Oral Health in the Nursing Home
A Discussion for Social Workers

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Objectives
- Describe the connection between oral health and quality of life
- Explain how medical conditions affect oral health and vice versa
- Review the most common oral health concerns of NH residents
- Discuss ways in which staff can help residents maintain or improve oral health
- Encourage social workers to advocate for access to oral health care

Why is oral health important for older adults in nursing homes?

Why is Oral Health Important for Older Adults?

Psychosocial Functions & Quality of Life
- Good appearance & socialization & kissing;
- Pleasure of sucking eating & drinking;
- Ability to chew comfortably;
- Being free of pain and discomfort;
- Ability to speak & communicate;
(Strauss RP, Hunt RJ. J Am Dent Assoc 1993;124:105-110)

Medical Reasons
- Prevention of medical problems (e.g., bacteremias, aspiration pneumonia)
- Management of medication side-effects (e.g., dry mouth, bad breath, speech problems, swallowing problems, tardive dyskinesia, gingival overgrowth)
- Maintenance of adequate nutrition & hydration;
- Managing consequences of co-morbid medical conditions such as Sjogren’s Syndrome, arthritis, strokes, radiation & chemotherapy;
Common Oral Problems in Elderly Persons in Nursing Homes

1. **Tooth loss**;
2. Caries – root caries (decay);
3. Periodontal disease (gum disease);
4. Drug induced dental disease;
5. Oral mucosal problems;
   - Xerostomia (dry mouth);
   - Candidiasis (fungal infection);
   - Squamous cell carcinoma (mouth cancer);

**Tooth Loss**
- If the patient is cognitively impaired, unable to maintain hygiene and dependent on others, is a partial denture required?
- If the patient is no longer aware of esthetics and dependent on others, is a partial denture required even if the family asks for it?

**Caries (decay) is caused by Plaque**

**Caries is a Chronic Infectious Disease**
**Root Surface Caries (difficult to treat)**

**Gingivitis [Reversible Gum Disease]**

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**Warning Signs for Periodontal Disease**

1. Gums that bleed when brushed.
2. Gums that are red, swollen or tender.
3. Gums that have pulled away from the teeth.
4. Pus between the gums and the teeth.
5. Permanent teeth that are loose or displaced.
6. Any change in the way teeth come together.
7. Bad breath

**Diabetic Patient**

Bone loss after one year

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**Oral Health Is Dependent On Maintenance**

How difficult is it for the resident to perform daily oral hygiene independently or does the resident need help if so who is going to help?

**Oral Hygiene Care Challenges**

Modified dental equipment
Mrs. Jean F.
Age 86;
Married living in assisted living;
Retired elementary teacher;
Severe Osteoarthritis of the hand, difficulty holding a toothbrush.

Mrs. Jean F
She has severe arthritis of the hands and fingers;
Toothbrush with a modified handle;

Electric Toothbrushes
- Work well for some people but not for others;
- Types: Rotary versus ultrasonic;
- Good if people have arthritis;
- May not be good if people have dementia - noise and vibration in their head can be scary;

Mr. John R
Age 72
After cleaning the teeth and extracting #24 & #25 & 31 is an RPD required?
Is oral hygiene instruction effective in this population? If not what do we do?

### Xerostomia (dry mouth)
Results in:
- Decrease in salivary pH buffer capacity, remineralization capacity, antimicrobial capacity and oral cleansing;
- Rampant dental decay (caries) is possible;
- Increased risk of fungal, bacterial, & viral infections;
- Increased tooth attrition and abrasion;
- Speech, eating, chewing, & swallowing problems;
- Burning mouth;
- Denture problems;
- Salivary gland infections;
- Gingivitis and plaque accumulation;
- Risk of aspiration pneumonia

### Some Drug classes which can cause Xerostomia
- Anticholinergics – Banthine, Bentyl;
- Antihistamines - Benadryl, Chlor-Trimeton;
- Tricyclic Antidepressants – Elavil, Tofranil;
- Phenothiazines – Thorazine, Mellaril, Haldol;
- Diuretics – Diuril, Hydrochlorothiazide;
- Bronchodilators – Theophylline;

