



ISSN Print: 2394-7489
ISSN Online: 2394-7497
IJADS 2020; 6(2): 426-428
© 2020 IJADS
www.oraljournal.com
Received: 04-02-2020
Accepted: 06-03-2020

Dr. Varshini Rajagopal
M.D.S 3rd Year P.G.,
Department of Pedodontics &
Preventive Dentistry, Manav
Rachna Dental College, Delhi-
Surajkund Road, Aravali Hills,
Sector 43, Faridabad, Haryana,
India

Dr. Shveta Sood
MDS, Professor and Head,
Department of Pedodontics &
Preventive Dentistry, Manav
Rachna Dental College, Delhi-
Surajkund Road, Aravali Hills,
Sector 43, Faridabad, Haryana,
India

Dr. Naresh Sharma
MDS, Associate Professor ,
Department of Pedodontics &
Preventive Dentistry, Manav
Rachna Dental College, Delhi-
Surajkund Road, Aravali Hills,
Sector 43, Faridabad, Haryana,
India

Dr. Akshara Singh
MDS, Senior Lecturer,
Department of Pedodontics &
Preventive Dentistry, Manav
Rachna Dental College, Delhi-
Surajkund Road, Aravali Hills,
Sector 43, Faridabad, Haryana,
India

Corresponding Author:
Dr. Varshini Rajagopal
M.D.S 3rd Year P.G.,
Department of Pedodontics &
Preventive Dentistry, Manav
Rachna Dental College, Delhi-
Surajkund Road, Aravali Hills,
Sector 43, Faridabad, Haryana,
India

Infant oral health care-an early preventive approach to dental caries

Dr. Varshini Rajagopal, Dr. Shveta Sood, Dr. Naresh Sharma and Dr. Akshara Singh

Abstract

Caries is the most prevalent infectious disease in our world's children. Professional intervention within six months after eruption of the first primary tooth or not later than twelve months of age, directed at factors affecting the oral cavity helps in reduction of dental caries. Early screenings present an opportunity to educate parents about the medical, dental, and cost- benefits of preventive rather than restorative care and may be more effective in reducing early childhood caries than traditional infectious disease models. The family physician/pediatrician who sees a child from birth, as part of the well-baby visit program, is in the best position to identify early dental problems and to educate the family about early oral preventive health care. The physician will then be in a better position to recommend to parents when they should seek dental advice and treatment for their young children.

Keywords: Infant, oral hygiene, dental home, early childhood caries, teething, non nutritive oral habits

1. Introduction

Infant oral health care is the foundation on which a lifetime of preventive education and dental care can be built up in order to help acquire optimal oral health right up to childhood and adulthood [1]. Early childhood caries (ECC) and the more severe form of ECC , beginning soon after tooth eruption develops on smooth surfaces, progresses rapidly, and has a long- lasting detrimental impact on the dental health [2]. Caries in primary teeth can affect children's growth, result in significant pain, and diminish overall quality of life [3-5] In 1986, the American Academy of Pediatric Dentistry (AAPD) adopted the first infant oral health-care policy statement approach [6]. It has been twenty five years since the inception of this policy [6]. This paper collectively reviews the guidelines adopted for infant oral health and steps taken in early prevention of dental caries.

2. Discussion

2.1 Goals of infant oral health care programme

An infant oral health care programme helps to identify, intercept and modify the potentially harmful parenting practices that may adversely affect infants' oral health. It provides parent education right from prenatal period highlighting the importance of their role in the prevention of dental disease for their child. Periodic evaluation of the oro-facial development and oral healthcare is done by the clinician. It helps (a) to break the cycle of early childhood caries, (b) to provide optimal fluoride protection and (c) to use anticipatory guidance to arm patients in therapeutic alliance [7].

2.2 Dental Home Concept

The American Academy of Pediatric Dentistry (AAPD) developed a policy on dental homes that was first adopted in 2001 and revised in 2004. The concept of dental home is derived from the AAP "Medical Home." The essential concept of 'medical home' states that the medical care for children of all the ages is best managed when there is an established relationship between the practitioner who is familiar with the child and the child's family. The 'medical home' is the place where the child receives the preventive instructions, immunizations, counseling, and anticipatory guidance [8].

“The dental home is the ongoing relationship between the dentist and the patient, inclusive of all aspects of oral health care delivered in a comprehensive, continuously accessible, coordinated, and family-centered way. Establishment of a dental home begins no later than 12 months of age and includes referral to dental specialists when appropriate.”^[9]

2.3 Need for establishing dental homes

- High caries rates run in families, and are passed from mother to child, from generation to generation.
- The children of mothers with high caries rates are at a higher risk of decay
- The modification of the mother's dental flora at the time of the infant's colonization can significantly impact the child's caries rate
- Therefore, an oral health risk assessment before 1 year of age affords the opportunity to identify high-risk patients and to provide timely referral and intervention for the child, thus allowing an invaluable opportunity to decrease the level of cariogenic organisms in the mother with a significant caries risk before and during colonization of the infant

