



## Knowledge and Attitude about Oral Health Care in Children among Health Care Professionals of Belagavi City- A Questionnaire Study

**Niraj S Gokhale\*, Rucha N Davalbhakta, Shivayogi M Hugar, Vidyavathi H Patil, Gowtham K and Madhura Mundada**

*Department of Pedodontics and Preventive Dentistry, KLE Academy of Higher Education and Research, KLE VK Institute of Dental Sciences, Belagavi, India*

**\*Corresponding Author:** Niraj S Gokhale, Reader, Department of Pedodontics and Preventive Dentistry, KLE Academy of Higher Education and Research, KLE VK Institute of Dental Sciences, Belagavi, India.

**Received:** January 8, 2019; **Published:** January 29, 2019

### Abstract

**Introduction:** Oral health care in children is the base of foundation for preventive education and dental care. Paediatricians and medical practitioners are the first to meet a child and hence they should have knowledge about oral health. The survey was aimed to assess the knowledge and attitude about oral health care in children among Paediatricians and house surgeons of Belagavi city.

**Materials and Method:** A cross sectional survey was conducted by using convenience sampling with sample size of 100. A printed questionnaire containing 20 questions containing three domains was distributed among the participants. The data was analysed using descriptive analysis.

**Results:** The average knowledge score was 66%, average attitude score was 76%. Only 19% knew the age of referral. 3% had received training, 94% were willing to receive training.

**Conclusion:** Thus, it concludes that there is a need to increase the level of knowledge and awareness among health care professionals about oral health care in children.

**Keywords:** Paediatric Dentistry; Preventive Oral Health Care

### Introduction

Pedodontics and preventive dentistry deals with the oral health care and treatment of children. Even though there is improved dental care status, the preventive aspect is still not well implemented. Dental caries is still considered as one of the most common occurring diseases. The prevalence of Early Childhood Caries in South Indian Population ranges from 19.2% to 63.2% with high prevalence as age increases from 2-5 years [1].

According to the American Academy of Paediatrics, the recommended time for first visit of a child to a Paediatric dentist is 6 months to 1 year. Dental care has been a concern due to neglect and less awareness. Oral health care of children is compromised and is seen to deteriorate due to lack of knowledge of parents during first few years of the child's life [2].

The Paediatricians and House surgeons are the first to come in contact with infants and their parents. They have an important role in educating, guiding and accessing as well as counselling the parents about the preventive measures and referring them to the paediatric dentist at correct time. The paediatricians and house surgeons are seen to have less awareness about the preventive aspect of Paediatric dentistry. This may pose a barrier in complete and proper oral health care. The most important part in for qualitative care is the co-ordination between the paediatrician and pedodontist [3].

Only a few studies have been conducted in this area. Hence, this study is conducted to evaluate the knowledge and attitude of Health Care professionals about oral health care in children.

### Materials and Methods

Paediatricians and House surgeons in the Belagavi city were included in the study. A sample size of 100 was considered by using convenience sampling and standardized sample formula [4]. A Self-administered printed questionnaire containing 20 questions was distributed. The questionnaire was prepared based on previous studies and minor modifications were made [5]. The questionnaire was divided into three parts:

1. Demographic data- included the age, gender, years of experience.
2. Knowledge about oral health care among the health care professionals
3. Attitude about oral health care among the health care professionals

### Statistical analysis

The data was collected and tabulated on excel sheet. It was analysed by descriptive analysis using IBM SPSS software (version 20.0 Chicago IL, USA).