### Patient Management of Xerostomia
- Extensive Counseling;
- Temporary palliation;
- Saliva Substitutes;
- Saliva Stimulants;
- Caries Prevention;
- Dietary changes;
- Environmental changes;

### Xerostomia - Patient’s Perception of a Dry Mouth
Due to disease e.g. Parkinson’s, Depression, etc.
Due to drugs e.g. Antihistamines, diuretics, etc.
Xerostomia (Advice for Patients)
- Sip cool water during the day or let ice melt in your mouth;
- Drink milk with your meals;
- Avoid alcohol or alcohol containing mouth washes;
- Restrict caffeine;
- Use sugar-free food or candy;
- Use lip balm or a lanolin product on your lips – avoid Vaseline;
- Sleep on your side;
- See your dentist more frequently;

 Oral Symptoms reported by Terminally ill Patients [N=70]
- Dryness during the day 97%
- Dryness at night 84%
- Difficulty talking 66%
- Altered taste sensation 40%
- Difficulty eating 36%
- Soreness 22%


Hospice patients Oral Problems[N=31]
- Dry mouth 36%
- Acute gingivitis 36%
- Intraoral swelling 29%
- Mucosal ulcers 26%
- Cracked lips 16%
- Glossitis 13%
- Candidiasis 10%


Symptom Assessment
- Results from a Questionnaire;
- "For what percentage of nursing home patients is dry mouth a problem?"
- response:
  - Patients 73%
  - Physicians 16%
  - Nurses 39%

IMPORTANCE OF MAINTAINING OR IMPROVING DENTAL OR ORAL CONDITIONS

Gordon SR et al., Gerodontics 1:125-129, 1985
People with Dementia

- Age 60 – 64: 1%
- Age 65 – 74: 2% to 5%
- Age 75 – 84: 7% to 9%
- Age 85+: 30% to 50%

- Alzheimer's disease;
- Vascular dementia due to CVA's;
- Lewy Body dementia;
- Parkinson's disease;
- Pick's disease;
- Alcohol induced dementia;

- More coronal and root caries, retained roots, missing teeth and fewer filled teeth;
- Taking neuroleptic medication with high anticholinergic adverse effects.

People With Dementia

More coronal and root caries, retained roots, missing teeth and fewer filled teeth:
- No private health insurance;
- Not attended dentist in previous 12 months;
- More functionally dependent;
- Need assistance with oral hygiene care;
- Carers have more difficulties with oral hygiene care;
- Not able to eat harder food types;
- Swallowing problems;
- Taking neuroleptic medication with high anticholinergic adverse side effects;

Sources: The Adelaide Dental Study of Nursing Homes The Oral Health of Community-Dwelling Older Adults with Dementia

In Cognitively Impaired Adults

what are some of the issues?

- How do we know when the patient has dental pain?
- When should we extract teeth?
- When should we replace missing teeth with a prosthesis (denture)?
- When should we render them edentulous?
- Should we make a denture for a patient if the family wants it although it may not directly benefit the patient?

Communication of Oral Discomfort?

- disinterest in food
- "pulling" at the face or mouth
- chewing of the lip, tongue or hands
- grinding of teeth or dentures
- not wearing dentures
- aggression (especially during activities of daily living)
- alterations in ADLs (somnolence, tiring, screaming and restlessness)

Older Adults in Nursing Homes may have:

- Lack of oral hygiene independence;
- Decreased ability to communicate dental pain & problems to others;
- Increased barriers to obtaining dental tx – e.g., transport, financial, physical, cognitive
- Decreased recognition by both patient & carer of significance of the consequences of dental pain and dental problems;
- Decreased perception by both patient & carer of the need for dental treatment;
As a Result there is a High Risk of:
- Neglect of oral hygiene care &/or dental treatment;
- Ignorance of developing dental pain & problems;
- Interactions with dental professionals become difficult & complex;
- Need for expensive & high risk sedative/anesthetic procedures to be able to do dental treatment;
- Compromised Quality of Life;
- Development of nutritional, behavioral & medical consequences;

Aspiration Pneumonia
- Older adults who have lost their ability to feed themselves cannot maintain dental hygiene independently are at high risk of aspiration pneumonia.


