Practical Oral Care for People With Developmental Disabilities

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Developmental disabilities such as autism, cerebral palsy, Down syndrome, and intellectual disability are present during childhood or adolescence and last a lifetime. They affect the mind, the body, and the skills people use in everyday life: thinking, talking, and self-care. People with disabilities often need extra help to achieve and maintain good health. Oral health is no exception.

Over the past three decades, a trend toward deinstitutionalization has brought people of all ages and levels of disability into the fabric of our communities. Today, approximately 80 percent of those with developmental disabilities are living in community-based group residences or at home with their families. People with disabilities and their caregivers now look to providers in the community for dental services.

Providing oral care to patients with developmental disabilities requires adaptation of the skills you use every day. In fact, most people with mild or moderate developmental disabilities can be treated successfully in the general practice setting. This booklet presents an overview of physical, mental, and behavioral challenges common in these patients and offers strategies for providing oral care.

Health Challenges and Strategies for Care

Before the appointment, obtain and review the patient's medical history. Consultation with physicians, family, and caregivers is essential to assembling an accurate medical history. Also, determine who can legally provide informed consent for treatment.

Focusing on each person's specific needs is the first step toward achieving better oral health.

MENTAL CAPABILITIES vary in people with developmental disabilities and influence how well they can follow directions in the operatory and at home.

- Determine each patient's mental capabilities and communication skills. Talk with caregivers about how the patient's abilities might affect oral health care. Be receptive to their thoughts and ideas on how to make the experience a success.
- Allow time to introduce concepts in language that patients can understand.
- Communicate respectfully with your patients and comfort those who resist dental care. Repeat instructions when necessary and involve your patients in hands-on demonstrations.

BEHAVIOR PROBLEMS can complicate oral health care. Anxiety and fear about dental treatment can cause some patients to be uncooperative. Behaviors may range from fidgeting or temper tantrums to violent, self-injurious behavior such as head banging. This is challenging for everyone, but the following strategies can help reduce behavior problems:

- Set the stage for a successful visit by involving the entire dental team—from the receptionist's friendly greeting to the caring attitude of the dental assistant in the operatory.
- Arrange for a desensitizing appointment to help the patient become familiar with the office, staff, and equipment before treatment begins.
- Try to gain cooperation in the least restrictive manner. Some patients' behavior may improve if they bring comfort items such as a stuffed animal or a blanket. Asking the caregiver to sit nearby or hold the patient's hand may be helpful as well.
- Make appointments short whenever possible, providing only the treatment that the patient can tolerate. Praise and reinforce good behavior and try to end each appointment on a good note.
- Use immobilization techniques only when absolutely necessary to protect the patient and staff during dental treatment—not as a convenience. There are no universal guidelines on immobilization that apply to all treatment settings. Before employing any kind of immobilization, it may help to consult available guidelines on federally funded care, your State department of mental health/disabilities, and your State Dental Practice Act. Guidelines on behavior management published by the American Academy of Pediatric Dentistry (*www.aapd.org*) may also be useful. Obtain consent from your patient's legal guardian and choose the least restrictive technique that will allow you to provide care safely. Immobilization should not cause physical injury or undue discomfort.

MOBILITY PROBLEMS are a concern for many people with disabilities; some rely on a wheelchair or a walker to move around.

- Observe the physical impact a disability has and how a particular patient moves. Look for challenges such as uncontrolled body movements or concerns about posture.
- Maintain a clear path for movement throughout the treatment setting.

- If you need to transfer your patient from a wheelchair to the dental chair, ask the patient or caregiver about special preferences such as padding, pillows, or other things you can provide. Often the patient or caregiver can explain how to make a smooth transfer.
- Certain patients cannot be moved into the dental chair but instead must be treated in their wheelchairs. Some wheelchairs recline or are specially molded to fit people's bodies. Lock the wheels, then slip a sliding board (also called a transfer board) behind the patient's back to support the head and neck.

Positioning for treating a patient in a wheelchair. Note the support a sliding board can provide. Sliding or transfer boards are available from home health care companies.

NEUROMUSCULAR PROBLEMS can affect the mouth. Some people with disabilities have persistently rigid or loose masticatory muscles. Others have drooling, gagging, and swallowing problems that complicate oral care.

- If a patient has a gagging problem, schedule an early morning appointment, before eating or drinking. Help minimize the gag reflex by placing your patient's chin in a neutral or downward position.
- If your patient has swallowing problems, tilt the head slightly to one side and place his or her body in a more upright position.
- If you use local anesthesia, be sure your patient does not chew the tongue or cheek. A short-lasting form of anesthesia may work well.

UNCONTROLLED BODY MOVEMENTS can jeopardize safety and your ability to deliver dental care. Pay special attention to the following:

- ***Treatment setting:*** Make the treatment setting calm and supportive. Place dental instruments behind the patient and carefully position other objects such as cords and the light above the dental chair.
- ***Patient's position:*** Determine in advance whether a patient will need to be treated in his or her wheelchair. If not, keep the patient in the center of the dental chair. Pillows can help maintain a comfortable position.
- ***Your position:*** Observe the patient's movements and look for patterns to help anticipate direction. Place yourself behind the patient and gently cradle the head to provide support. Rest your hand around the mandible. (See the illustration above.)

