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Dental home - A new approach for child oral health care

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Abstract:

To prevent caries in children, high risk individuals must be identified at an early age and aggressive strategies should be adopted, including anticipatory guidance, behavior modifications and establishment of dental home by one year of age for children deemed at risk. The dental home is locus for preventive oral health supervision and emergency care. It can be repository for records and focus for making specialty referrals. Establishment of the home early in the child's life can expose a child to prevention and early interventions before problem occur, reduce anxiety and facilitate referral.

Keywords: Dental home, medical home, anticipatory guidance, AAPD, first dental visit.

Introduction:

Many parents of children with special health care needs come upon dental care for their child out of necessity or urgency. In order to make the relationship most beneficial, the preferred way is to establish a Dental Home during your child's infancy. The Dental Home concept is derived from the American Academy of Paediatrics (AAP) definition of a medical home which states paediatric primary health care is best delivered where comprehensive, continuously accessible, family-centred, coordinated, compassionate, and culturally effective care is available and delivered or supervised by qualified child health specialists has fostered to improve the quality of care for children, beginning at birth.¹⁻⁴

The American Academy of Paediatric Dentistry (AAPD) developed a policy on dental homes that was first adopted in 2001 and revised in 2004⁵. The definition states: "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-centred way. Establishment of a dental home begins no later than 12 months of age and includes referral to dental specialists when appropriate."

Similar to the medical home, the dental home offers the patients comprehensive, continuous, prevention-based care that is accessible, family-centred, compassionate, and culturally competent. Citing strong clinical evidence that early preventive dental care promotes oral health, the AAPD declared that "The establishment of a dental home may follow the medical home model as a cost-effective and higher quality health care alternative to emergency care situations".⁵ Table 1 shows the application of the principles and ideal characteristics of the Medical Home as applied to dental practice.⁶ "The Dental Home is a place for child; it is really a relationship, a frame of mind, and peace of mind."⁶

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Table 1: Ideal characteristics and practical advantages of a Dental Home⁶

Characteristics	Description	Practical Advantages
Accessible	<ul style="list-style-type: none"> ◆ Care provided in the child's community ◆ All insurance accepted and changes in coverage accommodated 	<ul style="list-style-type: none"> ◆ Sources of care is close to home and accessible to family ◆ Minimal hassle encountered with payment ◆ Office ready for treatment in emergency situations ◆ Office is non biased in dealing with children with special health care needs, or CSHCN ◆ Dentist knows community needs and resources (fluorides in water)
Family centred	<ul style="list-style-type: none"> ◆ Recognition of the centeredness of the family ◆ Unbiased complete information is shared on an ongoing basis 	<ul style="list-style-type: none"> ◆ Low parent/child anxiety improves care ◆ Care protocols are comfortable to family (behaviour management) ◆ Appropriate role of parents in home care is established
Continuous	<ul style="list-style-type: none"> ◆ Same primary care providers from infancy through adolescence ◆ Assistance provided with transitions(for e.g ,to school) 	<ul style="list-style-type: none"> ◆ Appropriate recall intervals are based on child's needs ◆ Continuity of care is better owing to recall system vs. episodic care. ◆ Coordination of complex dental treatment is possible (traumatic injury) ◆ Liaison with medical providers for CSHCN is improved (congenital heart disease)
Comprehensive	<ul style="list-style-type: none"> ◆ Health care available 24 hours per day, seven days per week. ◆ Preventive, primary, tertiary care provided 	<ul style="list-style-type: none"> ◆ Emergency access is ensured ◆ Care manager and primary care dentist are in same place
Coordinated	<ul style="list-style-type: none"> ◆ Families linked to support, education and community services ◆ Information centralized 	<ul style="list-style-type: none"> ◆ Records centralized ◆ School, workshop, therapy linkages established and known (cleft palate care)
Compassionate	<ul style="list-style-type: none"> ◆ Expressed and demonstrated concern for child and family 	<ul style="list-style-type: none"> ◆ Dentist-child relationship is established ◆ Family relationship is established ◆ Children less anxious owing to familiarity
Culturally competent	<ul style="list-style-type: none"> ◆ Cultural background recognized, valued, respected 	<ul style="list-style-type: none"> ◆ Mechanism is established for communication for ongoing care ◆ Specialized resources are known and proven if needed ◆ Staff may speak other languages and known dental terminology

Purpose:

The American Academy of Paediatric Dentistry (AAPD) supports the concept of a dental home for all infants, children, adolescents, and persons with special health care needs. The dental home is inclusive of all aspects of oral health that result from the interaction of the patient, parents, dentists, dental professionals, and non-dental professionals.⁷

Policy statement:

The AAPD encourages parents and other care providers to help every child establish a dental home by 12 months of age.^{7, 8}

The AAPD recognizes a dental home should provide:

- Comprehensive oral health care including acute care and preventive services in accordance with AAPD periodicity schedules;
- Comprehensive assessment for oral diseases and conditions;
- Individualized preventive dental health program based upon a caries-risk assessment and a periodontal disease risk assessment;
- Anticipatory guidance about growth and development issues (i.e. teething, digit or pacifier habits);
- Plan for acute dental trauma;
- Information about proper care of the child's teeth and gingivae. This would include the prevention, diagnosis, and treatment of disease of the supporting and surrounding tissues and the maintenance of health, function, and aesthetics of those structures and tissues;
- Dietary counselling;
- Referrals to dental specialists when care cannot directly be provided within the dental home;
- Education regarding future referral to a dentist knowledgeable and comfortable with adult oral health issues for continuing oral health care; referral at an age determined by patient, parent, and paediatric dentist.

