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Review Article

Dental Management of Children with Special Health Care Needs

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Abstract

The management of children with health care needs creates hesitation and anxiety among health professionals including dentists. There has been general agreement that disabled population has a higher prevalence of dental caries, poor oral hygiene, and compromised gingival and periodontal health than healthy population. Oral healthcare professionals require specialized knowledge acquired through special training and increased awareness. The purpose of this article is to describe the characteristics of some common developmental disabilities and medically compromised states and the challenges of these issues present to the oral healthcare professionals.

Keywords: Special health care needs(SHCN), Dental home, Behaviour guidance

INTRODUCTION

As we know every child is unique. Children cannot independently meet their social and cultural exceptions because they are emotionally and physically immature. According to AAPD Special Health Care Needs (SHCN) 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. The condition may be congenital, developmental, or acquired through disease, trauma, or environmental cause and may impose limitations in performing daily self-maintenance activities or substantial limitations in a major life activity. Health care for individuals with special needs requires specialized knowledge acquired by additional training, as well as increased awareness, attention, adaptation, and accommodative measures beyond what are considered routine.[1]

The number of adolescents and youth with disabilities particularly in developing countries is significantly higher and is on the rise.[2] From several studies, we can see individuals with SHCN may be at a higher risk for dental and oral diseases compared to others.[3-5] Oral and dental diseases, which are mainly due to effects of the conditions and also the lack of dental care, can have a direct and distressing impact on the quality of life of SHCN and their families.[6] Patients with mental, developmental, or physical disabilities who do not have the ability to understand, assume responsibility for, or cooperate with preventive oral health practices are also at greater risk of oral and dental diseases. Oral health is considered an intimate part of general health and well-being.[7]

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RECOMMENDATIONS

Dental Home

In dental home, patients with SHCN are more likely to receive appropriate preventive and routine care.[8] The dental home provides an opportunity to implement individualized preventive oral health practices and reduces the child's risk of preventable dental/oral disease.

Oral health care needs may extend beyond the scope of the pediatric dentist's training when patients with SHCN reach adulthood. It is important to educate and prepare the patient and parent on the value of transitioning to a dentist who is knowledgeable in adult oral health needs. At a time

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agreed on by the patient, parent, and pediatric dentist, the patient should be transitioned to a dentist knowledgeable and comfortable with managing that patient's specific health care needs. In cases where this is not possible or desired, the dental home can remain with the pediatric dentist and appropriate referrals for specialized dental care should be recommended when needed.[9]

Scheduling Appointments

Initial contact with the dental practice allows both parent and patient an opportunity to address the child's primary oral health needs and to confirm the appropriateness of scheduling an appointment with that particular practitioner. Along with the child's name, age, and chief complaint, the receptionist should determine the presence and nature of any SHCN. The office staff, under the guidance of the dentist, should determine the need for an increased length of appointment and/or additional auxiliary staff to accommodate the patient in an effective and efficient manner. The need for increased dentist and team time as well as customized services should be documented, so the office staff is prepared to accommodate the patient's unique circumstances at each subsequent visit.[10]

It is important that the dentist be familiar and complies with Health Insurance Portability and Accountability Act (HIPAA) and AwDA regu-lations applicable to dental practices

when scheduling patients with SHCN. HIPAA insures that the patient's privacy is protected and AwDA prevents discrimination on the basis of a disability.[11]

Patient Assessment

The patient's medical history should be familiar and it decreases the risk of aggravating a medical condition while rendering dental care. Up-to-date, an accurate, comprehensive medical history is necessary for correct diagnosis and effective treatment planning. Information regarding the chief complaint, history of present illness, medical conditions, illnesses, hospitalizations, surgeries, anesthetic experiences, current medications, immunization status, allergies, review of systems, family and social histories, and thorough dental history should be obtained.[12] The dentist should include condition like sensory issues during the history intake and be prepared to modify the traditional delivery of dental care to address the child's unique needs. Consultation with the caregiver or with the patient's physician may be required, if the patient/parent is unable to provide accurate information.

The history should be consulted and updated, during every visit. Recent medical attention for illness or injury, newly diagnosed medical conditions, and changes in medications should be documented. Significant medical conditions should be identified in a conspicuous yet confidential manner in the patient's record.

