

Role of Pediatrician in The Oral Health Care of Infants And Children

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ABSTRACT

Background: Children are often seen by the medical personnel and all the issues about general health are addressed. However, oral health care for children is not provided adequately and this may be primarily due to the lack of awareness among parents, socioeconomic background. Further, inadequate knowledge about oral cavity screening among medical personnel will increase the risk of signs of some oral diseases or conditions go unnoticed. Proper coordination between medical and dental fraternities is needed to uplift the comprehensive general and oral health care needs of the children.

Keywords: Pediatrician, Infant, Oral Health.

INTRODUCTION

The association and relationship between the two health care fraternities, pediatrics and pediatric dentistry can be strengthened by adopting two major approaches i.e. the involvement of allied health professionals and changes in the dental workforce, so as to provide oral health services, to improve oral health and access to dental care for the needy. The American Academy of Pediatrics (AAP) Recommendations for Preventive Pediatric Health Care also suggests that pediatricians should perform dental screenings. Both the medical and dental professions promote the importance of physicians' involvement in oral health promotion and the prevention of early childhood caries, which is defined as any sign of dental caries on any tooth surface during the first 3 years of life.¹

Most of the queries, including those concerned about the teeth are addressed to the pediatrician, who sees the child for a regular health check up. It is quite challenging for every pediatrician to attend to such issues and hence his

role herein assumes great importance for referral to the dental health care providers. For example, from the age of six, the permanent teeth start replacing the deciduous teeth. During this transitional phase the permanent teeth are typically seen as irregularly placed teeth / crooked teeth. This is the time when most of the parents get anxious and worry about the proper alignment and appearance of the teeth. To answer all such queries, it is essential for every pediatrician to have a brief understanding on eruption of primary and permanent teeth; to recognize any deviation at the earlier stage.

IMPORTANCE OF PRIMARY TEETH AND NORMAL ERUPTION PATTERN

It is a known fact that human beings are biphodonts wherein the deciduous and permanent dentitions have 20 and 32 teeth respectively. Each dentition has an important role in the overall development of the individual.

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The deciduous teeth are also known by other names like primary teeth, milk teeth. The time span of this dentition extends from 6 months of age to 6 years which coincide with the eruption of first deciduous tooth and the first permanent tooth respectively. Primary teeth aid in mastication, speech, esthetics, psychological development and also serve as space maintainers till they are replaced by their succedaneous teeth. Thus, it is important to preserve the primary dentition and avoid premature loss of any primary tooth.

Certain salient features of deciduous dentition are very unique. For example, spacing between teeth is normal in deciduous dentition while it is not considered to be normal in permanent dentition.

SIGNIFICANCE OF SPATIAL TEETH POSITIONS AT VARYING AGES

Age 1-3 yrs: The first deciduous tooth erupts in the child by 6 months and the rest follow within the third birth day usually. Spacing between the teeth is considered to be normal and these physiologic spaces will be utilized to accommodate the permanent teeth which are larger than the primary teeth.

Age 4: The primary molars have been in their proper position for two years or more, and the permanent bicuspid are beginning to form. These teeth will eventually replace the primary molars. The permanent 6-year molar is also in the formative stage.

Age 6: The eruption process so far is normal. The primary molars are still helping the child chew and are maintaining space for the permanent bicuspid. These bicuspid are exerting pressure, and the roots of the primary molars are beginning to dissolve (resorb). The permanent 6-year molar has erupted into proper position.

Age 10: The root structure of the primary first molar has disintegrated and the tooth has been shed, creating an eruption path for the first bicuspid. The roots of the primary second molar are resorbing normally. Within the next couple of years, it too will shed.

Age 12-13: By age 12 or 13, the primary molars have served their purpose and are shed. The

permanent bicuspid have replaced the primary molars. Notice that this space was maintained by the primary molars. The 6-year molar remains in proper position. This position was stabilized by the presence of the primary molars.

NORMAL VARIATIONS SEEN DURING THE MIXED DENTITION PERIOD

Children from ages 6 to 12 generally go through numerous development stages. One of these which may be cited is the "Ugly duckling stage". This is a transient phase during childhood wherein we find a very large space or diastema in the middle between the two erupting upper incisors, which may also be flared. This occurs due to pressures from adjacent erupting teeth. This gets corrected on its own and does not require any orthodontic intervention. When the canines erupt, the gap will close up and the incisors will assume normal alignment. The two permanent central incisors may appear big because they are found side by side with the primary teeth, which are smaller in size. Mamelons are commonly seen as serrated edges on incisal edge of permanent incisors which wear off in due course of time. Any delay in eruption of within the stipulated time of eruption considered normal.

DEVELOPING MALOCCLUSION

Often some disturbance in the alignment of the teeth is noticeable during the transitional phase. Proper clinical examination is the key for early intervention. Abnormal facial appearance, incompetent lips, irregular alignment of tooth or teeth and speech difficulties are some of the common signs of developing malocclusion. Unable to recognize the developing malocclusion if the clinician fails to refer the patient to dentist in time, the advantage of utilizing nonsurgical growth modulation treatment modalities may not be possible and sometimes even if applied desirable results are not achieved.

DENTAL CARIES

"Dental caries (tooth decay) is the single most common chronic childhood disease—five times more common than asthma and seven times more common than hay fever" for children over age five.¹ Numerous studies and national oral health

surveys corroborate dental caries as a significant health problem in preschool children, including the fact that dental needs do not drive dental care utilization for children.¹⁻³ According to National Oral Health Survey and Fluoride Mapping 2002, Dental Council of India more than 50% of all 5 year old children suffer from dental caries and about 63% of the children by the age of 15 years. 25% of the children suffer from painful or bleeding gums at least once by the time they finish their schooling. 25% of the children have irregular /crooked teeth and 5% of school aged have broken teeth.

The causes of many dental diseases are influenced greatly by behavioral and life style factors. Thus, the burden of oral diseases among children is so high that, to achieve the Healthy People 2010 objectives, alliance between the dental and medical communities is essential.

CONCLUSION

Large numbers of children often visit the medical hospitals or clinics seeking treatment while this practice is often not frequently seen at the dental hospitals. In this scenario, medical personnel (physicians and auxiliary staff) need to have a thorough knowledge on normal features and discrepancies of orofacial complex. This not only enables them to recognize and refer to the dentist but also provide scope for early intervention. In addition, emphasis on preventive strategies for better oral health can also be addressed. Thus, a comprehensive oral health care can be provided to the children with the coordination of medical and dental health care providers.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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