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RESEARCH ARTICLE

A PRIMARY CARE ORAL HEALTH CONCEPT :THE DENTAL HOME.

Dr. Gaurav Kumar Mittal, Dr. Neha Sharma, Dr. Fehan Ahmed Khan, Dr. Ankit Chaudhari, Dr. Priyanka, Dr. Parth Barot, Dr. Ramphal Singh, Dr. Sorav Gupta and Dr. Hansika Pahuja.

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Abstract

Background: If the adverse trends in oral health in children and young people are to be reversed, fundamental changes in the provision of primary dental care for young people will be required. The most important of these are the setting of a realistic level of remuneration for general dental practitioners treating children in the NHS and assurance of an adequate supply of appropriately trained staff within the Community Dental Service. For the future, the recognition of Paediatric Dentistry in the Chief Dental Officer's report on Specialization in Dentistry, and the setting up of a Task Force for this Specialty, are vital developments in ensuring high-quality comprehensive oral health care for children and adolescents is readily available and accessible to all.

Description: The dental home is a locus for preventive oral health supervision and emergency care. It can be a repository for records and the focus for making specialty referrals. When culture and ethnicity are barriers to care, the dental home offers a site adapted to care delivery and is sensitive to family values.

Clinical Implications: The dental home can provide access to preventive and emergency services for children. Establishment of the home early in the child's life can expose a child to prevention and early intervention before problems occur, reduce anxiety and facilitate referral.

Introduction:-

The concept of a dental home for children is new to most of the dental profession. For medical practitioners, however, the concept of identifying a child with a practitioner in a familiar and safe health supervision relationship is well-established.[1] The U.S. surgeon general's recent concern about the low use of oral health services by children[2] and the persistence of early childhood caries [3] suggest that dentistry should consider taking a closer look at the potential benefits of an analogous concept of a "dental home." It could improve access to and provide children with a source of care and anticipatory guidance as early as 1 year of age. This article provides a rationale for creating a dental home, what a family could expect once they find a home and what improvements in oral health might occur as a result.

Child dental health in the 1990s:-

The pre-school child the recent publication of the National Diet and Nutrition Survey undertaken on behalf of the Department of Health for pre-school children aged 1-4 years included an oral health survey[4]. Information was

Corresponding Author:-Dr.Gaurav Kumar Mittal.

available from a sample of 1658 pre-school children from 100 districts in mainland UK. It was found that, overall, 17% of children in this age group had some caries experience, but particularly worrying was the observation that 83% of carious teeth were untreated. The longest period of study of pre-school children in the UK has been carried out in Camden over nearly 30 years.[5]The 1986 Camden Survey had already suggested that the continuing improvement in the dental health of pre-school children had not occurred and that there had been a slight upturn in the caries prevalence. The results of the 1993/94 study show once again that the burden of dental caries falls most heavily on children from the most socio-economically disadvantaged groups of the population, i.e. families with unemployed fathers and families in some ethnic minority groups. These observations have since been conformed amongst other 5-year-old children in different parts of the UK . Significant improvement in the dental health of pre-school children is unlikely to occur in the foreseeable future without fluoridation of the nation's drinking water supplies where appropriate. To prevent the ravages of caries affecting successive generations of children, further efforts are required to ensure that the most recent recommendations contained in the COMA report on Weaning and the Weaning Diet are emphasized sufficiently in local oral health promotion initiatives. As far as treatment services are concerned, there is little indication that the introduction of a capitation system of payment for the dental care of children in the General Dental Service in 1990 has had a positive impact on the oral health of the youngest children; registrations within the GDS for the 0-2-year-olds is less than 20% across the UK. Referrals of new patients to specialist centres for paediatric dental care as well as general anaesthesia rose by as much as 207% in some centres in the second year after the introduction of capitation[6].

The Medical Home Concept:-

The American Academy of Pediatrics, or AAP, proposed a definition of a medical home in 1992 in the form of a policy statement.[7]The essential concept is that medical care of children of all ages is best managed when there is an established relationship between a practitioner who is familiar with the child and the child's family. This relationship fosters care that is accessible, coordinated and compassionate and that encourages mutual responsibility and trust. The medical home also presumes that the physician caring for the child is well-trained and capable of supervising health and managing illness. The medical home becomes the place where a child receives preventive instruction, immunizations, counseling and anticipatory guidance. In a rather bold statement for today's health care, the framers of this definition proposed that management of acute illness be available 24 hours a day. They also proposed that long-term continuity be an important consideration and that the provider initiate and coordinate subspecialty care and function as the child's link to community agencies regarding health issues. The medical home's physical location should be the safe repository of the child's medical records. In a subsequent publication,[8] the AAP addressed the medical home concept for children with special health care needs in managed care programs. This view of the medical home emphasized the need for coordination of specialized medical and community services and acknowledged the role of subspecialists as a more appropriate home for these children, based on individual need. The complexities of care, as well as the introduction of an additional care manager, were emphasized as all the more reason for a care supervising medical home.

Table 1:-

CHARACTERISTICS OF A MEDICAL HOME.*

CHARACTERISTIC	DESCRIPTION
Accessible	▬ Care provided in the child's community ▬ All insurance accepted and changes in coverage accommodated
Family-Centered	▬ Recognition of the centeredness of the family ▬ Unbiased complete information is shared on an ongoing basis
Continuous	▬ Same primary care providers from infancy through adolescence ▬ Assistance with transitions (for example, to school) provided
Comprehensive	▬ Health care available 24 hours per day, seven days per week ▬ Preventive, primary, tertiary care provided
Coordinated	▬ Families linked to support, education and community services ▬ Information centralized
Compassionate	▬ Expressed and demonstrated concern for child and family
Culturally Competent	▬ Cultural background recognized, valued, respected

* Source: American Academy of Pediatrics.[5]

Table 1 delineates the seven characteristics of a medical home. Cultural competence was added to the original six in the description by AAP to account for the need to reach underrepresented populations who traditionally have had difficulty gaining access to care.

