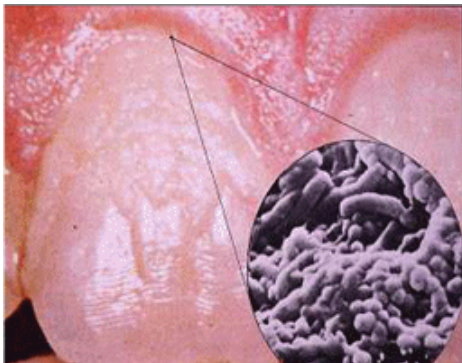
- 1) Proteins / carbohydrates (pellicle)
- 2) “Early” bacterial attachment
- 3) Secondary bacterial colonization

- Acids
- Enzymes
- Inflammatory products

Decalcification of enamel /
dentine

Inflammation / Infection of gingiva

About 1,000
bacterial species can
exist as part of the
dental biofilm



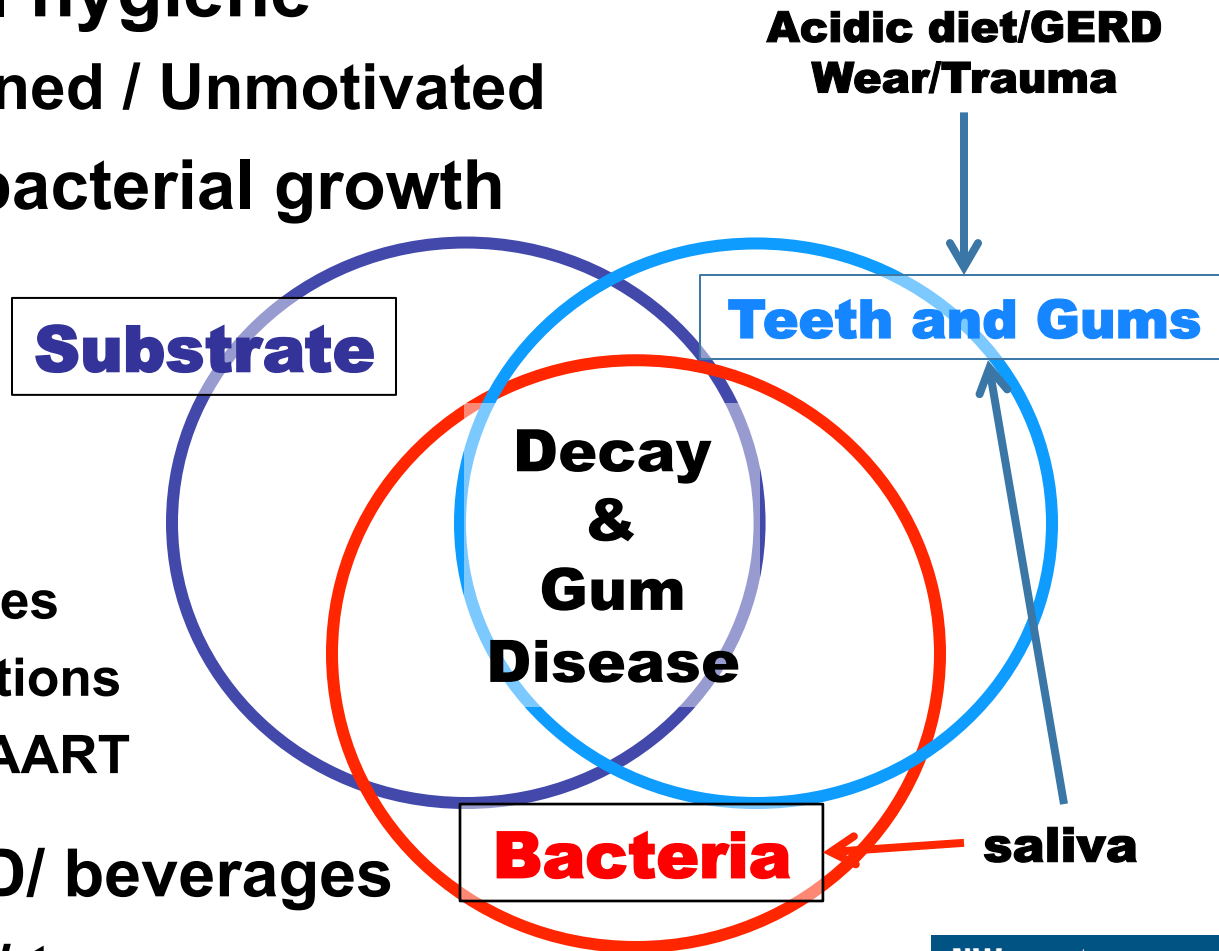
Factors Affecting Dental Health

- Inadequate oral hygiene
 - Not properly trained / Unmotivated
- Diet promoting bacterial growth