Make the treatment setting calm and supportive.

CARDIAC DISORDERS, particularly mitral valve prolapse and heart valve damage, are common in people with developmental disabilities such as Down syndrome. Consult the patient's physician if you have questions about the medical history and the need for antibiotic prophylaxis (*www.americanheart.org*).

GASTROESOPHAGEAL REFLUX sometimes affects people with central nervous system disorders such as cerebral palsy. Teeth may be sensitive or display signs of erosion. Consult your patient's physician about the management of reflux.

- Place patients in a slightly upright position for treatment.
- Talk with patients and caregivers about rinsing with plain water or a water and baking soda solution. Doing so at least four times a day can help mitigate the effects of gastric acid. Stress that using a fluoride gel, rinse, or toothpaste every day is essential.

SEIZURES accompany many developmental disabilities. The mouth is always at risk during a seizure: Patients may chip teeth or bite the tongue or cheeks. Persons with controlled seizure disorders can easily be treated in the general dental office.

Record in the patient's chart strategies that were successful in providing care. Note your patient's preferences and other unique details that will facilitate treatment, such as music, comfort items, and flavor choices.

- Consult your patient's physician. Record information in the chart about the frequency of seizures and the medications used to control them. Determine before the appointment whether medications have been taken as directed. Know and avoid any factors that trigger your patient's seizures.
- Be prepared to manage a seizure. If one occurs during oral care, remove any instruments from the mouth and clear the area around the dental chair. Attaching dental floss to rubber dam clamps and mouth props when treatment begins can help you remove them quickly. Do not attempt to insert any objects between the teeth during a seizure.
- Stay with your patient, turn him or her to one side, and monitor the airway to reduce the risk of aspiration.

VISUAL IMPAIRMENTS affect many people with developmental disabilities.

- Determine the level of assistance your patient requires to move safely through the office.
- Use your patients' other senses to connect with them, establish trust, and make treatment a good experience. Tactile feedback, such as a warm handshake, can make your patients feel comfortable.
- Face your patients when you speak and keep them apprised of each upcoming step, especially when water will be used. Rely on clear, descriptive language to explain procedures and demonstrate how equipment might feel and sound. Provide written instructions in large print (16-point or larger).

HEARING LOSS and DEAFNESS sometimes occur in people with developmental disabilities.

- Patients may want to adjust their hearing aids or turn them off, since the sound of some instruments may cause auditory discomfort.
- If your patient reads lips, speak in a normal cadence and tone. If your patient uses a form of sign language, ask the interpreter to come to the appointment. Speak with this person in advance to discuss dental terms and your patient's needs.
- Visual feedback is helpful. Maintain eye contact with your patient. Before talking, eliminate background noise (turn off the radio and the suction). Sometimes people with a hearing loss simply need you to speak clearly in a slightly louder voice than normal. Remember to remove your facemask first or wear a clear face shield.

LATEX ALLERGIES can be a serious problem. People who have spina bifida or who have had frequent surgeries are especially prone to developing an allergic reaction or a sensitivity to latex. An allergic reaction can be life threatening.

- Ask patients and caregivers about the presence of a latex allergy before you begin treatment.
- Schedule appointments for your latex-allergic or -sensitive patients at the beginning of the day when there are fewer airborne allergens circulating through the office.
- Use latex-free gloves and equipment and keep an emergency medical kit handy.

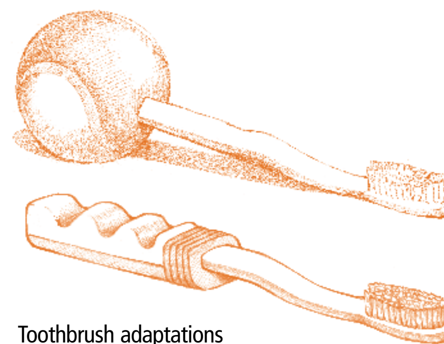
Oral Health Problems and Strategies for Care

People with developmental disabilities typically have more oral health problems than the general population. Focusing on each person's specific needs is the first step toward achieving better oral health.

Encourage independence in daily oral hygiene.

DENTAL CARIES is common in people with developmental disabilities. In addition to discussing the problems associated with diet and oral hygiene, caution patients and caregivers about the cariogenic nature of prolonged bottle feeding and the adverse side effects of certain medications.