### Results

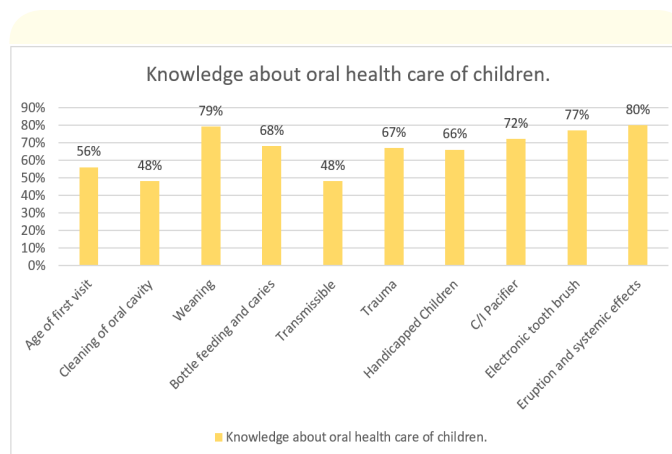
In the present study all the 100 participants returned their forms and there were no dropouts. The study included 44% male and 66% female, this could be related to the increasing number of female population interested in dentistry as their profession (Table1). Forty percent of the participants were Paediatricians, 60% percent of the participants were House surgeons.

Male	44
Female	66

**Table 1:** Table showing distribution of the participants according to their gender.

When participants were asked questions related to their level of knowledge towards oral health care an average knowledge of 66% was seen while the average attitude score was seen to be 76% table 2 demonstrates the health care professionals perception about the knowledge regarding oral care needs in children. It was seen that almost 56% (Graph 1) had the knowledge about the age of first dental visit. Almost 48% participants said it is important to clean the oral cavity after first tooth erupts others responded negatively showing the negligence towards oral health care in children. Weaning period was known to 79% of the participants. 68% agreed that

bottle feeding lead to dental caries while 52% agreed that dental caries is transmissible. 67% and 68% of the participants responded positively that a case of dental trauma and/or handicapped child management can be carried out by a Paediatric dentist but it was surprising to see that almost 40% were not aware regarding the same. The results showed that 72% of health care workers were aware about the pacifier usage. It was interesting to know that 77% of the study population agreed to the use of motored tooth brush in children. There was strong belief among the health care professionals regarding the relation between eruption of teeth and systemic manifestation (80%).



**Graph 1:** Knowledge about oral health care by Health care professionals.

Table 3 shows the attitude of health care professionals towards oral health care was seen to be adequately positive (76%). Almost 100% participants considered primary teeth important which shows that they had a positive attitude towards oral health care in children but the preventive aspect of Pediatric dentistry was not known by more than fifty percent of the participants. Regarding the usage of pit and fissure sealants as preventive measures only 44% of health worker were knowing which was showing very poor knowledge as 66% were not even aware about it and 62% knew about the use of fluorides in Paediatric dentistry which have now become an important aspect in prevention of dental caries. This shows that necessary training, knowledge and awareness regarding the preventive as well as referral practises needs to be incorporated in the curriculum. 86% were of the opinion that primary teeth restorations are important. A good attitude was seen of the health care professionals regarding examination of oral cavity by paediatrician, routine dental visit and cleaning of the oral cavity

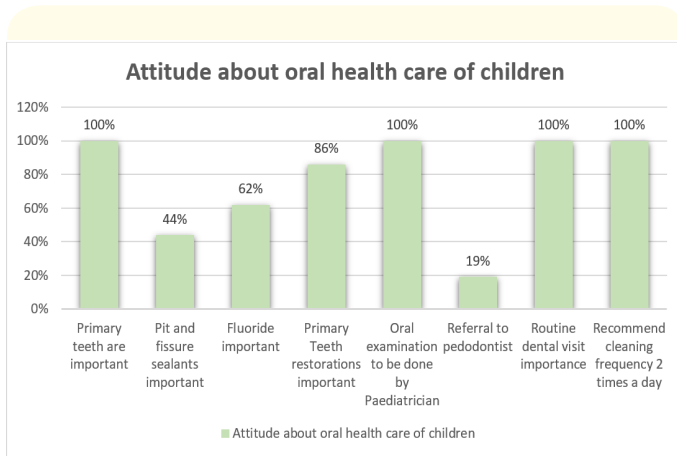
Knowledge related Questions	Answered by health professionals (Percentages)		
1. Age of first dental visit is?	a. At birth	b. After eruption of first tooth	c. After eruption of all primary teeth
	10%	56%	44%
2. When should the cleaning of oral cavity begin?	a. After all primary teeth erupt	b. After first tooth erupts	c. After every feed from birth
	47%	48%	5%
3. Weaning should be started by?	a. 2-3 months	b. 4-6 months	c. 8-9 months
	6%	79%	15%
	a. Agree (Percentage)	b. Disagree (Percentage)	
4. Prolonged breastfeeding/ bottle feeding leads to dental caries?	68%	32%	
5. Tooth decay is transmissible?	52%	48%	
6. Cases with trauma to the jaw can be referred to paedodontist?	67%	33%	
7. Paedodontists are trained to treat handicapped children?	66%	34%	
8. Do you contraindicate use of pacifier?	72%	28%	
9. Can modified electronic toothbrush be used in children?	77%	23%	
10. Is there relation between eruption of teeth and systemic manifestations (fever, diarrhoea, etc)	80%	20%	

