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Maintaining Oral Health in Children with Special Healthcare Needs

A quick guide for caregivers outlining oral health status and routine oral hygiene measures

Understanding special healthcare needs (SHN)¹⁻³

Physical, developmental, mental, sensory, behavioural, cognitive, social, or emotional impairment often requires healthcare intervention and the use of specialised services

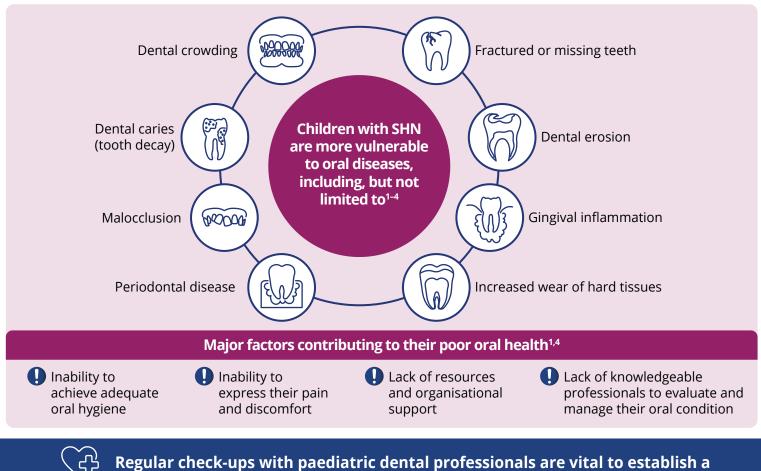


Healthcare for these individuals requires specialised knowledge, heightened awareness, attention, adaptation, and accommodative measures (including infrastructure or materials) beyond what is considered routine

Oral health is an essential part of an individual's overall well-being, especially for children with SHN, as they are at an increased risk of developing oral health problems throughout their lifetime^{2,4}

This infographic provides an overview of the conditions, challenges, and principles of oral healthcare in children with SHN, but the information included is not exhaustive

Oral health status in children with SHN^{1,4}



prevention routine for a healthy mouth and allow early intervention



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Oral health challenges in children with SHN⁴⁻⁸

Excessive tooth-grinding habits in children with e.g., cerebral palsy, cause excessive wear of hard dental tissues

Seizures increase the risk of traumatic dental injury; medications used to manage seizures may result in gingival overgrowth

Malformed teeth predispose to crowding or poor alignment, plaque accumulation, gum disease, and tooth decay Delay in tooth emergence (up to two or three years of age) Patients with immune suppression and bleeding disorders are at an increased risk of oral health problems and worsening of existing oral diseases

Medication with high sugar content increases the risk of dental caries and worsens existing disease

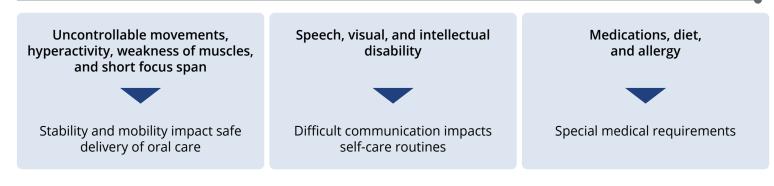
Some medications, such as those used to limit drooling, can result in dry mouth

Impact of oral health conditions in children with SHN^{4,8,9}



- Reduced nutritional intake
 - Impaired social interactions
 Difficulty in undertaking daily activities
- Associated anxiety
- Reduced quality of life (QoL)
- Decreased communication
- Lack of self-confidence

Pre-existing medical conditions affect oral health in children with SHN





Challenges for children with cerebral palsy, autism, developmental delay, and Down $\mathsf{syndrome}^2$

- Unable to grasp the importance of preventive oral health practices
- Express greater anxiety and aversion to dental treatment, delaying care and impeding cooperation
- Individually adapted behavioural management methods may be needed to attain cooperation

For children with SHN to receive the correct and necessary dental treatment, this requires:4,7

- Better understanding from all involved stakeholders regarding the specific requirements
- Availability of appropriate healthcare facilities
- Proper knowledge and training for dental professionals to adapt their practices



Children with SHN are more likely to receive curative rather than preventive care, usually extractions and emergency treatments^{2,5}

Caregiver guide to daily oral care routine^{2,3}



Toothbrushing may be difficult for children with SHN to learn, along with adapting to the:

- Texture, smell, and taste of toothpaste
- Tactile sensation of brush bristles
- Vibrations from toothbrushing

Children with SHN require additional guidance, supervised toothbrushing, and specialised cleaning aids for adequate oral care