- Recommend preventive measures such as fluorides and sealants.
- Caution patients or their caregivers about medicines that reduce saliva or contain sugar. Suggest that patients drink water frequently, take sugar-free medicines when available, and rinse with water after taking any medicine.
- Advise caregivers to offer alternatives to cariogenic foods and beverages as incentives or rewards.
- Educate caregivers about preventing early childhood caries.
- Encourage independence in daily oral hygiene. Ask patients to show you how they brush, and follow up with specific recommendations. Perform hands-on demonstrations to show patients the best way to clean their teeth.
- If necessary, adapt a toothbrush to make it easier to hold. For example, place a tennis ball or bicycle grip on the handle, wrap the handle in tape, or bend the handle by softening it under hot water. Explain that floss holders and power toothbrushes are also helpful.
- Some patients cannot brush and floss independently. Talk to caregivers about daily oral hygiene and do not assume that they know the basics. Use your experiences with each patient to demonstrate oral care techniques and sitting or standing positions for the caregiver. Emphasize that a consistent approach to oral hygiene is important—caregivers should try to use the same location, timing, and positioning.



Toothbrush adaptations

PERIODONTAL DISEASE occurs more often and at a younger age in people with developmental disabilities. Contributing factors include poor oral hygiene, damaging oral habits, and physical or mental disabilities. Gingival hyperplasia caused by medications such as some anticonvulsants, antihypertensives, and immunosuppressants also increases the risk for periodontal disease.

- Some patients benefit from the daily use of an antimicrobial agent such as chlorhexidine.
- Stress the importance of conscientious oral hygiene and frequent prophylaxis.

MALOCCLUSION occurs in many people with developmental disabilities and may be associated with intraoral and perioral muscular abnormalities, delayed tooth eruption, underdevelopment of the maxilla, and oral habits such as bruxism and tongue thrusting. Malocclusion can make chewing and speaking difficult and increase the risk of periodontal disease, dental caries, and oral trauma. Orthodontic treatment may not be an option for many, but a developmental disability in and of itself should not be perceived as a barrier to orthodontic care. The ability of the patient or the caregiver to maintain good daily oral hygiene is critical to the feasibility and success of orthodontic treatment.

No developmental disability in and of itself should be perceived as a barrier to orthodontic treatment.

DAMAGING ORAL HABITS can be a problem for people with developmental disabilities. Some of the most common of these habits are bruxism, food pouching, mouth breathing, and tongue thrusting. Other oral habits include self-injurious behavior such as picking at the gingiva or biting the lips; rumination, where food is chewed, regurgitated, and swallowed again; and pica—eating objects and substances such as gravel, sand, cigarette butts, or pens.

- For people who pouch food, talk to caregivers about inspecting the mouth after each meal or dose of medicine. Remove food or medicine from the mouth by rinsing with water, sweeping the mouth with a finger wrapped in gauze, or using a disposable foam applicator swab.
- If a mouth guard can be tolerated, prescribe one for patients who have problems with self-injurious behavior or bruxism.

ORAL MALFORMATIONS affect many people with developmental disabilities. Patients may present with enamel defects, high lip lines with dry gingiva, and variations in the number, size, and shape of teeth. Craniofacial anomalies such as facial asymmetry and hypoplasia of the midfacial region are also seen in this population. Identify any malformations and explain to the caregiver the implications for daily oral hygiene and future treatment planning.

TOOTH ERUPTION may be delayed in children with developmental disabilities. Eruption times are different for each child, and some children may not get their first primary tooth until they are 2 years old. Delays are often characteristic of certain disabilities such as Down syndrome. In other cases, eruption problems are attributable to the gingival hyperplasia that can result from medications such as phenytoin and cyclosporin. Dental examination by a child's first birthday and regularly thereafter can help identify atypical patterns of eruption.

TRAUMA and INJURY to the mouth from falls or accidents occur in people with seizure disorders or cerebral palsy. Suggest a tooth-saving kit for group homes. Emphasize to caregivers that traumas require immediate professional attention and explain the procedures to follow if a permanent tooth is knocked out. Also, instruct caregivers to locate any missing pieces of a fractured tooth, and explain that radiographs of the patient's chest may be necessary to determine whether any fragments have been aspirated.

Physical abuse often presents as oral trauma. Abuse is reported more frequently in people with developmental disabilities than in the general population. If you suspect that a child is being abused or neglected, State laws require that you call your Child Protective Services agency. Assistance is also available from the Childhelp® USA National Child Abuse Hotline at (800) 422–4453 or the Child Welfare Information Gateway (*www.childwelfare.gov*).

Making a difference in the oral health of a person with a developmental disability may go slowly at first, but determination can bring positive results—and invaluable rewards. By adopting the strategies discussed in this booklet, you can have a significant impact not only on your patients' oral health, but on their quality of life as well.

Additional Readings

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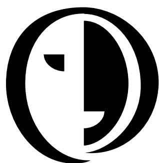
Making a Difference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This booklet is one in a series on providing oral care for people with mild or moderate developmental disabilities. The issues and care strategies listed are intended to provide general guidance on how to manage various oral health challenges common in people with developmental disabilities.

Other booklets in this series:

Practical Oral Care for People With Autism

Practical Oral Care for People With Cerebral Palsy

Practical Oral Care for People With Down Syndrome

Practical Oral Care for People With Intellectual Disability

Wheelchair Transfer: A Health Care Provider's Guide

Dental Care Every Day: A Caregiver's Guide

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