Understanding the Oral Health Needs of Individuals with Intellectual and Developmental Disabilities: The Nurse’s Role

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Oral Health Care for People with Disabilities

Developmental disabilities affect the mind, the body and the skills people use in everyday life. People with disabilities often need extra help to achieve and maintain good oral health.
Oral Health and Lifelong Disabilities

“Dental problems are commonly observed in people with lifelong disabilities and generally are related to their cognitive and/or physical impairments, which may lead to difficulties in learning and/or practicing preventative dental hygiene” (Stiefel, Truelove, Chin & Mandel, 1992).
Your Role
It Starts with YOU!

Proper oral health care starts with good home care. It is your responsibility to make sure individuals are brushing and flossing daily and that staff is properly trained to assist with oral hygiene and make this goal possible.
Oral Health Care - Your Role as a Nurse

- Prevention of oral health diseases and disorders
- Injury prevention
- Decrease/prevent infection and tooth loss
- Promote proper oral healthcare
- Education, training and resources
Health Disorders Relating to Poor Oral Health

• Diabetes
  • Research shows that there is an increased prevalence of gum disease among those with diabetes – American Diabetes Association
Health Disorders Relating to Poor Oral Health

- People with diabetes are more susceptible to:
  - Serious gum disease
    - Gum disease may have the potential to affect blood glucose control
  - Gingivitis (an early stage of gum disease)
  - Periodontitis (serious gum disease)
- People with diabetes are at an increased risk for serious gum disease because they are generally more susceptible to bacterial infection and have a decreased ability to fight bacteria that invade the gums

American Diabetes Association
Health Disorders Relating to Poor Oral Health

- **Lung Conditions**
  - Periodontal disease may increase the amount of bacteria in the lungs
  - Poor oral health may increase the risk of aspiration pneumonia
  - Inhaling bacteria present in the mouth into the lungs is now believed to both cause respiratory infections and make existing lung conditions worse. In addition, the inflammation in your mouth triggers the release of chemicals that can worsen lung inflammation
Health Disorders
Relating to Poor Oral Health

- **Cardiovascular disease**
  - Some research suggests that heart disease, clogged arteries and stroke may be linked to oral bacteria, possibly due to chronic inflammation from periodontitis — a severe form of gum disease
  - According to the American Academy of Periodontology, people with periodontal disease are almost twice as likely to have coronary artery disease (also called heart disease)
  - Bacteria from the mouth enters the bloodstream through the gums and have been found clumped in artery plaques sticking to the fatty plaques in the bloodstream, directly contributing to blockages
DDS Requirements (Summary)

- At least 2 visual and tactile dental visits (includes scaling/prophylaxis) per year
- 1-2 radiographs per year
- 1-2 soft tissue evaluations for those without natural teeth
- No more than every 3 years, full mouth rehabilitation if necessary

* Information is taken from the DDS Dental Health and Wellness Standards
The Mouth
The Mouth

Your mouth is important because it helps you to:

Eat/Chew

Speak
Smile
Frown
Drink
Swallow
Parts of the Mouth
Common Oral Health Diseases and Disorders
Common Oral Health Diseases and Disorders

- Dental caries (cavities)
- Periodontal disease (gum disease)
- Bruxism (teeth grinding)
- Xerostoma (dry mouth)

Compared to the general population, it is often found that individuals with disabilities suffer from higher rates of tooth loss, periodontal disease, bruxism and poor oral hygiene.
Dental Caries/Cavities

- Tooth decay/holes in the teeth
- Localized destruction to the enamel and underlying dentine
- Cavities are formed when the bacteria (germs) in the mouth uses the sugar in food to make acid
- The acid eats away at teeth and cavities are formed
- Treatment(s) include topical fluoride solution and/or restorative procedures – fillings
How Do You Get Cavities?