The Dental Home Concept:-

The American Academy of Pediatric Dentistry (**AAPD**) sup-ports 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 nondental professionals. Establishment of the dental home is initiated by the identification and inter-action of these individuals, resulting in a heightened aware-ness of all issues impacting the patient's oral health. This concept is derived from the American Academy of Pediatrics' (**AAP**) definition of dental home is ongoing relationship between the dentist and the patient ,inclusive of all aspect 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].

Methods:-

This policy is based on a review of the current dental and medical literature related to the establishment of a dental home. An electronic search was conducted using the search parameters: Terms: dental home, medical home in pediatrics, and infant oral health care; Fields: all fields: Limits: within the last 10 years, humans, English. Papers for review were chosen from this list and from references within selected articles. Expert opinions and best current practices were relied upon when clinical evidence was not available.

Background:-

The AAP issued a policy statement defining the medical home in 1992.Since that time, it has been shown that health care provided to patients in a medical home environment is more effective and less costly in comparison to emergency care facilities or hospitals.Strong clinical evidence exists for the efficacy of early professional dental care complemented with caries-risk assessment, anticipatory guidance, and periodic supervision.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.

Children who have a dental home are more likely to receive appropriate preventive and routine oral health care. Referral by the primary care physician or health provider has been recommended, based on risk assessment, as early as six months of age and no later than 12 months of age.Furthermore, subsequent periodicity of reappointment is based upon risk assessment. This provides time-critical opportunities to implement preventive health practices and reduce the child's risk of preventable dental/oral disease.

Policy statement:-

The AAPD encourages parents and other care providers to help every child establish a dental home by 12 months of age. The AAPD recognizes a dental home should provide:

- Comprehensive, continuously-accessible, family- centered, coordinated, compassionate, and culturally-effective care for children, as modeled by the AAP.
- 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 regarding growth and development.
- 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 esthetics of those structures and tissues.
- Dietary counseling.
- 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 pediatric 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.

Table 2:-

IDEAL CHARACTERISTICS AND PRACTICAL ADVANTAGES OF A DENTAL HOME.

CHARACTERISTIC	DESCRIPTION	PRACTICAL ADVANTAGES
Accessible	— Care provided in the child's community — All insurance accepted and changes in coverage accommodated	— Source of care is close to home and accessible to family — Minimal hassle encountered with payment — Office ready for treatment in emergency situations — Office is nonbiased in dealing with children with special health care needs, or CSHCN — Dentist knows community needs and resources (fluoride in water)
Family-Centered	— Recognition of the centeredness of the family — Unbiased complete information is shared on an ongoing basis	— Low parent/child anxiety improves care — Care protocols are comfortable to family (behavior management) — Appropriate role of parents in home care is established
Continuous	— Same primary care providers from infancy through adolescence — Assistance provided with transitions (for example, to school)	— 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	— Health care available 24 hours per day, seven days per week — Preventive, primary, tertiary care provided	— Emergency access is ensured — Care manager and primary care dentist are in same place
Coordinated	— Families linked to support, education and community services — Information centralized	— Records centralized — School, workshop, therapy linkages established and known (cleft palate care)
Compassionate	— Expressed and demonstrated concern for child and family	— Dentist-child relationship is established — Family relationship is established — Children less anxious owing to familiarity
Culturally Competent	— Cultural background recognized, valued, respected	— Mechanism is established for communication for ongoing care — Specialized resources are known and proven if needed — Staff may speak other languages and know dental terminology

The Dental Home Advantage:-

The dental home embraces the importance of early intervention with optimal preventive strategies chosen based on the risk of the patient and would encourage the first dental visit by approximately 1 year of age. Parents may welcome professional support and anticipatory guidance to ensure that their children have healthy mouths at this age. Practitioners can provide personalized preventive approaches for children based on their families' histories, the oral examination and the risk factors identified. These risk factors include medical history, dietary habits, medication, fluoride availability and parental attitudes. Abundant literature supports the role of risk factors early in lifeas predictors of dental caries. The AAPD's Recommendations for Periodic PreventiveCare provide a framework for the practitioner to consider when developing office policies and recommendations. An important feature of a dental home is to provide anticipatory guidance to the parents so that they are aware of their children's growth and development, as well as possible risk factors that occur as children age. Anticipatory guidance provides a framework for practitioners and their staff members to periodically engage parents in conversations about the anticipated needs of the children. Another advantage of the dental home is that preventive intervention can be personalized to the

needs of the child. Risk assessment remains an emerging science, and, although empirical suggestions are available for children who are at greater risk, the observations of the practitioner still are valid. In fact, recent consensus validates the power of the dentist's opinion on individual caries risk. Too often, a "shotgun" approach is suggested, and all children are given the same preventive intervention no matter what their risks. Studies confirm that this approach is both inefficient and ineffective. An individualized preventive program can be recommended for optimum protection of children in different risk categories within a good cost-benefit range[10,11].

Conclusion:-

We conclude that the dental home is an important concept for the dental profession to embrace. Evidence supports the advantages of receiving early professional dental care and intervention that are complemented by anticipatory guidance for parents, as well as periodic supervision visits based on the child's risk of dental disease. The dental home could increase opportunities for preventive oral health services for children that can reduce disease disparities.

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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