2.4 Crucial role of Dental Homes

- In order establish a dental home; it is important to meet the parents/ prospective parents early. Gynecologists, pediatricians, family physicians are the people who come in contact with them much before a dentist. He must establish communication with them so that effective and timely referrals are made to dentist. Also, schools and pre-school day care centers can be informed about the dental home^[10].
- A notice such as – “Do you know you can benefit your child's teeth and oral health by starting preventive dental care *before* child-birth?”- can attract the attention of prospective parents if put up in a gynecologist's office, pediatrician's clinic and hospitals^[11].
- First visit by the first birthday. A child should visit the dentist within six months of the eruption of the first tooth or by age one. Early examination and preventive care will protect your child's smile now and in the future^[11]
- Dental problems can begin early. A big concern is the Early Childhood Caries (also known as baby bottle tooth decay or nursing caries). Children risk severe decay from using a bottle during naps or at night or when they nurse continuously from the breast^[11].
- Encourage children to drink from a cup as they approach their first birthday.
- Children should not fall asleep with a bottle. Night time breast-feeding should be avoided after the first primary teeth begin to erupt. Drinking juice from a bottle should be avoided. When juice is offered, it should be in a cup^[12].
- Never dip a pacifier into honey or anything sweet before giving it to a baby. Limit the frequency of snacking, which can increase a child's risk of developing cavities^[13].
- Parents should ensure that young children use an appropriate size toothbrush with a small brushing surface and only a pea-sized amount of fluoride toothpaste at each brushing^[14].
- Children should always be supervised while brushing and taught to spit out rather than swallow the toothpaste.^[14]

Unless advised to do so by a dentist or other health professionals, parents should not use fluoride toothpaste for children less than two years of age^[14].

From six months to age 3, children may have sore gums when teeth erupt^[15].

Many children like a clean teething ring, cool spoon, or cold wet washcloth. Some parents prefer a chilled ring; others simply rub the baby's gums with a clean finger^[15].

Children should not be given powdered beverages or soda pop as these drinks pose increased risk for dental caries. Only iron-fortified infant cereals along with breast milk or infant formula should be given to infants who are older than 6 months. Cow's milk should be completely avoided in the first year of life and restricted to 24 oz per day in the second year of life^[16]

Parents should also be counseled on the potential of various foods that constitute choking hazard to infants. Infants should be given food only when they are seated and are supervised by an adult.

A suggestion exists that early exposure to cereals by 3 months of age may be associated with increased risk for type I diabetes mellitus. At present, however, there is insufficient evidence to conclude that “infant cereal causes diabetes^[17]”.

Practitioners should provide age-appropriate injury prevention counseling for oro-facial trauma. Initially, discussions would include play objects, pacifiers, car seats, and electric cords^[18]. Non-nutritive oral habits (e.g., digit or pacifier sucking, bruxism, and abnormal tongue thrust) may apply forces to teeth and dento alveolar 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^[19].

Oral hygiene measures should be implemented no later than the time of eruption of the first primary tooth. Cleansing the infant's teeth as soon as they erupt with a soft toothbrush will help reduce bacterial colonization. Tooth brushing should be performed for children by a parent twice daily, using a soft toothbrush of age-appropriate size^[20].

3. Conclusion

“Every child has a fundamental right to his or her total oral health”. Preventive oral health care should be provided as soon as the first tooth erupts. Parents should be given health education right from the time the child is in the mother's womb. It is possible to prevent many forms of dental disease and thus promote the total health of child- patients by examining the infant early for oral problems and providing early preventive counseling,

4. References

1. Tandon S. Textbook of pediatric dentistry. Third edition. India: Paras publishers pvt ltd, 2017
2. Nowak AJ, Warren JJ. Infant oral health and oral habits. *Pediatr Clin North Am.* 2000; 47:1043-66.
3. Acs G, Lodolini G, Kaminsky S, Cisneros GJ. Effect of nursing caries on body weight in a pediatric population. *Pediatr Dent.* 1992; 14:302-5
4. Ayhan H, Suskan E, Yildirim S. The effect of nursing or rampant caries on height, body weight and head circumference. *J Clin Pediatr Dent.* 1996; 20:209-12
5. Low W, Tan S, Schwartz S. The effect of severe caries on the quality of life in young children. *Pediatr Dent.* 1999; 21:325-6
6. Nowak AJ, Quiñonez RB. Visionaries or dreamers? The story of infant oral health. *Pediatr Dent.* 2011; 33:144-52

7. Vaishnavi B, Kathleen AM, Kimon D. The importance of preventive dental visits from a young age: systematic review and current perspectives. Dove press, age Clinical, Cosmetic and Investigational Dentistry 2014, 6
8. Marwah N. Textbook of Pediatric dentistry.F edition. India: Fourth Edition Jaypee Brothers Medical Publishers Pvt. Ltd, 2018
9. American Academy of Pediatric. Breast feeding and use of human milk. Pediatrics. 1997; 100:1035-9.
10. American Academy of Pediatric Dentistry. Policy on baby bottle tooth decay (BBTD)/early childhood caries (ECC). Pediatr Dent. 2002; 24:23
11. Committee on Nutrition. American Academy of Pediatrics: The use and misuse of fruit juice in pediatrics. Pediatrics. 2001; 107:1210-3.
12. Ashley MP. It's only teething. A report of the myths and modern approaches to teething. Br Dent J. 2001; 191:4-8.
13. American Academy of Pediatric Dentistry. Guideline on Fluoride therapy Guideline on fluoride therapy. Pediatr Dent. 2012; 34:162-5
14. American Academy of Pediatric Dentistry. Definition of dental home. Pediatr Dent. 2011; 33:12.
15. Kazal LA Jr. Prevention of iron deficiency in infants and toddlers. Am Fam Physicia. 2002; 66:121724.
16. Hashim N, Shamsia M, Diet Counseling During the Infant Oral Health Visit. Pediatric Dentistry – 2004; 26:5.
17. American Academy of Pediatric Dentistry. Policy on prevention of sports-related orofacial injuries. Pediatr Dent. 2015; 37:71-5.
18. 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. 2010; 32:93-100
19. American Academy of Pediatric Dentistry. Policy on early childhood caries (ECC): Classifications, consequences, and preventive strategies. Pediatr Dent. 2011; 33:47-9.