• Eating sugary foods and liquids frequently throughout the day
• Not brushing daily
• Not flossing daily
• Not using fluoride toothpaste
• Not visiting the dentist on a regular basis

Note: Some medications have sugar too!
Preventing Cavities

- Brush teeth **at least 2 times per day** every day (once in the morning and once before bedtime)
- Use **fluoride toothpaste** and a toothbrush with **soft flexible bristles**
- Floss **at least 1 time per day** every day (before bedtime)
- See the dentist **at least 2 times** every year (unless otherwise specified by the individual’s dentist)
- **Do not snack on sugary foods**

Are there any foods that are good for the teeth?
Periodontal Disease

- Disease of the gum and supporting bone disease
- Most common type is gingivitis
- Bacterial
- Dental plaque and bacteria that has collected around the gum line
- Red swollen gums, bleeding gums, bad breath and loose teeth
- Treatment includes:
  - Good oral hygiene and dental prophylaxis (by a dentist)
  - Gum surgery may be necessary in later stages
Bruxism/Grinding Teeth

- Clenching and/or grinding of the teeth (day and/or night)
- Pain in the jaw, “clicking” jaw, limited jaw movement and tension headaches
- Flattened occlusal surface of the teeth and cracks in teeth
- Treatment Includes:
  - Occlusal appliance made of hard acrylic and soft material inside that fits over the occlusal and incisal surfaces of the teeth
  - Stress relief/meditation
Xerostomia/Dry Mouth

- Salivary gland dysfunction/reduction in saliva
- Often found in older adults
- Results often from medication use
- Decreased saliva in the mouth; saliva does not have the “power” to kill germs in the mouth; dry mouth, burning sensation and increased risk of dental caries

Treatment Includes:
- Lidocaine provides temporary relief
- Over the counter mouth rinse such as Biotene
- Drink a lot of water
Over Time...

- Pain perception is reduced making it difficult to detect painful toothaches
- Enamel wears away and teeth may become sensitive to heat, cold and “sweet”
- Gums recede from teeth (may cause pain along the gum line)
- Toothpaste and mouth rinses for sensitive teeth may be used to combat the pain
Oral Health in the Home
How to Brush

• Put a pea-sized amount of fluoride toothpaste on a soft bristled toothbrush
• Place the toothbrush alongside the teeth
• **Gently** move the brush in short strokes cleaning one tooth at a time
• Brush teeth for at least 2 minutes
• Brush everywhere - that includes all sides and surfaces of the teeth
• **Brush the tongue and the roof of the mouth**
• Get a new toothbrush with soft flexible bristles at least every 3 months
If an Individual is Unable to Brush His/Her Own Teeth...

• Wash your hands and put on disposable gloves
• Put a pea-sized amount of fluoride toothpaste on a soft bristled toothbrush
• Place the toothbrush alongside the individual’s teeth
• Gently move the brush in short strokes cleaning one tooth at a time
• Brush teeth for at least 2 minutes
• Brush everywhere - that includes all sides and surfaces of the teeth
• Brush the tongue and the roof of the mouth
• Rinse with plain water or sweep out with gauze
• Get a new toothbrush with soft flexible bristles at least every 3 months
Remember - Be Flexible!

- Teeth brushing can occur anywhere as long as you have your supplies:
  - Toothbrush
  - Toothpaste
  - Floss
  - Bowl or glass of water
  - Good lighting
Swallowing Issues?

• If an individual has swallowing issues, he/she should not gargle after brushing to prevent the possible intake of water or mouth wash if there is a risk of aspiration with thin liquids

• Individual should be monitored by staff at all times

• If the individual can gargle or hold liquid in the mouth, give the individual a small amount of liquid to “swish” around in the mouth after brushing in a head down/chin tuck position

• Staff must ensure that all liquid and toothpaste is spat out (or swiped out) and not consumed by mistake
Brushing
Step 1

1. Place your toothbrush at a 45 degree angle to your gums.
Brushing
Step 2

2. Brush gently in a circular motion.
Brushing
Step 3

3. Brush the outer, inner, and chewing surfaces of each tooth.
Brushing
Step 4

4. Use the tip of your brush for the inner surface of your front teeth.
Successful Brushing with Your Assistance

- Make the toothbrush easier to hold (Velcro strap)
- Make toothbrush handle bigger (tennis balls or bicycle grip)
- Other toothbrush options (electric toothbrushes)
- Hand over hand technique

Be sure to examine the individual’s mouth on a regular basis for signs of redness, swelling or bleeding
“Tell-Show-Do” Approach

When assisting a more independent individual that needs extra assistance with brushing, try the “Tell – Show – Do” Approach

