INFANT ORAL HEALTH CARE

INTRODUCTION:

Infant oral health care is a foundation upon which preventive education and dental care must be built to enhance the opportunity for a lifetime free from preventable oral diseases. The American Academy of Pediatric Dentistry (AAPD), the American Dental Association (ADA), and other dental organizations and US federal agencies recommend that the first dental visit occurs at or around 1 year of age.

Goals Of Infant Oral Health Care:

- 1. Break the cycle of Early Childhood Caries.
- 2. Disrupt the acquisition of harmful micro flora.
- 3. Impart optimal fluoride protection.
- 4. Establish a Dental Home for health.
- 5. Manage the risk/benefits of habits.

Anticipatory Guidelines:

Whenever possible the ideal approach to infant oral health care, including ECC (Early childhood caries) prevention and management, is the early establishment of dental home.

ECC is an infectious and preventable disease that is transmitted vertically from mothers or other intimate caregivers to infants.

General anticipatory guidance for the mother (or other intimate caregiver), before and during the colonization process, includes the following:

Oral hygiene: Tooth-brushing and flossing on a daily basis are important for the parent to dislodge and reduce bacterial plaque levels. parents include the caries potential of their diet, cariogenicity of certain foods and beverages, role of frequency of consumption of these substances, and demineralization and remineralization process.

Fluoride: Using a fluoridated toothpaste approved by the **American Dental Association** and rinsing every night with over-the-counter mouth rinse containing 0.05% sodium fluoride have been suggested to help reduce plaque levels and help enamel remineralization.

Caries removal: Routine professional dental care for the parents can help keep their oral health in good condition. Removal of active caries and subsequent filling are important to minimize infecting the infant with the parent's oral flora.

Delay of colonization: Education of the parents, especially mothers, on sharing utensils (e.g. shared spoons, cleaning a dropped pacifier with their saliva), foods, and cups can help prevent early colonization of oral flora in their infants.

Xylitol chewing gums: Recent evidence suggests that the use of xylitol chewing gum (4 pieces per day by the mother) had a significant impact on decreasing the child's caries rate.

Dr. Usha Mohan Das

President, Indian Society of Pedodontics and Preventive Dentistry, Dean, V S Dental College and Hospital, Professor and Head, Dept of Pediatric Dentistry, K R Road, V V Puram, Bangalore-560004, Karnataka, India.



General anticipatory guidance for the young patient (0 to 3 years of age) includes the following:

Oral hygiene: Cleansing the infant's teeth as soon as they erupt with either a washcloth or soft brush will help reduce bacterial colonization. The use of dental floss when adjacent teeth are touching is important to help reduce interproximal caries.

Diet: After the eruption of the first primary teeth, ECC prevention is possible by restricting bottle/breast-feeding to normal meal times and not allowing the infant to feed while sleeping. The parents understanding of the cariogenicity of certain foods can help the infant and child eliminate or reduce their caries levels.

Fluoride: Optimal exposure to fluoride is important to all infants and children. Caution is indicated in the use of all fluoride-containing products.

American Academy of Pediatric Dentistry Recommendations on Fluoride Supplementation

| Age of the child | Supplementation based on fluoride concentration of water supply | | |
|---------------------------|---|----------------|----------|
| | <0.3 ppm | 0.3 to 0.6 ppm | >0.6 ppm |
| Birth to six months | 0 | 0 | 0 |
| Six months to three years | 0.25 mg | 0 | 0 |
| Three to six years | 0.5 mg | 0.25 mg | 0 |
| Six to at least 16 years | 1 mg | 0.5 mg | 0 |

Timing of the First Dental Visit:

Traditionally, the recommended time for the first dental visit has been at three years of age. The rationale for choosing this later age was that children were more manageable, and treatment was more efficient.