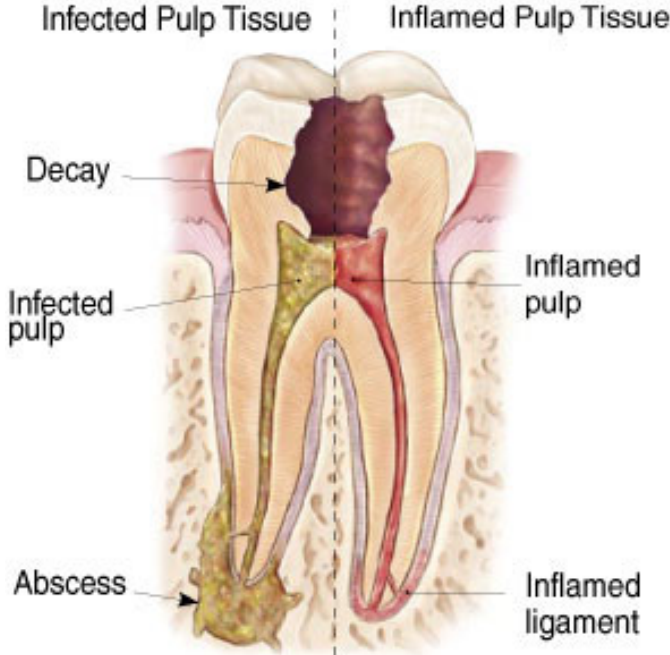
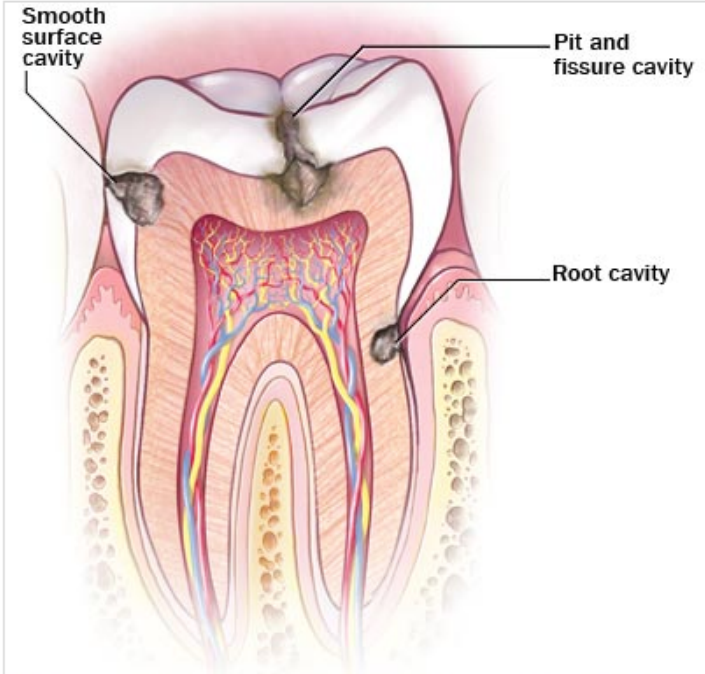
- Xerostomia:

- Medical treatments
 - Radiation
 - Medications
- Autoimmune diseases
- Salivary gland infections
- HIV infection and HAART

- Acidic diet/GERD/ beverages
- Excessive wear / trauma



Bacterial-Induced Dental Disease





Tooth Decay Gum Disease



Basic Oral Hygiene

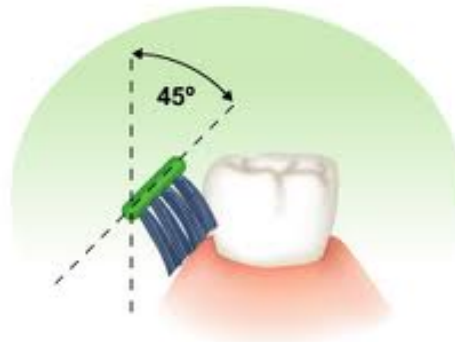
Achieving Maximum Oral Health

Unfortunately there are no cell phone apps to give us oral health
– WE have to do it yourself!



