ejpmr, 2020,7(7), 389-392

SJIF Impact Factor 6.222

EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

Review Article

ISSN 2394-3211

EJPMR

'WELL-BABY' ORAL HEALTH EVALUATION – A REVIEW

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Article Received on 05/05/2020 **Article Revised on 26/05/2020** **Article Accepted on 16/06/2020**

ABSTRACT

Well baby checkup at an early age helps to diagnose and manage oral health problems which can improve children overall health and well-being. The first dental visit of the child indicates the awareness of the parents about the importance of well-baby oral health checkup irrespective of dental problem. Widespread application of this preventive education protocol is required for parents to increase the awareness to take their children to the dentist within six months but no later than the child's first birthday.

KEYWORDS: Children, First visit, Oral health.

INTRODUCTION

Early tooth decay is a predictor of future dental caries. The American Academy of Pediatric Dentistry and the American Academy of Pediatrics suggest that early dental health care is important to prevent future dental caries.[1,2]

Oral infections, which are common in childhood last for few days, some of the infections are preventable by maintaining good oral hygiene. Mutans streptococci are the foremost cariogenic pathogens in tooth decay. They are highly acidogenic, producing short-chain acids which soften hard tissues of teeth. Caries in early childhood affects both primary and permanent dentitions in future. Prevention is the best way of confronting baby-bottle decay. It can be accomplished by informing the parents on what they have to do and what they have to avoid.

A dental home can provide oro-dental anticipatory guidance for parents of a child as young as the age of one and provide access to preventive and emergency services.

Al-shalan TA in 2003 suggests that a first dental visit of the child is related to parental factors. Parents lack sufficient knowledge about the timing of the first dental visit and the importance of modification of child's behavior prior to treatment.[3] To raise the percentage of population for regular dental visits, it is important to educate parents about their children's oral health and diseases.

ONE dental visit when there's ONE tooth can equal ZERO cavities.

Feeding habits and Early childhood caries

In developing and industrialized countries, early childhood caries (ECC) is a serious public health issue.[4] ECC is defined as "the presence of one or more decayed (non-cavitated or cavitated lesions), missing teeth (due to caries), or filled tooth surfaces in any primary tooth in a child 72 months of age or younger. In children younger than 3 years of age, any sign of smooth-surface caries is indicative of severe early childhood caries (S-ECC). From ages 3 through 5, one or more cavitated, missing teeth (due to caries), or filled smooth surfaces in primary maxillary anterior teeth, or decayed, missing, or filled score of ≥4 (age 3), ≥5 (age 4), or ≥6 (age 5) surfaces constitutes S-ECC. Early childhood caries starts early, affects children who are at high risk with rapid progression and often goes without treatment.[5]

The most common cause of early childhood caries is due to nursing bottle especially during sleep. The bottle filled with milk with or without sugar, fruitjuice or water added with sugar or honey pools around the teeth and causes tooth decay. Pacifiers dipped in honey or sugar can also cause nursing caries. There are many biological variables, such as sugar intake, enamel hypoplasia and the bacteria which is associated with early childhood caries and breast feeding. Education of parents and their socioeconomic status also has an impact on oral health of the children.

Early childhood caries can have a significant social and economic consequences which affects the immediate and long-term quality of life of the child and family.[6] This disease affects the general population, but is 32 times more likely to occur in infants who are of low socioeconomic status, who consume a diet high in sugar,

and whose mothers have a low education level.[7] The consequences of early childhood caries includes high risk of new caries, loss of school days, reduced learning ability, high treatment costs, frequent hospitalizations, more emergency visits and diminished oral health-related quality of life.[8]

Night-time breast-feeding, breastfeeding in children older than 12 months of age, the use of a bottle at night as a substitute for the pacifier, and the bottle's use on demand during the day are associated with SECC.[9] Frequent breastfeeding more than or equal to 24 months cause severe early childhood caries.[10]

Late first dental visit is a key factor responsible for high caries prevalence.[1]

Anticipatory guidance and dental home

Anticipatory guidance for development is education provided to parents in order to promote optimal developmental outcomes. Developmental milestones occur in a predictable sequence over time, reflecting the interaction of the child's developing neurological system with its environment. The sequence of milestones helps parents to understand their children's stage of development, so as to anticipate common developmental patterns, especially those that may prove difficult or puzzling to parents, and suggest parenting strategies demonstrated to be effective. Responsive parenting is one of the most important factors promoting healthy cognitive and social-emotional development.[11]

The American Academy of Pediatric Dentistry (AAPD) has given recommendations on anticipatory guidance, bottle-feeding habits to prevent ECC, and infant/toddler oral hygiene care.