Aspiration Pneumonia
- Leading cause of death in nursing homes
- Second most common cause for hospitalizations in nursing homes
- Aspiration of bacteria into the lungs
  - Difficulty swallowing
  - Loss of protective reflexes (cough)
- Pneumonia
  - Fever
  - Altered mental status
  - Decreased oral intake
- Can lead to respiratory failure or sepsis → Death

Loesche et al, 1998
Sarin et Al 2008

Aspiration Pneumonia
- Risk factors:
  - Poor OH
  - Immunocompromised patients (including recent antibiotic use)
  - Alzheimer's/dementia
  - Psychotropic and sedative drugs
  - Active periodontal disease
  - Bedridden
  - h/o CVA, bulbar palsies, esophageal disease, COPD, CHF, GERD (Langmore, 1998).
  - Intubator/ventilator use
  - Known aspirators
  - Dysphagia, decreased gag reflex, shallow cough or other abnormalities of the protective airway mechanism
  - Poorly fitting prosthetics
  - Xerostomia


Omnibus Budget Regulations Act (OBRA)1987
- Federal law for nursing homes receiving federal funds (Medicare, Medicaid);
- State surveyors assess the quality of care in LTC facilities;
- Focused on QOL issues;
- Guidelines for implementation of OBRA led to the development of the Resident Assessment Instrument (RAI) which has 2 components:
  - Minimum Data Set (MDS)
  - Resident Assessment Protocol (RAP)

Dept. of Inspection and Appeals Rules & Regulations (481-58.23)
- NH personnel must promptly refer residents with lost or stolen dentures to a dentist
  - Promptly means within reason, as soon as the dentures are lost or damaged;
  - Referral does not mean the resident must see the dentist at that time, but does mean that an appointment is made or the facility is aggressively working to replace/repair the dentures;
IOWA LTC

In a report on 4,100 Iowa LTC residents from June 1996-June 1997:
- 2 oral problems were identified as a result of weight loss;
- No oral problems were identified through the MDS/RAP trigger system;
- No nursing facilities were cited for problems with lack of provision of oral health care;


Dental In-service for Nurses and Nursing Assistants

Program works if:
- improve traditional theoretical education model
- more practically oriented and “hands-on”
- one-on-one with care-resistant residents
- address oral hygiene care problems (e.g., not opening mouth, biting toothbrush)
- ongoing care giver support
- establish “dental liaison/oral hygiene care staff”
- regular presence of dental professionals on-site

Challenges for dentists treating frail older patients living in Nursing Homes

- Increasing complexity of medical conditions and polypharmacy;
- Increased chair time needed for patient management;
- Lack of financial ability to pay for treatment;
- Organizing premedication and medication changes with their physician;
- Traveling off-site to nursing homes to treat functionally dependent patients;
- Effective communication between the dental team, the medical team, the patient and care-givers;

1979 Iowa Geriatric Mobile Unit [GMU] Funded by HRA & Heritage Agency on Aging

Special Care Clinic 1985. 8 Chairs

Mobile Equipment

- DNTL;
- A-Dec
New Van 2003

New DNTL mobile equipment

Nomad X-ray Unit

Mrs. Myrtle R.
Dental Problems
- Carious tooth #7;
- Worn teeth;
- Scarred palate where carcinoma of the palate was removed 3 years ago;
- Very dry mouth;
- Candidiasis of the palate and angular cheilitis;
- She resists oral care and is demented;

Treatment Needs
- Prophylaxis;
- Treatment of candidiasis – topical ketoconazole 2% cream;
- Endodontics for #7 or extraction;
- If endodontics then restoration of #7 with composite resin;
- Restorative treatment is only possible with the use of premedication e.g. Serax (10mg) or Ativan (1.00mg) one hour prior to Tx.
- Requires informed consent. Husband refused to give informed consent for premedication.

Questions
- What is the appropriate response to a family member who has power of attorney for health care & finances, who refuses necessary dental treatment for an elderly patient of record who is in a long term care institution and desires care?
Thank You