



**Knowledge, Attitude and Practice towards Infant Oral Health Care Amongst Paediatricians and General Physicians in Parbhani District**

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**Abstract:** Internationally, there is a growing focus on the role of the non-dental workforce in improving oral health outcomes, particularly for children. Dental caries is the most common chronic disease affecting children. The impact of chronic pain/discomfort related to dental caries on child cognitive development has been documented, with lack of concentration commonly reported. Since children are not seen routinely by the dentist, they are at risk of developing dental disease. Paediatricians and general physicians who see a child from birth are in the best position to identify early dental problems and to educate the parents about the early oral preventive healthcare.

**Aim:** The present study is designed with an objective to gather the data and evaluate the level of knowledge, attitude and practice toward infant oral healthcare among the paediatricians and general

physicians.

**Methodology:** All participants gave verbal consent and the consent procedure was approved by the institutional Ethical Committee/Institutional Review Board. The first part of the questionnaire included general information on pediatricians and general physicians: like gender; working environment; and the number of years in practice. In second part of questionnaire, the knowledge of pediatricians and general physicians were assessed by asking them to answer the questions in questionnaire.

**Result:** Results were obtained by using SPSS version 21. It was found that 70% practitioners were not aware about treatment needs of deciduous teeth.

**Conclusion:** There is a need to educate everyone by conducting regular health educative programs.

**Keywords:** Infant, Caries, Oral health, Pediatrician, General physician.

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**Introduction:** The American Academy of Paediatric Dentistry (AAPD), three decades ago, has established guidelines for infant oral healthcare that are specifically directed towards young children. Infant oral healthcare aims at delivering preventive dental strategies within six months after the eruption of the first primary tooth and no later than 12 months of age.<sup>1</sup>

Having this initial dental visit helps to establish a dental home for the child at an early stage of life to prevent common dental diseases.<sup>2</sup>

Indian Society of Paediatric and Preventive Dentistry (ISPPD) also strives to achieve this goal with the motto 'every child has the fundamental right to his/her total oral health'.<sup>3</sup>

Early childhood caries (ECC) is the most virulent form of caries, which starts soon after tooth eruption. It develops on smooth surfaces and progresses rapidly, causing a detrimental impact on the dentition

Promotion of oral health and preventive dental care are fundamental concepts in paediatric dentistry. The goal is to provide infants and toddlers with a pleasant, non-threatening introduction to dentistry and to establish and reinforce the foundation for sound dental habits. There is a need to move away from the surgical approach of managing oral diseases and embrace the concept of oral care beginning at infancy or even prenatally.<sup>4</sup>

Since children less than 3 years are not seen routinely by the dentist, they are at risk of developing dental disease. Paediatricians who see a child from birth as part of well baby visit

program are in the best position to identify early dental problems and to educate the parents about the early oral preventive healthcare. They also can provide screening services for early detection of dental disease, provide advice about the need to seek dental care and refer those children in need to paediatric dentist.

One of the factors which affect the performance of preventive dentistry is the knowledge, attitude and practice of the paediatricians concerning this issue. Basic questions about the delivery of infant oral healthcare, dental referral process and its outcomes remain unanswered. Thus, the present study is designed with the objective to gather the data and evaluate the level of knowledge, attitude and practice toward infant oral healthcare among the paediatricians and general physicians.

**Materials and Methods:** The present survey was undertaken among the paediatricians and general physicians of Parbhani district. A comprehensive questionnaire was prepared based on the studies done by Prakash et al and Murthy et al.<sup>5,6</sup>

The questionnaire was prepared in two parts.

- The first part of the questionnaire included general information of paediatricians and general physicians: gender; working environment; and the number of years in practice.
- In second part of questionnaire the knowledge of paediatricians and general physicians are assessed by asking them to answer the questions in questionnaire

After the questions were considered to be reliable, it was handed over personally to all the paediatricians who agreed to participate in the survey and some are approached with google form. The questionnaire was collected after 1 day. The results obtained were analysed using statistical package for social science (SPSS) software descriptive and inferential statistical tests.

**Results:** The sample in our present study had 43% females and 57% male professionals.

23% of them had a degree of DCH, 17% were having MD degree where as remaining speciality were grouped into others. The sample however was equally distributed into private Practice and institute level Practice.