A study by Hussein AS et al 2013 showed that there is low parental awareness (12.5%) of timing for the first dental visit. Most parents believed that the first visit should occur at 3 or 6 years of age. This may be because more parents thought that primary teeth are not fully erupted at 12 months of age and hence no need to see dentist. Others may have thought that disease cannot affect teeth at this early age, while others may feel a young child is too difficult to manage and will be uncooperative.[2]

Avoiding caries-promoting feeding behaviors

1. Infants should not be put to sleep with a bottle containing fermentable carbohydrates.
2. Ad libitum breastfeeding should be avoided after the first primary tooth begins to erupt and other dietary carbohydrates are introduced.
3. Parents should be encouraged to have infants drink from a cup as they approach their first birthday. At 12 to 14 months of age, infants should be weaned from the bottle.
4. Repetitive consumption of any liquid containing fermentable carbohydrates from a bottle or no-spill training cup should be avoided.
5. Between- meal snacks and prolonged exposures to foods and juice or other beverages containing fermentable carbohydrates should be avoided.[12]

The AAPD and the American Dental Association (ADA) recommend that a child should first visit the dentist within six months of eruption of the first tooth and no later than 12 months of age . After that, a child should visit a dentist every 6 months or according to the individual need of the child. The reason for the first-year dental visit is for the parent to receive oral anticipatory guidance and to establish a "dental home", which identifies a child with a dentist in a familiar and safe health-supervision relationship and is similar to that of a "medical home". A medical home can also provide an oral health exam and referral to a dentist which can result in a dental home for the child at an early age, a practice that the AAPD recommends.[13]

Anticipatory guidance includes counseling on intake of carbohydrates and sugar containing beverages and tooth brushing habits.[14] Counseling to parents regarding nutrition, habits (tobacco and alcohol), medication, postnatal care and breastfeeding can also have a huge impact on oral health in children.

Education on Oral hygiene and Dietary Habits

Dental caries in infants and young children develops due to poor dietary habits and poor oral hygiene.

Pregnancy care visits provide a teachable moment for physicians, dentists, and nurses to counsel mothers about nutrition for pregnant mother and fetus. This education also should include information regarding the caries process and food cravings that may increase the mother's caries risk.

Parents should be encouraged to establish a dental home for infants by 12 months of age that includes the following:

- An initial visit with thorough medical (infant) and dental (parent and infant) histories, a thorough oral examination, performance of an age-appropriate tooth and gum cleaning demonstration, and fluoride varnish treatment if indicated.
- Assessing the infant's risk of developing early childhood caries, its prevention, anticipatory guidance regarding dietary effects, fluoride use and periodic visits for management of dental caries. This should be provided by practitioners who have the training and expertise to manage both the young child and the disease process.
- Injury prevention counseling to prevent orofacial trauma.
- Education on teething. While many children have no apparent difficulties, teething can lead to intermittent localized areas of discomfort,

irritability, and excessive salivation. Treatment of symptoms includes oral analgesics and chilled teething rings for the child. Use of topical anesthetics, including over-the-counter teething gels, to relieve discomfort should be avoided due to potential toxicity of these products in infants.

- Education on oral habits which affects dentition and oral structures. It is important to discuss the need for early sucking and the need to wean infants from these habits before malocclusion or skeletal dysplasias occur.[14]

A Study done by Farid H et al in 2013 at Aga Khan University Hospital concluded that Mothers lack sufficient knowledge regarding timings of the children's first dental visit and the importance of limiting frequency of in-between meals snacks consumed by their children.[15]

DISCUSSION

Research suggests that children with healthy teeth are happier overall, perform better in school and have higher self-esteem.

According to American academy of Pediatric Dentistry, a dental home can be established through early dental visit which provides a foundation upon which a lifetime of preventive education and oral health care can be built.[16] In a study done by Hussain AS (2013), only 5% of the children had their first dental visit before 12 months of their age showing that there is low parental awareness of the recommended time for the visit.[17] A similar recent survey by American Association of Paediatric Dentistry found that 97 percent of parents didn't know that their children needed to visit dentist in the first year of life. Another survey found that 26% of parents felt that children needed to see a dentist only in case of emergency.[15] Eventhough children visits a child health professional by 3 years of age for well- child visits, most of the children doesnot visit a dentist until the age of 3 years.[18]

A study by Hussein AS et al 2013 showed that there is low parental awareness (12.5%) of timing for the first dental visit.[17] Most parents believed that the first visit should occur at 3 or 6 years of age. This may be because more parents thought that primary teeth are not fully erupted at 12 months of age and hence no need to see dentist. Others may have thought that disease cannot affect teeth at this early age, while others may feel a young child is too difficult to manage and will be uncooperative.

