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Management of children with special health care needs in the dental office: A review

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Abstract

Children with special needs have certain disabilities that restrict them in performing daily life activities. There is a general agreement that specially challenged children have increased risk of Gingivitis and Periodontitis than the general population. Such children are at an increased risk for various oral diseases which can adversely affect their quality of life. Health is a term that encompasses multiple dimensions such as physical, social and mental well-being of an individual and not merely an absence of disease or infirmity providing both primary and comprehensive, preventive and therapeutic oral

health care to children with SHCN is an integral part of Pediatric Dentistry. Dental team should know and use various treatment modifications and modalities for such children. All patients with special needs must have equal access and high-quality treatment that focuses on patient safety and treatment of dental needs. Therefore, in addition to training and increasing the awareness among dental and medical professionals, there should be more emphasis on establishing dental home and other comprehensive and coordinated services.

Keywords: Dental caries, Preventive Dentistry, Children with Special Health Care Needs

Introduction

The American Academy of Pediatric Dentistry (AAPD) recognizes that providing both primary and comprehensive preventive and therapeutic oral health care to individuals with Special Health Care Needs (SHCN) is an integral part of Pediatric Dentistry. AAPD defines Special Health Care Needs as “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 or programs.

AAPD believes each person is unique and there is a need to ensure maximum health benefits to all, irrespective of developmental disability or other SHCN. Etiology may be congenital, developmental, acquired through disease, trauma or environmental causes limiting various day to day activities of an individual varying from self-maintenance activities to major life activities. Hence, a health care provider for individuals with SHCN should have specialized knowledge, increased awareness, attention, adaptation and accommodative measures beyond what is considered routine ^[4].

Oral health is considered to be an inseparable part of general health and well-being of an individual. SHCN individuals are at higher risk for developing oral diseases than their normal counterparts which in turn can have direct as well as devastating impact on health and quality of life ^[5, 6, 7, 8]. Though there is accessibility and availability of dental services to these children in urban region, dental needs for most of these children in rural areas are unmet. Hence, it is very essential to emphasize on establishment of dental home and comprehensive, co-ordinated services. Effective communication is very much essential for establishing good rapport with the patient and parent which in turn helps us in delivering best treatment possible.

Hence, it becomes imperative for us as Pediatric Dentists to provide family centered care in Dentistry where it is described as a suggested philosophy of care for working with families of children with SHCN where the dental care system is responsive to the priorities and unique needs of each family and also make sure that the family members understand their rights and responsibilities as consumer of dental services and also acknowledge that emotional, social and developmental support are an integral part of health care ^[15].

Various ways to assure that services are family centered and help to build a healthy parent-provider relationship include

1. Recognizing parents as primary managers of their child's health care.
2. Considering flexibility in scheduling the appointments as they may have multiple health care appointments for different therapies and also to avoid no show appointments or cancellation.
3. Facilitate any necessary referrals if required.
4. Provide information about community based resources and encourage such assistance when required includes hospitals and most importantly involving families in making decisions about child's care ^[15].

Materials and methods

Search strategy

Recommendations for management of dental patients with SHCN were developed by Council on Clinical Affairs and adopted in 2004 which is last revised on 2012. A literature search revealed two systematic reviews to identify the best available guidelines and management of children with SHCN. First was published in 2012 by AAPD ^[1] and second in 2016 by Polli *et al.* ^[2] In addition, valuable information on the oral health and dental management of an individual with SHCN was provided by National Institute of Dental and Craniofacial Research website ^[3].

Oral Problems

In children with SHCN, oro-dental problems may be directly or indirectly related to their disabilities and in turn oral diseases may also adversely impact general health of the patient which may be exaggerated by associated growth abnormalities or medical conditions ^[20, 21]. These children may have increased prevalence of dental caries, problems associated with tooth eruption, dental anomalies with respect to size, shape and number, developmental defects such as Enamel Hypoplasia, Enamel demineralization, also prone to develop malocclusion, traumatic injuries, self inflicting habits, bruxism with respect to soft tissues. They are prone to develop gingival hypoplasia and periodontal diseases ^[20].

Management

A thorough medical history is essential part of patient assessment, diagnosis and effective treatment planning of children with SHCN. An accurate case history comprises of chief complaint, history of presenting illness, current and past medications, allergies, immunization status should be obtained. It is proven in literature that most of these children might have sensory issues which in turn can make dental treatment challenging for the dentist, such information should be considered during history taking to provide customized dental care to such children ^[1, 3].

At each recall visit, patient's history should be updated regarding any new illness/injury or change in medication. A complete summary of oral findings and specific treatment plan should be discussed with parent/caregiver. Physician consent should be sought for safe delivery of oral health care.

Management guidelines and recommendations for children with SHCN includes

1. Scheduling appointments

As discussed earlier, initial communication to parents of children with SHCN helps to address the primary oral health

needs of the child which in turn aids in scheduling an appointment. Information regarding the child's medical care provider also benefits in some cases. Depending on the nature of SHCN, oral health care demand duration of each appointment and needs for an additional staff and the customized services should be documented mainly helps to address unique demands of each patient ^[17]. Dentist must be familiar and comply with Health Insurance Portability and Accountability Act (HIPAA) and ADA regulations prior to scheduling patients with Special Health Care Needs. As HIPAA aids in reprotecting the privacy of patients and ADA prevents discrimination of patients on the basis of disability ^[18].