**Table 2:**Table showing knowledge about oral health care of children among health care professionals

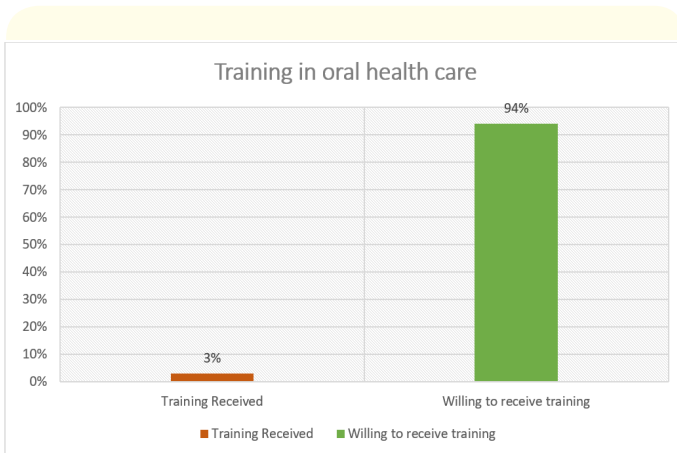
twice a day (100%). It was seen that only 19% (Graph 2) referred the child to Paediatric dentistry at the recommended age by the AAPD (American Association of Paediatric Dentistry) that is at 6 months of age. This shows the negligence of the health care professionals towards the guidelines established which will further hamper the reduction of caries prevalence in children. Only 3 % had received training in oral health care (Graph 3) while 94% were willing to further receive training. Hence, the health care professionals should have a thorough knowledge of referral as well as examination as the percentage receiving training is seen to be minimal.

Attitude related Questions	Answered by health professionals (Percentages)		
	a. Agree (Percentage)	b. Disagree (Percentage)	
1. Are primary teeth important?	100%	-	
2. Pit and fissure sealants are used as a preventive measure?	44%	66%	
3. Is Fluoride important for prevention?	62%	38%	
4. Primary tooth fillings are necessary?	86%	14%	
5. Paediatrician should examine oral cavity during physical examination?	100%	-	
6. When do you refer the patient to a Paedodontist?	a.6 months	b. 1 year of age	c. when there is a problem
	6%	19%	75%
7. Is routine dental visit important in preventing dental caries?	100%	-	
8. Do you recommend parents to wash/clean the child's teeth twice a day?	100	-	
9. Have you received training regarding oral health care?	3%	97%	
10. Are you willing to receive training in oral health care?	94%	6%	

**Table 3:** Table showing attitude about oral health care of children among health care professional.



**Graph 2:** Attitude about oral health care by Health care professionals.



**Graph 3:** Training received in oral health care by Health care professionals.

The results showed that there was a significant level of knowledge (66%) and a positive attitude (76%) of health care professionals but lack of awareness about preventive as well as referral practises towards oral health care in children.

**Discussion**

This survey was done to highlight the fact that there is a need to improve the relationship between general practitioners and the Paediatric dentistry and to emphasize on the areas where the practitioners need to improve their knowledge regarding oral health care and to recognize the importance of Paediatric dentistry.

