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REVIEW ARTICLE

Children with special health care needs: A review

[1]Dr.Sumit Singla, [2]Dr.Pragati Poddar, [3]Dr.Abhishek Dhindsa, [4]Dr. Jairaj

[1]Associate Professor, Department of Pediatric and Preventive Dentistry, Desh Bhagat Dental College Hospital, DBU, Gobindgarh, Punjab, India
[2]PG student, [3]Professor, Department of Pediatric and Preventive Dentistry, Swami Devi Dyal Dental Hospital and College, Haryana, India
[4]Private Practitioner, India

Correspondence:
Dr.Pragati Poddar
PG student, Department of Pediatric and Preventive Dentistry, Swami Devi Dyal Dental Hospital and College, Haryana, India
Email: drpragati07@gmail.com

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ABSTRACT

The American Academy of Pediatric Dentistry (AAPD) recognizes that providing both primary andcomprehensive preventive and therapeutic oral health care to individuals with special health care needs (SHCN)is an integral part of the specialty of pediatric dentistry. Oral health care is the most common unmet need in the children with special needs.The dental condition of children with special health care needs (SHCN) may be directly or indirectlyassociated with their disabilities. Children with SHCN relatively have poor oral hygiene and increased prevalence of gingivaldiseases and dental caries. Parents of disabled children may face problems in providing dental treatment to their children as they might have theburden of medical treatment. The management of children with special health care needs(SHCN) requires specialized knowledge and training, increased awareness, accommodative measures, and resources.

Keywords: special health care-needs, children, dentists, management

INTRODUCTION

Special health care needs for any individual include any physical, developmental,mental, sensory, behavioral, cognitive, or emotional impairment or limiting condition that requires medical management,health care intervention, and/or use of specialized services orprograms. They may be congenital, developmental, oracquired through disease, trauma, or environmental cause andmay impose limitations in performing daily self-maintenanceactivities or substantial limitations in a major life activity. Specialized knowledge, as well as increased awareness and attention,adaptation, and accommodative measures are required for the health care of individuals with special needs. CHILDREN WITH SPECIAL health care-needs(SHCNs; hereafter referred to as SHCN children), defined by the federal Maternal and Child Health Bureau (MCHB) as thosechildren who have or are at increased riskfor a chronic physical, developmental, behavioral, or emotional condition and whoalso require health care–related services ofa type or amount beyond that required bychildren generally,1 are an important population from health care services, economic, and policy perspectives. They are also at heightened risk forhaving mental and behavioral health problems,school absence days, unfulfilled health care needs,and unscheduled intensive care

unit admissions.[2]The unmetneeds among children with special health care needs were identified for various conditions such as hearing, emotional, and behavioral difficulties and for a variety of services such as speech therapy,mental health care, and genetic counselling.India has 12 million children living with disabilities, and only1% of them have access to school.About 80% of children withdisabilities do not survive past age 40. Children with SHCN generally have poor oral hygiene, compromised gingival and periodontal health, and increased incidence of dental caries than the general population. Dental diseasesand its treatment require several considerations in this groupof patients. By understanding and proper assessment of the potential barriers to oral health care and consequences of poor oral health in children with SHCN, dental healthcare providers can identify at-risk patients at an early stage, provide anticipatory guidance, and refer to pediatric dentist.[3]

REVIEW

Behavioural(e.g., anxiety, attention deficit hyperactivity disorder, autismspectrum disorder), congenital (e.g., trisomy 21, congenital heart disease), developmental (e.g., cerebral palsy) or cognitive(e.g., intellectual disability) disorders, and systemic diseases (e.g., childhood cancer, sickle cell disesase) may be found in children with SCHN. In some cases,the condition primarily affects the orofacial complex (e.g.,amelogenesisimperfecta, dentinogenesisimperfecta, cleft lip/palate, oral cancer).Oral health is an inseparable part of general healthand well-being.

Some of the oro- dental conditions associatedwith SHCN include:

- build-up of calculus resulting in increased gingivitisand risk for periodontal disease.
- enamel hypoplasia.
- dental caries.
- oral aversion and behavior problems.
- dental crowding.
- malocclusion.
- anomalies in tooth development, size, shape, eruption,and arch formation.
- bruxism and wear facets.
- fracture of teeth or trauma.[4]

Growth abnormalitiesand medical conditions may adversely affect oral health. Oraldiseases may directly influence the general health of special children.