The AAPD advocates interaction with early intervention programs, schools, early childhood education and child care programs, members of the medical and dental communities, and other public and private community agencies to ensure awareness of age-specific oral health issues.

Need for Establishing Dental home in India:

Dental caries results from an overgrowth of specific organisms that are part of normally occurring human dental flora. 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.

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.⁹

Empiric evidence of the value of the dental home which includes:

Children in a dental home are more likely to receive appropriate preventive and routine oral health care, thereby reducing the risk of preventable dental/oral disease.

Environmental factors in implementing the dental home for all young children:

Benefits of the dental home are substantial and intuitive, although not yet substantiated by research, and include an increasing emphasis on prevention and disease management, advancements in tailoring care to meet individual needs, and better health outcomes at lower costs.

Forces explored are:

- The advent of "social medicine" that clarifies that opportunities for children to obtain and maintain oral health are established by factors beyond the mouth and beyond the dental chair.
- Expanding knowledge of early childhood caries risk and disease management.
- Trends in oral health and dental care disparities and the forces that propel them which states that: "The dental home will need to be particularly accommodating and sensitive to opportunities and constraints for oral health among the disproportionately growing numbers of young children who live in poverty and single parent households."
- Perceived needs for dental services to children at greatest risk of disease and continuing active professional involvement in solving barriers to both oral health attainment and to dental care.
- Dentistry as an independent health profession helps explain why a child may require more than one "home."
- Dental system capacity for all children, because the total numbers of dentists are inadequate to provide a dental home for the total numbers of children, priority should be given to children at greatest risk for dental disease, including those with earliest signs of early childhood caries, children from high-risk subpopulations, and children with special health care needs.⁹

Creating awareness of dental home:

In order to establish a dental home; it is important to meet the parents/prospective parents early. Gynaecologists, paediatricians, family physicians are the people who come in contact with them much before a dentist. These people must establish communication with them such that effective and timely referrals are made to dentist. Also, schools and pre-school day care centres can be informed about the dental home.⁹

- 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 in a gynaecologist’s office.
- A child should visit the dentist within six months of the eruption of the first tooth or by age one.
- The earlier the dental visit, the better is the chance of preventing dental problems.
- Encourage children to drink from a cup as they approach their first birthday.
- Children should not fall asleep with a feeding bottle.
- Children should be weaned from the bottle feeding at 12-14months of age.
- Thumb sucking is perfectly normal for infants; most stop by age of 2 and it should be discouraged after age of 4years.
- Never dip a pacifier into honey or anything sweet before giving it to a baby.
- Limit the frequency of snacking in between meals which can increase child’s risk of developing cavities.
- 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.
- From six months to age 3, children may have sore gums when teeth erupt. Many children like a clean teething ring, cool spoon, or cold wet washed cloth.
- Some parents prefer a chilled ring; others simply rub the baby’s gums with a clean finger.

The Virtual Dental Home:

The virtual dental home is an innovative new model for delivering dental care. It is applicable for a wide variety of population groups, especially those who are currently inadequately served in traditional dental settings. The model incorporates many of their commendations from the Institute of Medicine report, “Improving Access to Oral Health Care for Vulnerable and Underserved Populations” they are:¹⁰

- Bringing oral health services to locations where underserved vulnerable populations receive educational, social, and general health services and integrating oral health with services provided in those settings;
 - Expanding duties for existing oral health professionals;
 - Emphasizing prevention and early intervention oral health procedures; and
 - Creating a geographically distributed but coordinated dental team through the use of tele health technologies.
- In the virtual dental home model, early intervention restorative care is provided through a Health Workforce Pilot Project (HWPP) authorized by the California Office of State wide Health Planning and Development.¹¹ The settings for care in the virtual dental home system include Head Start Centres, schools, residential facilities for people with disabilities, and long-term care facilities for dependent adults. The services provided include diagnostic, preventive, and early intervention restorative care. Where more advanced care that can only be provided by a dentist is required, case management techniques are employed to refer patients to dental offices and clinics. The dental team includes dentists who review electronic records and make diagnostic and treatment decisions and allied dental professionals who collect records and provide preventive and early intervention services in community settings under the general supervision of dentists.

The virtual dental home advisory committee concluded that the current system for delivering dental care is not optimized to improve or maintain oral health for many underserved people. In order for innovations in the delivery of oral health care, such as the virtual dental home to be sustained and spread, alterations are needed in the educational environment that trains Providers, state systems that regulate scopes of practice and the delivery of services, and financing mechanisms.⁷

Conclusion:

We conclude that the dental home is an important concept for the dental profession to embrace. Current dental system capacity cannot support wholesale implementation of the dental home unless the dental home’s functions are shared by other agencies that interact with children where they live, learn, and play. The dental home is a concept that deserves support, further investigation and, in conjunction with the medical home, would provide the comprehensive health care to which all children are entitled.

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