2. Setting up Dental Home

Age appropriate preventive and routine care can be provided to patients with Special Health Care Needs who have a dental home. Dental home concept gives an opportunity to implement customized preventive oral health practices which in turn aids in reducing exposure of the child to infective oral diseases ^[19]. As Pediatric Dentistry is age specific, these children's oral health care needs may extend beyond the scope of Pediatric Dentist training, therefore, it is very important to counsel, educate and prepare both patient and parent on the value of appropriate referrals to a specialized dental care if needed.

3. Role of communication and behavior management

Developing appropriate communication is crucial while treating patients with SHCN. Information provided by parent/caregiver can assist in preparation for the appointment. Attempts should be made to communicate directly with the patient and when indicated, communication should be supplemented with gestures and augmentive methods during dental care delivery. A patient who is unable to communicate verbally may communicate in a variety of non traditional ways. At times, parents or caretaker may need to be present to facilitate communication and/or provide information. According to the requirements of ADA, if attempts to communicate with patients with SHCN are unsuccessful due to a disability such as impaired hearing, dentist must work with those individuals to establish effective means of communication ^[9]. Children with disabilities may exhibit resistant behavior due to dental anxiety or lack of understanding of dental care which can interfere with safe delivery of dental treatment. Most patients with physical and mental disabilities can be managed in the dental office with parent/caregiver's assistance. Protective stabilization can be helpful in patients for whom traditional behavior guidance techniques are not adequate. When protective stabilization is not feasible or effective, sedation or general anesthesia should be considered. When in-office sedation/general anesthesia is not feasible or effective, an out-patient surgical care facility might be necessary ^[21].

Management of dental problems in children with SHCN 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.

Preventive strategies

Individuals with SHCN may be at increased risk for oral diseases which may further jeopardize the patient's

health. Education of parents/caregivers is critical for ensuring appropriate and regular supervision of daily oral hygiene. A non-cariogenic diet is important for long term prevention of dental diseases [22]. Toothbrushing with a fluoridated dentrifice, pit and fissure sealants [23], topical fluoride application, [24] Chlorhexidine mouthrinses may be appropriate as preventive approaches in patients with SHCN. [22, 23] Interim therapeutic restorations with Fluoride releasing materials such as GIC can be used as both preventive and therapeutic approach in children with SHCN. Patients having severe dental diseases may need to be recalled every two or three months or more often if indicated. Preventive strategies for children with SHCN should address traumatic injuries. This would include anticipatory guidance about risk of trauma, mouthguard fabrication. Such children are more likely to be victims of physical abuse, sexual abuse and neglect compared to children without disabilities. Dentists should be aware of signs of abuse and reporting procedures. [26, 27]

Barriers to oral health care

Parents of children with SHCN are faced with certain challenges or barriers. Financial aspect is also considered to be one of the major barrier that is present for families of children with SHCN as they experience higher expenditure for various other health needs of the child. Lack of timely preventive and therapeutic care may increase the need for costly care [11]. Non financial barriers include language and psychosocial, structural and cultural barriers [12]. Psychosocial barriers include oral health beliefs, norms of caregiver responsibility and past dental experience of the caregiver. Structural barriers include transportation, school absence policies, difficulty locating providers who accept Medicaid [13]. In present situation with outbreak of a pandemic, accessibility and delivery of dental care for such children is more challenging as they are said to be at increased risk compared to their counterparts. Pediatric dentists are concerned about decreased access to dental care for patients with SHCN [14].

Dentist can also overcome barriers by familiarizing oneself with community based resources and encourage such assistance when appropriate which includes local hospitals, public health facilities, rehabilitation centres or may even include groups that address language and cultural barriers and some communication based resources may offer support with financial or transportation needs of the patients and the parents [16].

Referrals

1. According to AAPD guidelines, dentist should refer all children to a dentist 6 months after the first tooth erupts or by age 12 months for establishment of a dental home.
2. All children with SHCN fall into high-risk category and should be referred to a dentist by 1 year of age.
3. Children with SHCN may need to visit a pediatric dentist every 2-3 months for professional preventive care, depending on risk factors.
4. Any child with caries, gingival or eruption anomalies should be immediately referred to a pediatric dentist.
5. Dentist who have an obligation to act in an ethical manner in the care of patients [28].

Conclusion

Children with SHCN are at increased risk for various oral diseases which can adversely affect their quality of life. General health and oral health go hand in hand. Dental care for these children has been given less attention by their families and health professionals. Oral health care needs require pre treatment planning and proper assessment, including scheduling appointments at appropriate times. Informed consent and proper documentation are essential. Entire dental team should be educated on how best to care for children with special needs. Dentists should choose the best dental management and also help other medical professionals in understanding the need to maintain optimal oral health for children with SHCN. Let us all join hands and be aware of our responsibilities and services for these "God's forgotten children" as they certainly deserve the best that medical and dentistry has to offer as an important part to their total habilitation.

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