Families having SHCN children tend to expend more money for dental treatment in comparison to that required for healthy children, which is considered an important barrier to access of oral care. The oral health needs of a large proportion of children with SHCN are unmet and therefore, in addition to providing education and increasing the awareness among dental and medical professionals, there should be more emphasis on establishing dental home, providing anticipatory guidance and other comprehensive and coordinated services.[5]

Fear of intervention: Researchers found lack of co-operation as a major reason for dental neglect in children with special healthcare needs; however, it is not always as simple as a blatant refusal to collaborate with healthcare professionals as the refusal to co-operate often originates from fear, caused by lack of understanding.[6]

Management of dental problems in children withspecial needs:

It is carried out in three phases:

1. Relief of pain and control of infections
2. Treatment or elimination of existing untreated disease
3. Planning for prevention of further disease.[3]

When managing patients with SHCN, itis the responsibility on the part of the dentist to be familiar andcomply with Health Insurance Portabilityand Accountability Act (HIPAA) and

AwDAregulations applicable to dental practices. HIPAAinsures that the patient's privacy is protected andAwDA prevents discrimination on the basis of adisability.[7]

Patients with SHCN who have a dental home are more likely to receive appropriate preventive and routine care. Moreover, the dental home provides an opportunity to implement individualized preventive oral health practices and reduces the risk of preventable dental/oral disease.[8]

The crucial part prior to the management of a patient with SHCN is to know the patient's medical history in order to decrease the risk of aggravating amedical condition while rendering dental care. Anaccurate, comprehensive, and accurate medicalhistory is necessary for correct diagnosis andeffective treatment planning.[7]

When communicating with a child with SHCN, an attempt should be made to communicate directly with the patient and, when indicated, to supplement communication with gestures and augmentive methods of communication. A patient who does not communicate verbally/ directly with dentist maycommunicate in a variety of other non-traditional ways.At times, a parent, guardian, or caretakermay need to be present in the dental operatory to facilitate communicationand/or provide information which isn't possible on the part of the patient to provide.[7]

Behaviour guidance is one the challenges in managing a child with SHCN. However, with the help of parents/ caregiver's guidance, the child can be well managed in the operatory. Also, protective stabilization technique can be used for managing such children. When protective stabilization technique is not sufficient, then sedation/ general anaesthesia can also be used to treat such children.

Holding therapy' is a child-friendly physical support strategy where the child stays in the lap of the personresponsible for stabilizing the trunk and arms and supporting the patient. The "knee to knee" position is also ideal for 1-3-year-oldchildren.[8]

Lastly, dentists should know when to refer the patient toundertake dental treatment under general anesthesia.According to the World Health Organization (WHO), approximately 8% of people with disabilities present indication of dental treatment under general anesthesia.[9]

Preventive Strategies: Imparting education to parents and caregivers is important for ensuring appropriate and regular supervisionof oral hygiene. The dental team should develop anindividualized oral hygiene program that suits eachchild. Brushing with a fluoride toothpaste twice dailyshould be emphasized. Modifications of toothbrush are done to enable individuals with physical disabilities to brushtheir teeth. Electric toothbrushes and floss holders mayalso improve patient compliance. It is the responsibility of the parents/caregivers to provide appropriate oral health care whenthe child is unable to do so. A non-cariogenic diet,sugar-free liquid medicine, and use of sealants reducethe risk of caries in susceptible pits and fissures of primary and permanent teeth. Regular scaling and topical fluorides suchas fluoride varnish may be indicated when there is an increased risk for caries. Finally, preventive strategies for childrenwith SHCN should address traumatic oral and dentalinjuries. This would include proper guidance about the risk oftrauma, especially in individuals with seizure disorders or motor skills/coordination deficits. Prevention oftraumatic dental injuries also includes the use of mouthguards and advice on what to do if traumatic dental andoral injuries occur.[10]

CONCLUSION

Individuals with special needs usually require extensive dental care services; yet, dental care often takes the backseat because other grave medical requirements take focus. Oral health care and dental management of children with SHCN require pre-treatment planning, proper examination and diagnosis.Managing and shaping behaviour of patients with SHCN are of utmost importance to delivering high standard dental care. Dentists should try their level best

to provide the adequate level of dental care and also help other medical professionals in understandingthe need to maintain optimal oral health for children with SHCN and the importance of collaboration of the medicaland dental professionals.

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