Tooth Brushing

- Soft toothbrush
- Brushing techniques
- Toothpastes
- Remineralizing pastes
 - Calcium / phosphate
 - **Fluorides**



Topical Fluorides

- **Prescription Strength – 1.1% Neutral Sodium Fl**
 - Prevents tooth decay
 - Re-mineralize / Slow or arrest active decay
 - Especially important for xerostomia patients
- **Easy to use:**
 - Brush on techniques
 - Oral rinses
 - Fluoride trays
 - Apply once a day
- **Inexpensive “dental insurance”**

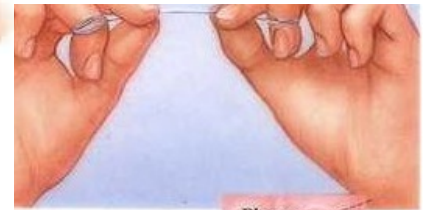
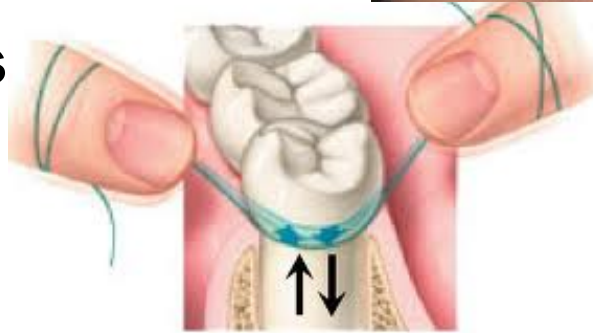
Flossing

■ Floss

- Waxed / Unwaxed
- Fine / Extra- fine
- Glide™ / "teflon" floss

■ Hand flossing

■ Flossers

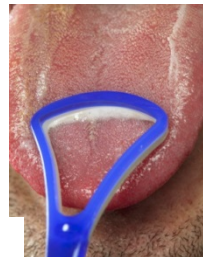
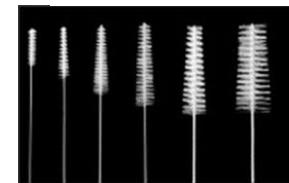


Maximizing Effectiveness of Oral Hygiene

- **Be sure “equipment” works for patient**
 - Electric vs manual toothbrush
 - Type of floss and hands vs flosser
- **Correct technique is critical!!**
 - Manual dexterity – DO IT RIGHT
 - Attention to detail
- **2x/day brushing; 1x/day flossing**
 - Don't get lazy – be consistent
 - Modify habits to ensure success
 - Multi-task: floss while reading email, TV, etc.

Adjunctive Oral Hygiene Aids

- **Antibacterial rinses**
 - Chlorhexidine
 - Doxycycline / Minocycline
- **Interproximal brushes**
- **Tongue scrapers**
- **Water irrigators**



Oral Health for HIV+ Patients

- **Oral health supports systemic health**
- **Effective oral hygiene requires effective training/ follow-up**
 - Basic oral hygiene needs to be consistent and done correctly!
 - Oral hygiene protocols: Basic protocols but adapted and customized for specific patient needs and situations
- **Understand the basics of dental “infections”**
Dental decay / Gingivitis / Periodontal disease

Dental health should be integrated into and supported by primary health care providers

AND

primary health should be integrated into and supported by routine dental health care providers

Beautiful Smiles – Fresh Breath



**But
healthy,
too!**





NORTHWEST AIDS EDUCATION AND TRAINING CENTER

Basic Oral Health for HIV Patients

Thank you

Questions??

Comments!!