In a study done by Shqair AQ et al in 2012, pain was found to be the main complaint for the first visit, and the main cause of this symptom was dental decay.[19] Dental pain affects children emotionally and prevents children from physical and social activities.[20] Extraction and trauma were the next least given reasons for the first visit in many studies. Murshid EZ in 2015 conducted a study to assess the average age of and most common reasons for first dental visits in children attending governmental and private dental clinics.[21] The study concluded that parental compliance with the standard age for initial dental visitation recommended by the major dental academies is lacking.

CONCLUSION

Mothers appear to be the primary source of a child's dental knowledge. Lack of adequate education at an early age can lead to subsequent dental problems in children. Early dental checkups, especially timing of first dental visit is essential to prevent tooth decay and dental pain. Hence it is essential to educate parents about the importance and timing of initial well baby dental checkup to create awareness in society.

REFERENCES

1. American Academy of Pediatric Dentistry, Guideline on infant oral health care. Pediatr. Dent, 2014; 36(6(1): 1141–1145.
2. American Academy of Pediatrics, Recommendations for preventive pediatric health care. Pediatrics, 2014; 133(3): 568–570.
3. Al-Shalan TA. Factors Affecting Saudi Parents' Perception of their Children's First Dental Visit. J Contemp Dent Pract, 2003 November; (4)4: 054-066.
4. Livny A, Assali R, Sgan-cohen H. Early Childhood Caries among a Bedouin community residing in the eastern outskirts of Jerusalem. BMC Public Health, 2007; 7: 167.
5. Grindefjord M, Dahllof G, Modeer T. Caries development in children from 2.5 to 3.5 years of age: A longitudinal study. Caries Res., 1995; 29: 449-54.
6. Inglehart MR, Filstrup SL, Wandera A. Oral health and quality of life in children. In:Inglehart M, Bagramian R, editors. Oral health-related quality of life. Chicago: Quintessence Publishing Co, 2002; 79-88.
7. Mobley C, Marshall TA, Milgrom P et al. The contribution of dietary factors to dental caries and disparities in caries. Acad Pediatr, 2009; 9(6): 410-4.
8. Filstrup SL, Briskie D, daFonseca M et al. The effects on early childhood caries (ECC) and restorative treatment on children's oral health-related quality of life (OHRQOL). Pediatr Dent, 2003; 25(5): 431-40.
9. Azevedo TD, Bezerra AC, de Toledo OA. Feeding habits and severe early childhood caries in Brazilian preschool children. Pediatric dentistry, 2005 Jan 1; 27(1): 28-33.
10. Chaffee BW, Feldens CA, Vítolo MR. Association of long-duration breastfeeding and dental caries estimated with marginal structural models. Annals of epidemiology, 2014 Jun 1; 24(6): 448-54.
11. National Institute of Child Health and Human Development. Washington, DC: US Department of Health and Human Services; The NICHD Study of

Early Child Care and Youth Development (SECCYD): Findings for Children Up To Age 4 ½ Years, 2006; 23.
12. Policy on early childhood caries (ECC): Classifications, consequences and preventive strategies. Pediatr Dent., 2008; 30: 40-3.
13. Nowak AJ, Casamassimo PS. The Dental Home - a primary care oral health concept. Journal of American Dental Association, 2002; 133: 93-98
14. American Academy of Pediatric Dentistry. Guideline on periodicity of examination, preventive dental services, anticipatory guidance/counseling, and oral treatment for infants, children, and adolescents. Pediatr Dent, 2016; 38 (special issue): 132-41.
15. Farid H, Khan FR, Aman N. Knowledge, attitude and practice of mothers regarding their own and children's dental health–a tertiary care hospital based study. Journal of Ayub Medical College Abbottabad, 2013 Jul 1; 25(3-4): 35-7.
16. American Academy of Pediatric Dentistry. Policy on the dental home. Pediatr Dent, 2012; 34(special issue): 24-5.
17. Hussein AS, Abu-Hassan MI, Schroth RJ et al. Parent's perception on the importance of their children's first dental visit (A cross-sectional pilot study in Malaysia). Journal of Oral and Dental Research, 2013 Mar; 23(1945): 1-6.
18. Ismail AI. Prevention of early childhood caries. Community dentistry and oral epidemiology, 1998 Oct; 26(S1): 49-61.
19. Shqair AQ, Gomes GB, Oliveira A et al. Dental emergencies in a university pediatric dentistry clinic: a retrospective study. Brazilian oral research, 2012 Feb; 26(1): 50-6.
20. Ratnayake N, Ekanayake L. Prevalence and impact of oral pain in 8-year-old children in Sri Lanka. International journal of paediatric dentistry, 2005 Mar; 15(2): 105-12.
21. Murshid EZ. Children's ages and reasons for receiving their first dental visit in a Saudi community. The Saudi dental journal, 2016 Jul 1; 28(3): 142-7.