	Frequency (n)	Percentage (%)
DCH	23	23%
MD	17	17%
Both	1	1%
Other	59	59%

96% of the sample thought that they play an important role in infant oral health care. However not all of them were aware about the preventive practices that need to be taught to parents for the same.

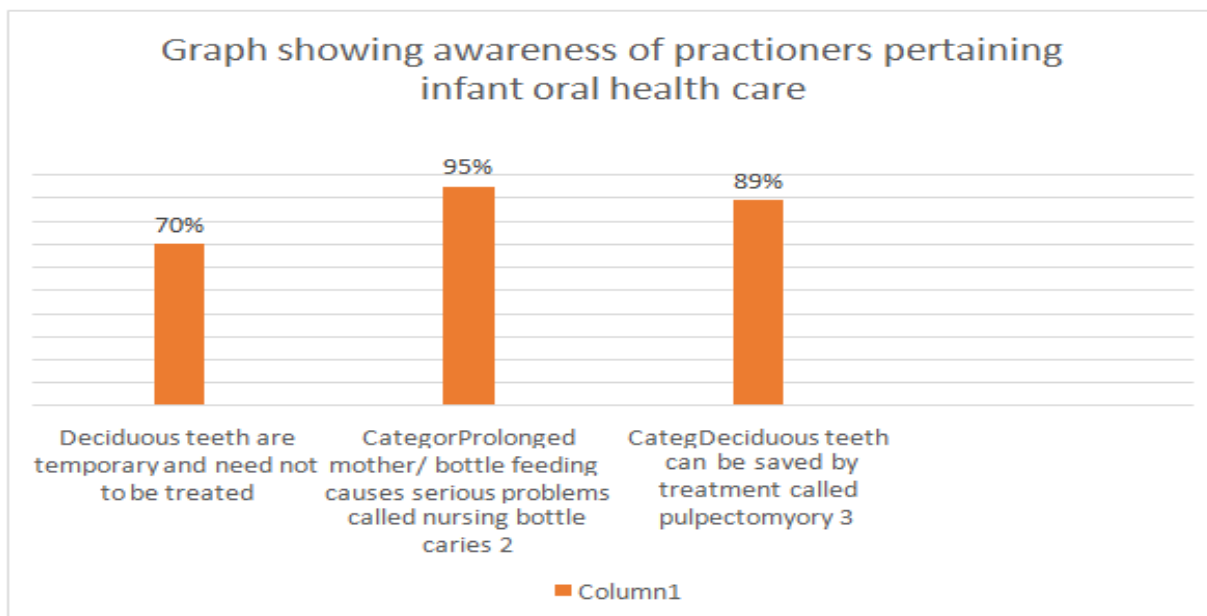
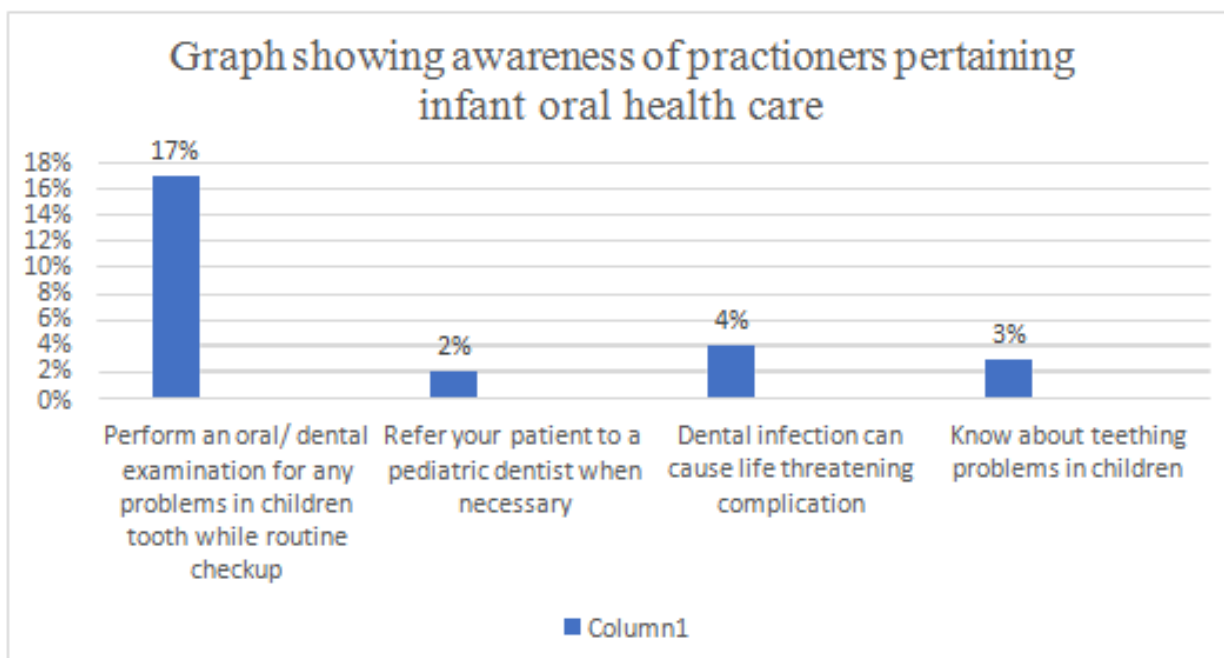
Only 64% of the paediatricians and general physicians were aware about the fact that cleaning of oral cavity should start right after first feeding. While only 33% of them knew that the first dental visit of child should be during his first year of life. (Graph 1)