Comprehensive examination of the head, neck, and oral should be completed on all patients. A caries-risk assessment should be performed.[13] Caries-risk assessment provides a means of classifying caries risk at a point in time, and therefore, should be applied periodically to assess changes in an individual's risk status. An individualized preventive program, including a dental recall schedule, should be recommended after evaluation of the patient's caries risk, oral health needs, and abilities.

A summary of the oral findings and specific treatment recommendations should be provided to the patient, parent, and caregiver, and the patient's other care providers should be informed.

Patient Communication

An attempt should be made to communicate the patient directly. Dental staff may need to communicate in a variety of non-traditional ways. A parent, family member, or caretaker may need to be present.[14,15]

Medical Consultations

The dentist should coordinate care through consultation with the patient's other care providers. When appropriate, the physician should be consulted regarding medications, sedation, general anesthesia, and special restrictions or preparations that may be required to ensure the safe delivery of oral health care. The dentist and staff always should be prepared to manage a medical emergency.[14,15]

Informed Consent

Informed consent for dental treatment must be signed by all patients. Informed consent should comply with state laws, and when applicable, institutional requirements. Informed consent should be well documented in the dental record through a signed and witnessed form.[14]

Behavior Guidance

Dental anxiety or a lack of understanding of dental care, children with disabilities may exhibit resistant behaviors, and it is challenging. These behaviors can interfere with the safe delivery of dental treatment. The parent or caregiver's assistance may need to manage patients with physical and mental disabilities in the dental office. When traditional behavior guidance techniques are not adequate, protective stabilization can be helpful in patients. Sedation or general anesthesia is the behavioral guidance armamentarium of choice when protective stabilization is not feasible or effective. An

outpatient surgical care facility might be necessary when in-office sedation or general anesthesia is not feasible or effective.[16]

Preventive Strategies

Oral diseases jeopardize the patient's health and individuals with SHCN may be at increased risk for oral diseases.[1] Education of parents and caregivers is critical for ensuring appropriate and regular supervision of daily oral hygiene. The team of dental professionals should develop an individualized oral hygiene program that takes into account the unique disability of the patient. Brushing with a fluoridated dentifrice twice daily should be emphasized to help prevent caries and gingivitis. If a patient's sensory issues cause the taste or texture of fluoridated toothpaste to be intolerable, a fluoridated mouth rinse may be applied with the toothbrush. Toothbrushes can be modified to enable individuals with physical disabilities to brush their own teeth. Electric toothbrushes and floss holders may improve patient compliance. Caregivers should provide the appropriate oral care when the patient is unable to do so adequately.

A non-cariogenic diet should be discussed for long-term prevention of dental disease.[17] When a diet rich in carbohydrates is medically necessary, the dentist should provide strategies to manage the caries risk by altering frequency or increasing preventive measures. As well, other oral side effects (e.g. xerostomia and gingival over growth) of medications should be reviewed.

Sealants reduce the risk of caries in susceptible pits and fissures of primary and permanent teeth, and thus, patients with SHCN may benefit from sealants.[18] Topical fluorides may be indicated when caries risk is increased.[19] Interim therapeutic restoration,[20] using materials such as glass ionomers that release fluoride, may be useful as both preventive and therapeutic approaches in patients with SHCN.[18] In cases of gingivitis and periodontal disease, chlorhexidine mouth rinse may be useful. For patients who might swallow a rinse, a toothbrush can be used to apply the chlorhexidine. Patients having severe dental disease may need to be seen every 2–3 months or more often if indicated. Those patients with progressive periodontal disease should be referred to a periodontist for evaluation and treatment.

Restorative Care

Most children with SHCN are at high caries risk, and therefore, definitive treatment of primary teeth with preformed metal crowns (PMCs) is more favorable over time than intracoronal restorations. A review of the literature comparing PMCs and Class II amalgams concluded that, for multisurface restorations in primary teeth, PMCs are superior to amalgams.[21] The selection of more durable restoration is particularly important in patients receiving treatment under sedation or general anesthesia. PMCs are likely to last longer and possibly decrease the need for sedation or general anesthesia with its increased costs and its inherent risks.

Barriers

Dentists should be familiar with community-based resources for patients with SHCN and encourage such assistance when appropriate. While local hospitals, public health facilities, rehabilitation services, or groups that advocate for those with SHCN can be valuable contacts to help the dentist/patient address language and cultural barriers, other community-based resources may offer support with financial or transportation considerations that prevent access to care.[9]

Referral

If patient's needs are beyond the skills of the practitioner, he should make necessary referrals to ensure the overall health of the patient.[14]

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