Variety of oral health products and adjuncts to help with oral care



- Electric toothbrushes
- Special/modified brushes, electric toothbrushes,* or three-headed toothbrushes
 - Customised toothbrush handle

- Toothpaste
- Use of flavoured, unflavoured, or non-foaming toothpaste should be determined on a case-by-case basis, taking into account any sensitivity or sensory issues
- Fluoride toothpaste, e.g., stannous fluoride, for better biofilm control

- Other needs
- Fluoride mouth rinses, antibacterial rinses, and gels
- Floss holders or interdental brushes
- Tools for facilitating compliance, like finger guards or mouth props
- Tongue cleaning aids

*There is scientific evidence to recommend oscillating-rotating electric toothbrushes to paediatric dental patients^{10, 11, 12}

Home care to improve oral health^{2,3}

Caregiver guide²⁻⁴



- Establish a "dental home" for regular dental check-ups and build a connection with your child's dental professional
- Establish a dental care routine
- Schedule regular appointments to discuss oral health needs
- Behaviour guidance and management to dispel anxiety or dental fear and gain cooperation in medical settings
- Work with your child's dental professional to soothe, acclimatise, and distract during check-ups and treatment to avoid protective stabilisation and sedation

Preventive strategies

Application of sealants by dental professionals to reduce the risk of caries; topical fluoride application and antibacterial mouth rinses prevent caries and gingivitis

Increased recall frequency for patients with severe dental disease is recommended Anticipatory guidance about the risk of trauma during seizures and mouthguard fabrication is helpful

Timely referrals help avoid unnecessary pain, discomfort, increased treatment needs and costs, unfavourable treatment experiences, and diminished oral health outcomes Transition to adult dental care homes is critical for extending the standard of oral health established during childhood



Secial Symmetry

Malocclusion

Abnormalities in nasal breathing Difficulties with chewing, swallowing, speech, and/or oral functioning

Additional motivation involves improving the child's oral function and QoL

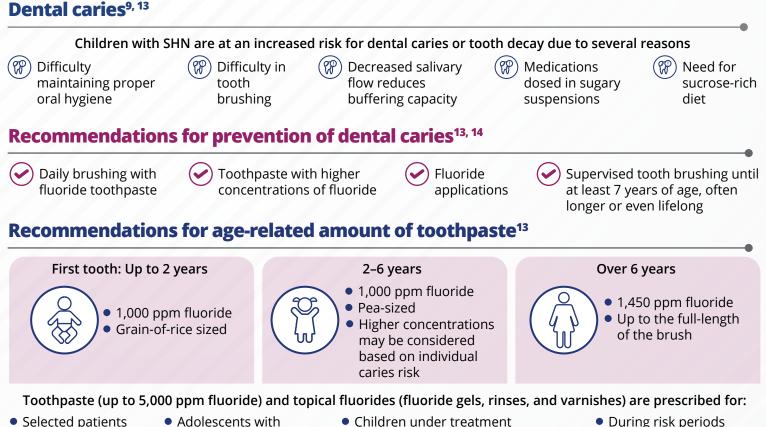
Orthodontic evaluation is recommended in the case of:

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- Remove dental plaque with a toothbrush and fluoride toothpaste, twice a day
- Children's teeth should be brushed using either a soft manual or electric toothbrush
- Tooth brushing should be conducted such that each tooth surface is reached and brushing should take place for 2 minutes, also in preschool children

commended mouth;



- Selected patients with SHN
- Adolescents with increased caries risk
- with fixed orthodontic appliances
- During risk periods such as tooth emergence

Preventive programmes should be re-evaluated at regular intervals and adapted to a patient's individual needs and risks

Dietary and lifestyle modifications^{2, 13, 14}

- Reduce consumption of sugar or sugary medicines or look for sugar-free alternatives; restrict this to meal times
- If necessary, alter the frequency of preventive measures like brushing or supplement with a fluoride mouthwash
- Drink plain water often during the day and avoid sugary and fizzy drinks
- Use sugar substitutes (e.g., xylitol), within limits, to prevent dental caries in high-risk groups
- Encourage a non-cariogenic diet

Individualised oral care regimen should be established for routine preventive care

Providing increased access to specialised care is imperative, encompassing both expertise and facilities, such as those for sedation and narcodontics

Key messages



Adequate training can ensure caregivers and other healthcare professionals deliver specialised care to children with SHN confidently

Improving access to dental care for children with SHN requires enhancement and restructuring of the dental education curriculum together with large systems-level changes in dental care practices and modes of delivery

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