Gaddam KR in a cross sectional survey assessed the knowledge and attitude on early childhood oral health among medical and dental graduate students from Narayan Dental college and Hospital, Nellore. It concluded that knowledge on early childhood caries among medical students was inadequate, who also lack enthusiasm for better understanding on early childhood caries compared to dental students. [1] This was in accordance with our study which showed inadequate training but showed positive attitude towards oral health care in children.

It is seen in this study that there is a need to increase the awareness and knowledge about the examination and prevention strategies about oral health care in children. This was in accordance with study by Bhat Pin which was a cross sectional survey which was conducted in Bangalore City, India to assess the knowledge and attitude of graduating medical students towards infant oral health and to propose ways to improve oral health education in the medical curriculum concluded that there is a need to increase the knowledge of graduating medical students through effective strategies [2].

The knowledge and understanding of the health care providers showed that 85% of the general practitioners could relate the importance of breast feeding and oral health [6]. During breast feeding that's during suckling the infants' oral muscles are exercised strenuously which have an important effect on the thrust and growth of the mandible, in addition to imparting immunological components. Health care professionals should encourage breast feeding in order to support health promoting practices [7].

Sanchez OM., *et al.* in a study showed that medical and paramedical students showed poor oral health knowledge comparatively and Oral health hardly receives any exposure in the medical and paramedical curriculum; hence oral health education must be included in pre-clinical curriculum of medical and paramedical courses. More studies on a larger sample size are needed to substantiate the present study [8].

From our study we would like to suggest the following points for enhancing awareness among health care professionals about oral health in children.

1. Collaboration between Paediatric dentists and practitioners for implementation of oral health education programs.
2. Promote oral examination of new born by a Pediatric dentist soon after birth.

3. Promotion of healthy referral practices to Pediatric dentists.
4. Promote the need for increased Pediatric specialty dental care for special children.

### Conclusion

The study has shown that health care professionals have sufficient overall knowledge about oral health care in children but in some aspects like knowledge about preventive strategies need to be made aware among the health care professionals. There is a need to create awareness about the age of referral to the Paediatric dentistry as it was found to be the least referred by health care professionals. The dental surgeon undergoes basic medical training including a thorough knowledge of head and neck anatomy; similarly the medical fraternity can be trained in their under graduation by including topic on oral health in children in their curriculum. The oral health knowledge and attitude among practising health care professionals can be enhanced through oral health education programme.

### Bibliography

1. Gaddam KR., et al. "Knowledge and attitudes on early childhood oral health among medical and dental graduate students". *Journal of Education and Ethics in Dentistry* 4 (2014): 18-22.
2. Bhat P., et al. "Knowledge and attitude on infant oral health among graduating medical students in Bangalore city, India". *JIMSA* 27 (2014): 13-15.
3. Anand A., et al. "Knowledge and attitude of paediatricians and family physicians regarding paediatric dentistry in Patna". *International Journal Science* 5 (2017): 136-139.
4. Nammalwar RB and Rangeeth P. "Knowledge and attitude of paediatricians and family physicians in Chennai on paediatric dentistry: A survey". *Journal of Dental Research (Isfahan)* 9 (2012): 561-566.
5. Bhat SS., et al. "Knowledge and attitude of oral health care of children among general practitioners in Mangalore". *Archives of Dental and Medical Research* 2 (2016): 15-19.
6. Di Giuseppe G., et al. "Knowledge, attitude and practices of paediatricians regarding the prevention of oral diseases in Italy". *BMC Public Health* 6 (2006): 176.
7. Murthy GA and Mohandas U. "The knowledge, attitude and practice in prevention of dental caries amongst pediatricians in Bangalore: A cross-sectional study". *Journal of the Indian Society of Pedodontics and Preventive Dentistry* 28 (2010): 100-103.
8. Sanchez OM., et al. "Physicians' views on pediatric preventive dental care". *Pediatric Dentistry* 19 (1997): 377-383.

Volume 3 Issue 2 February 2019

© All rights are reserved by Niraj S Gokhale., et al.