

Building a Healthy Foundation for the Child from Birth: Need for Collaborative Parenting by the Pediatricians and Pediatric Dentists

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A famous quote rightly says that “The aim of every science is to cause its own extinction.” As health care providers, therefore, the fundamental goal of our specialties should be not only to move toward providing the best possible treatment solutions to our patients, but also to reduce the burden of diseases to such an extent, wherever possible, so as to make ourselves less and less relevant to the population we serve.

Although preventable, oral diseases like dental caries, are a highly prevalent condition, affecting more than 3.5 billion people worldwide, mainly owing to the lack of preventive care and is closely linked to socioeconomic status and the broader social determinants of health.^{1,2} Early childhood caries (ECC) is defined as any sign of tooth decay in a child less than 6 years of age and has a worldwide pooled prevalence of 48%, which is greater than all known chronic diseases of early childhood, but is usually not considered when describing the overall health status of the child; highlighting the disparity among the other medical and oral conditions.³⁻⁵

The recommended age for the first dental visit of a child, is at the time of eruption of the first tooth, which is well before the child's first birthday. However, in practice it has been found that the first visit is generally at 6 years of age or beyond, primarily owing to symptomatic conditions, dental caries being the most common.^{6,7} As a result, a greater proportion of unidentified pediatric dental caries remain inaccessible for timely preventive care delivery. Moreover, lack of awareness about the importance of dental health, especially in the deciduous dentition stage, lack of pediatric dental specialists, and unwillingness of general dental practitioners to see infants and young children causes a hindrance to the assurance of optimal care.

The identification and addressing of barriers in providing optimum pediatric oral healthcare is important, especially in a developing country like India. These conditions pose a health hazard to children, also increase the burden of untreated cases and dental healthcare expenses.⁸⁻¹⁰ The discrepancies in providing oral healthcare also create a burden on the workforce of general practitioners and pediatricians due to a greater number of emergency cases resulting from dental neglect. Most of these conditions are the ones that could likely be prevented or reduced in its severity with timely preventive advice.

Oral diseases, like several other systemic diseases may be attributed to certain common maladaptive nutritional habits and microbial dysbiosis.^{11,12} The advice for its prevention needs to be centred around certain key factors in a multifactorial etiology, encompassing the general health of a child, genetic influences, environmental influences, diet, microbial load, and conditions

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affecting tooth morphology. Hence, the knowledge and ability to primarily screen patients who are at risk of developing oral diseases may help in reducing this disease burden. Moreover, knowledge about oral conditions may also help in early detection and greater understanding of certain other medical conditions as well.

The World Health Organization (WHO) identifies the scope for interprofessional practice in the primary healthcare sector.¹³ On an average, children visit a Pediatrician six times in their first year of life and decrease in frequency thereafter.¹⁴ However, in order to tap into this great potential in ensuring oral health of children, the barriers that need to be bridged include inadequate education and training, time constraints in practice, and lack of referral pathways.¹⁵

In the present scenario, it is important for Pediatricians to understand the inter-relationships between oral and general health and the basic concepts of common dental diseases to initiate primary treatment and ensure timely referrals to pediatric dentists. WHO endorsed the need for integration of oral healthcare with existing primary care such as child & maternal health programs, vaccination, general medical check up to raise awareness about ECC, and the importance of breastfeeding and risk factors for dental caries development, particularly addition of free sugars to drinks and food.³ Preventive guidance in the first year of life by pediatricians/health care professionals about limitation of sugar intake, avoidance of free sugar in children below one year and brushing twice daily with age appropriate fluoridated tooth paste can go a long way in sensitizing the primary care givers about the importance of oral health in a timely manner.^{3,16} The role

of pediatricians as primary oral care providers is also indispensable in time-limited emergency care and advise. Since the peak incident of dental trauma in young children is between 2 and 3 years, which is well before they may have had any first contact with a pediatric dentist. Most cases therefore are likely to seek consultation from general dental practitioners or pediatricians, the nature of which can directly affect the outcome in many cases.

Moreover, in the recent years, there has been a major shift in the understanding of pathophysiology of many diseases and the concept of early identification and early treatment is catching on. Maternal oral health has been shown to be closely associated with child's general and oral health,¹⁷ breast feeding positions/patterns have been shown to be associated with certain type of malocclusions,¹⁸ tongue tie at birth is related to many feeding difficulties, GERD¹⁹ and tooth eruption patterns have shown association with development of autism etc.²⁰ Due to change in our understanding and also the growing awareness among parents, this trend of seeking early advice is catching on and therefore, the pediatricians and pediatric dentists need to further strengthen the closer working linkages with an endeavor to offer the best health outcomes for the young growing child patients.

In conclusion, interdisciplinary treatment involving pediatricians and pediatric dentists is an overlooked, but an important aspect in pediatric care as the fundamental aspect of both of these specialties is helping every child to lead a disease-free life where they can develop to their full potential.

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