SHORT COMMUNICATION

Early Dental Visit-An Overview

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ABSTRACT

American Academy of Pediatric Dentistry in 1986 recommended that a child should visit the dentist for the first time within 6 months of the eruption of the first primary tooth. The purpose behind this is to lay the foundation on which a life time of preventive education and dental care can be based in order to help ensure optimal oral health during childhood.

Keywords: early dental visit, dental caries, prevention

INTRODUCTION

Traditionally the child's first dental visit was reserved for an age when schooling was imminent, unless dental caries, trauma or any other predisposing event necessitated an earlier trip to the dentist. There was a general refusal among dentists to see very young children owing to their lack of co-operation as compared to a 4 or 5 year old child who was considered manageable. There was also lack of knowledge about risk assessment and the impact of early caries or subsequent caries risk.

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Poor oral health diminishes a person's self esteem, self image and compromises normal well being. The quality of life becomes influenced as esthetics and function are affected. Also anterior teeth injured can make the child vulnerable to psychological trauma.

Nowak in his rationale for infant oral health argued that a child should be first seen at a time when dental caries has not had enough time to develop and habits are beneficial.

The challenge posed to pediatric dentists in the form of 'Early childhood caries' wherein children affected remain at risk throughout childhood even when preventive care is available calls for early intervention.

Caries initiating bacteria are transmitted from the mother to the child by kissing, shared food etc and thus can cause caries. In a recent report, mutans streptococci colonization has been detected by six months in an infant. This necessitates maternal counselling to prevent caries or arrest incipient lesions.

Therefore the benefit of an early dental visit should be made available to the infants and children. Reduction or prevention of caries and encouraging good habits can prove to be cost-effective. The reasons in support of age 1 dental visit i.e.oral anticipatory guidance and establishment of a dental home have been stated by Nowark and Casamassimo.

The goals of an early visit are (i) establishment of a dental home for infant (ii) Introduction of healthy habits (iii) Prevention of early childhood caries.

In a study Nainar[2] found that children having their first dental visit at 4 years of age or older had mean d m f t scores twice that of children younger than age 4 who were screened.

In a study conducted by Santos *et al.*[3] opinions of Pediatric and General Dentists in Connecticut were sought regarding age one dental visit and also dental care for children younger than three years old. It was found that only seventy five percent of general dentists provided prophylaxis to infants after performing their examination. Among the general dentists who did not see children from birth to two years of age, the most common reasons cited for not seeing these children were that they were too young to co-operate. They concluded

that most Pediatric Dentists recommended the first dental visit by age one, regardless of caries risk while 50% of general dentists recommended age one for a dental visit only in high caries risk children.

The first dental visit should include (i) An oral examination (ii) Risk Assessment (iii) Anticipatory guidance. In an oral examination, the dentist looks for physical factors that predispose the child to oral disease primarily. An individualized risk profile is prepared and the family is given anticipatory guidance to eliminate risk so that the infant or a child can be free of dental disease eventually.

Clinical risk assessment is central to dental practice:

In the first dental visit information can be gathered by recording a patient's medical and dental histories and clinical findings. A pediatric dentist's professional judgment and ability to integrate clinical findings with knowledge of oral disease processes, treatment possibilities and experience with treatment based on evidence based treatment recommendations can contribute to identification of appropriate treatment.

Risk assessment is the determination of likelihood that an adverse outcome will occur, based on identification and weighing of risk factors. This helps in recommending a more individualized oral health care and better and efficient use of oral health care resources.

Risk factors include markers of the disease such as incipient caries, restored lesions, mobile, missing teeth and biochemical characteristics of saliva, blood or other body fluids that are associated with disease. Risk assessment serves as an educational tool through which parents can be made to understand factors that contribute to the disease process. Risk of an individual may change in a matter of months. Therefore it is essential that risk be assessed at each visit.

A dental home is where a qualified dentist extends primary dental care that is comprehensive, accessible, family centered, co-ordinated and a culturally competent.

Anticipatory guidance at an early dental visit is beneficial to parents and the infant. For example if a child is sleeping with a bottle or if there are incipient white spot lesions on teeth due to plaque accumulation, then recommendation to stop the bottle habit or improve oral hygiene are helpful. Also developmental information can be provided, eg. about the eruption of first primary tooth in the oral cavity, spacing, occlusion as part of anticipatory guidance. Habits such as non-nutritive sucking can raise parental concern and their prolongation should be prevented.

Therefore one of the cornerstones of infant dental visit is to prepare parents and caregivers for future age-specific needs and dental milestones of infants.

There is little research to favour early dental visit by parents for young children. Eldstein and colleagues[4] analyzed data from the 1996 Federal medical expenditures Panel Survey to examine the percentage of children who had an annual dental visit and the number of visits accumulated by age, sex, ethnic, racial background, family income and parental education. They reported that 43% of all children aged 0-18 years recorded at least one dental visit in 1996. Low income, low education and minority status were associated with lesser number of visits.

American Academy adopted guidelines on infant oral health care in 1986. Erickson and Thomas[5] however reported that after a decade only 47% of AAPD members had seen infants below age one. Sixty four percent of members reported that parents do not appreciate the value of age one dental visits. Some of the members refused to see very young children to avoid negative behavior usually observed in very young children.

Early dental visits should be also be considered in the light of their cost-effectiveness regarding treatment as they are expected to reduce the child's future dental risk leading to improved oral health and reduced oral health costs. Dental disease increases in severity and necessitates costly treatment if postponed. Timely intervention reduces overall costs.[6]

A recent study has reported that children with an early dental visit are more likely to have subsequent preventive visits. Those who have had their first preventive visit later are more likely to have subsequent preventive, restorative and emergency visits.[7]

It is evident that dentist must begin prevention at any early age so as to avoid complication later in a child's life. Dental anticipatory guidance provided at any early age helps benefit parents and thus reduces or stops the severity of the disease.

However, the implementations of AAPD recommendations are still to be realized in developing countries. There is an urgent need to create awareness among the community, dental, medical and paramedical personnel for need of child's first dental visit at the age of layers. It was also reported that as recently as 2001, while 86% of dental schools teach in infant oral exams in U.S.A., only 51% provide hands on experience.[8]

This can be achieved by improving dental knowledge and referral patterns of pediatric primary care providers. A recent study from North Carolina showed that pediatric primary care providers tended to under refer and only 70% of children with evidence of dental disease received a referral.[9] Through joint programmes and seminars conducted at primary health care level. Dental camps can be conducted for spreading awareness about the advantages of early dental visit. These

can be introduced at both undergraduate and postgraduate level in dental school programmes.

In addition maternal counseling should be provided for infant oral health case to promote the advantages of early dental visit.

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