• **TELL** the individual each step before you do it

• **SHOW** how you are going to do each step before you do it

• **DO** the steps in the same way you explained
Examples of Toothbrushes
Mouth Prop

• Used to keep the mouth open while assistance is given during brushing and flossing
• Soft material – will not damage teeth
• Saves fingers
Positioning

Positioning for treating an individual in a wheelchair.
Stand behind the individual or lean against a wall for additional support. Use your arm to hold the person's head gently against your body.
If the individual you are helping is in a wheelchair, sit behind it. Lock the wheels, then tilt the chair into your lap.
Flossing

• Floss to clean between the teeth
• How to floss:
  • Take about 18 inches of dental floss and wrap one end around each of your middle fingers
  • Use your thumbs and index fingers to gently slide the floss between two teeth, using an up and down motion
  • Once at the gum line, gently pull both ends of the floss in the same direction to form a C shape against one tooth. Pull the floss tightly and move it up and down against one tooth
  • Push the floss against the other tooth and repeat the motion
  • Do this for all of your teeth
Flossing
Step 1

1. Wind about 18 inches of floss around your fingers as shown. Most of it should be wrapped around one finger, and as the floss is used, the other finger takes it up.
Flossing
Step 2

2. Use your thumbs and forefingers to guide about one inch of floss between your teeth.
Flossing
Step 3

3. Holding the floss tightly, gently saw the floss between your teeth. Then curve the floss into a C-shape against one tooth and gently slide it beneath your gums.
Flossing
Step 4

4. Slide the floss up and down, repeating for each tooth.
Examples of Floss and Floss Holders
Denture Care 101

- Dentures also need regular care to ensure a healthy mouth
- Dentures should be checked regularly for proper fit.
- Dentures should be cleaned at least once a day to prevent staining, bad breath and gum irritation.
Desensitization

• Used to reduce fear that an individual may experience when faced with the unknown or an unpleasant experience
• Provides relaxation
• Examples may include:
  • Music
  • Gentle touch
  • Oral motor exercises
  • Calm voice
• Familiar staff
• Follow the same routine each time
• Focus only on the individual (no talking on the phone or other distractions)
Desensitization Example

A successful oral desensitization program should be carried out in successive steps. Materials that could be used include a cotton ball, gauze, Q-tip or washcloth. Here’s an example:

- **Step 1**: Teach the patient to tolerate facial contact—gently rub cotton ball, gauze, or washcloth on the face a few times daily.

- **Step 2**: Teach toleration of oral contact—once the individual is comfortable with facial contact, gradually approach lips, teeth, tongue and gingiva with the material used above.

- **Step 3**: Introduction of a toothbrush—at first, only a few teeth and surfaces may be accessed. Gradually, and with much patience, effective tooth brushing can be achieved.

Coordination of Dental Care with Other Healthcare Providers

Team approach to care that includes medical providers, the dentist, the nurse, staff, etc.

- Health Passport
  - Medical status
  - Mental health status
  - Medications
  - Allergies
Before the Dental Exam

• Update the Health Passport (if necessary)
• Complete consult sheets – give complete information i.e. questions and concerns
• Clean the teeth (brushed and flossed) – many individuals are coming to the dentist with food and debris in their teeth
• Desensitization program
• Sedation (if necessary)
• Develop list of questions or concerns
• Call dentist office before appointment if there are questions
The Big Day - Dental Exam

- Be on time
- Desensitization (if needed)
- Sedation (if needed)
- Comfort the individual; make sure he/she knows about the appointment and what to expect
After the Dental Exam

• If deep scaling was done, assess for pain/sensitivity
• Update treatment plan and Health Care Management Plan as needed
• Give instructions about any changes to DSPs
When to Call the Dentist?

• Experiencing toothache
• Broken or cracked tooth
• Bitten lip or tongue (that does not heal)
• Jaw (pain and/or noted misalignment)
• Objects caught between teeth
• Any red or white spots or sores that bleed and do not go away within two weeks
• And of course to make regular dental appointments for the individual
Prevention

• Limit sugary snacks
• Brush two times per day (unless otherwise stated)
• Floss one time per day (unless otherwise stated)
• Provide education on proper oral health care
• Training for Direct Support Professionals
• Six month check-ups (unless otherwise stated)
• Lead by example
Resources