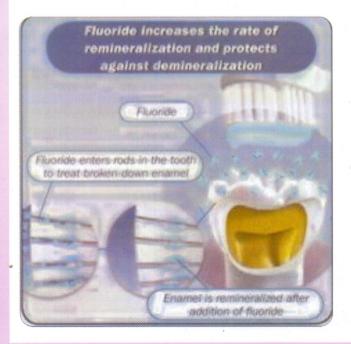
By three years of age, however, poor oral hygiene or improper feeding habits may already have compromised oral health. Therefore, the AAPD recommends that the first oral examination occur within six months of the eruption of the first primary tooth but by no later than 12 months of age. Conversely, the American Academy of Pediatrics currently recommends that children be referred for an initial dental evaluation at 24 months of age.

Early dental intervention provides an opportunity to supplement oral health education for parents in areas such as proper oral hygiene, prevention of dental injuries and prevention of nursing caries. Such intervention may also allow children to become comfortable in the dentist's office. Traditionally, family physicians and pediatricians have provided information on preventive oral health in infants because of the early age at which children are brought to

their offices and because parents accept their recommendations.

Recommendations:

- Infant oral health care begins ideally with prenatal oral health counseling for parents. An initial oral evaluation visit should occur within six months of the eruption of the first primary tooth and no later than twelve months of age.
- All primary health care professionals who serve others and infants should provide parent or caregiver education on the etiology and prevention of ECC. Oral health counseling during pregnancy is especially important for the mother.
- 3. The infectious and transmissible nature of bacteria that causes ECC and methods of oral health risk assessment, anticipatory guidance and early intervention should be included in the curriculum of all medical and allied health professional programs.
- 4. At the infant oral evaluation visit, the dentist should:
- a. Record a thorough medical and dental history, covering the prenatal, prenatal, and postnatal periods.
- b. Complete a thorough oral examination.
- c. Assess the patient's risk of developing oral and dental disease, and determine an appropriate prevention plan and interval for periodic reevaluation based on that assessment.
- d. Discuss and provide anticipatory guidance regarding dental and oral development, fluoride status, nonnutritive oral habits, injury prevention, oral hygiene, and effects of diet on the dentition.
- Dentists who perform such services for infants should be prepared to provide therapy when indicated, or should refer the patient to an appropriately trained individual for necessary treatment.



CONCLUSION:

With the above knowledge we present the salient issues affecting promotion of oral health and primary prevention from pregnancy through infancy and beyond. At the conclusion, one should recognize the oral health as integral to overall health, understand the value of partnerships toward our national oral health objectives, also disseminate to expectant and new mothers basic, and provide accurate information about oral health promotion and primary prevention for themselves and their newborns. Primary care providers' involvement with and perceptions of the epidemic of early childhood caries could be related to attitudes and knowledge of the disease as well as to differences in discipline-based recommendations.

References:

- Infant oral health care. American Academy of Pediatric Dentistry oral health policies. Pediatr Dent 1998;20:23.
- Oral health policies. American Academy of Pediatric Dentistry. Pediatr Dent 1999;21:18-37.
- Clinical guidelines on Infant oral health care. American Academy Of Pediatric Dentistry, Reference manual 2008 09; 30(7).
- Milnes AR. Description and epidemiology of nursing caries. J Public Health Dent 1996;56:38-50.
- Anticipatory Guidance in Infant Oral Health: Rationale and recommendations. Olga m. Sanchez, D.M.D., M.S., and noel k. Childers, D.D.S., M.S., PH.D.
- Dental and Medical Students' Knowledge and Opinions of Infant Oral Health. Mina H. Chung, D.D.S., M.S.; Linda M. Kaste, D.D.S., Ph.D.; Anne Koerber, D.D.S., Ph.D.; Shahrbanoo Fadavi, D.D.S., M.S.; Indru Punwani, D.D.S., M.S.D. J Dent Educ. 70(5): 511-517 2006

Special Admowledgement to



Dr. Natasha Shiggaon
PG Student
Department of Pedodontics & Preventive Dentistry
V.S.Dental College