Only 51% of the population knew the correct age of eruption while only, 64% of them knew that there are 20 deciduous teeth in an oral cavity.

Only 29% of the professionals were aware about the fact that the most appropriate age for weaning is six months.

Almost 30% of the professionals had no idea about natal teeth and 50% didn't know the concept of neonatal teeth.

Approximately 30% of the paediatricians and general physicians were not aware of the treatment options of deciduous teeth which included restoration, extraction, space maintainer or crowns. And only 72% of them seemed to be aware about the foods that cause the most decay.



**Discussion:** It is a common agreement amongst AAPD, AAP and ADA that early dental screening is the key to improve infant oral health care.

Traditionally, AAP had recommended seeing the dentist by the age of 36 months. However, more recently the AAP has changed and expanded its oral health guidelines; and the recent policy

aimsto establish a dental home for children by 1 year of age through the use of oral health risk assessment at 6 months of age. The policy recommends referring a child for oral health examination within 6 months of eruption of first primary tooth but not later than 12 months of age.

A study done by GA Murthy et al in 2010 also states that the pediatrician's had moderate knowledgeabout dental caries.<sup>5,9,12</sup>

A study done by Brickhouse TH et al in 2008, stated that majority of pediatricians are advising patients to see the dentist by 1 year of age. There is a need for increased infant oral health care education in the medical communities.<sup>4,10,14</sup>

A study done by Sabbagh et al in 2011, the most important observation was that the concept of oral health prevention was deficient. Pediatricians' awareness of fissure sealants, fluoride, dietary counseling, time of first dental visits and thumb sucking were quite limited. Pediatricians'knowledge was significantly lower than their attitude and behavior scores.<sup>7,8,15</sup>

Present study revealed that pediatricians and general physicians were aware about factors causingcaries.

In present study 99% pediatricians and general physicians agreed that pediatricians, general physicians and pediatric dentists are responsible for infant oral health care.<sup>13</sup>

Most of the children under 1 year of age are not routinely seen by the dentist, but paediatricians encounter them at least five times before the child is 1 year old.<sup>7</sup> Hence, paediatricians are in the position to provide information about oral healthcare to parents and make referral to the dentist when required. Studies have shown that if proper awareness is created among paediatricians, they can educate the parents and accurately identify patients in need of referral.<sup>11</sup>

**Conclusion:** From this study it can be concluded that majority of the paediatricians and general physicians are not advising parents to visit dentist by 1 year of age. Many paediatricians and general physicians feel that knowledge imparted in medical schools is inadequate as far as infant oral health is concerned. There is a need to educate everyone on infant oral healthcare by conducting regular health educative programs. More interactions between the paediatricians and general physicians and paediatric dentist would be worth to handle the infant population and provide them complete overall health.

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