



THE KNOWLEDGE, ATTITUDE AND PRACTICE REGARDING THE PEDIATRIC PREVENTIVE DENTAL CARE AMONGST MEDICAL PRACTITIONERS: A CROSS SECTIONAL STUDY

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ABSTRACT

Dental caries is the most common chronic disease affecting the children today. Many dental problems can be effectively prevented in children if they are detected early. Medical practitioners play a major role in the primary care of the child and are well positioned to recognize potential problems, encourage preventive care and refer appropriately. So the present survey was conducted among Medical practitioners in Kannur, Kerala to determine their knowledge, attitude and practice in Pediatric preventive dental care. To assess the attitude and practice of dental professionals towards using of advance Radiographic technique.

KEYWORDS: dental caries, medical practitioners, prevention, Kannur, pedodontic

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INTRODUCTION

Dental caries is an important public health problem. When it affects children younger than 6 years, the term “Early Childhood Disease” is used to describe it. It begins early in life, progresses rapidly in those who are at high risk, and often goes untreated. Its consequences can affect the immediate and long term quality of life of the child and can have significant social and economic consequences on the child’s family as well¹. Recently, the World Health Organization Assembly called attention to the significant burden oral disease has maintained in all countries

around the world. In response to this issue there has been renewed focus on combating access to oral health care issues.

Traditionally, efforts to reduce ECC have included parent education and counseling regarding infant feeding practices, training dental professionals to care for infants and young children. Various clinical guidelines recommend that pediatricians and primary care providers take an active role in preventive oral health care of young children.² The medical office therefore provides an attractive setting for detecting early stage dental disease

among very young children. Additionally, making parents aware of their child’s dental health status may increase the likelihood that parents will seek dental care for their child. These benefits in turn may reduce the incidence of dental disease and the need for related treatment and hospitalizations and improve quality of life. Educating medical practitioners and students about basic oral health recommendations and referral guidelines can help improve dental utilization among high risk children³. The purpose of this study was to determine the Knowledge, Attitude and Practice regarding the Pediatric

Preventive Dental Care among the Medical Practitioners.

MATERIAL AND METHODS

A cross sectional study was conducted among the Medical Practitioners. A Questionnaire was distributed to the Medical Practitioners selected randomly among those working at Kannur district in Kerala , India. Among 130 sheets distributed 100 practitioners filed the questionnaire. The questionnaire had questions to assess their personal details, knowledge about dental caries, attitude toward its prevention and practice guidelines and opinions. The knowledge was assessed based on questions about early childhood caries (ECC), risk factors for dental caries, fluoride supplement and spread of caries. Their attitude toward prevention

of dental caries was assessed based on queries about their role in promoting oral health and assessment of dental caries during routine checkup. Practice guidelines and opinions were assessed depending on the response to queries on first dental visit, examination of the child’s teeth for cavities, importance of tooth brushing, counseling in prevention of dental caries, fluoride supplement, spread of caries and dental sealants.

Scores were given to each question in the knowledge, attitude and practice section. The maximum score was given to the correct answer and minimum was given to the incorrect answer. The answers were tabulated and percent frequency distribution was used to calculate the frequency of their responses.

RESULTS

The questionnaire was answered by 100 medical practitioners out of which males constituted 49 % and females 51 %. (Fig 1).The answers to the queries to assess the knowledge regarding the risk factors for dental caries is given in table 1. It was observed that oral anatomy was perceived as risk factor by 74%, family tendency by 57 %, frequent intake of sugar by 89%. 79% of the practitioners perceived bottle feeding as risk factor whereas 58% considered night feeding as risk. Mouth breathing was agreed as risk by 55 (55%) and non nutritive sucking habits by 60 (60%). Malpositioned teeth was agreed to be risk by 84 (84%) of the medical practitioners.

Table 1. Distribution of responses about risk factors for Dental caries.

Sl.no	Risk factors	No		Yes		Do not know	
		N	%	N	%	N	%
1.	Gender	49	49	14	14	37	37
2.	Anatomy of oral cavity	11	11	74	74	15	15
3.	Family tendency	20	20	57	57	23	23
4.	Frequency intake of sugar	4	4	89	89	7	7
5.	Bottle feeding	12	12	79	79	9	9
6.	Breast feeding	74	74	16	16	10	10
7.	Night feeding	29	29	58	58	13	13
8.	Mouth breathing	24	24	55	55	21	21
9.	Non nutritive sucking habits	16	16	60	60	24	24
10.	Malpositioned teeth	7	7	84	84	9	9

On assessing the knowledge about Pediatric Preventive Dental Care(Table 2), 73% correctly answered that bottle fed children get early childhood caries. Majority 63.6% answered that

infants who sleep with mother and nurse all night do not have an increased risk of caries. Regarding transmission of bacteria from mother – majority 67% wrongly said no. 66.7% correctly

answered that flouridated toothpaste will prevent dental caries and interestingly only 53.2% answered that milk tooth with dental caries needs to be restored.

Table 2. Distribution of responses on knowledge about Pediatric Preventive Dental Care.

Sl.no	Knowledge questions	No		Yes		Total
		N	%	N	%	
1.	Do you think bottle fed children get early childhood caries	27	27	73	73	100
2.	Do you think infants who sleep with mother and nurse all night have an increased risk of caries	63	63.6	36	36.4	99
3.	Do you think cavity causing bacteria can be transmitted from mother	67	67	33	33	100
4.	Do you think flouridated toothpaste will prevent dental caries?	33	33.3	66	66.7	99
5.	Do you think milk tooth with dental caries needs to be restored?	44	46.8	50	53.2	94
6.	Do you think dental treatment of small children is important?	4	4	96	96	100
7.	Do you think consumption of sugar will increase dental caries?	11	11	89	89	100

Table 3. Distribution of responses towards attitude about oral health.

Sl.no	Attitude questions	Disagree		Agree		Uncertain	
		N	%	N	%	N	%
1.	Dental caries can be prevented	0	0	98	98	2	2
2.	Oral hygiene is important in preventing dental caries	0	0	100	100	0	0
3.	General physician should provide an oral cavity health examination	5	5	91	91	4	4
4.	General physician has a role in promoting oral health	3	3	92	92	5	5
5.	Routine dental visit is important in preventing oral diseases	4	4	94	94	2	2

With regard to the questions related to the attitude of the medical practitioners towards pediatric preventive dental care (table 3), 91% agreed that general physician should provide an oral cavity health examination and 92% agreed general physician has a role in promoting oral health. Routine

dental visit is important in preventing oral diseases was agreed by 94%.

The response to the questions about their practice is given in Table 4. It was observed that majority 54.6% perform dietary habits assessment of their patient, 95.9% inform the parents about the importance of oral hygiene and

all encourage the patients with dental problems for treatment. It was also observed that majority (53.1%) perform dental examination only for patients with presence of a problem as shown in Figure 2, and most of them (42.6%) considered 5 years of age to be appropriate for the first oral health examination by dentist.

Table 4. Distribution of responses about practice.

Sl.no	Practice questions	No		Yes		Total
		N	%	N	%	
1.	Do you perform a dietary habits assessment of your patients?	44	45.4	53	54.6	97
2.	Do you advise the parents about the use of flouridated toothpaste?	56	58.3	40	41.7	96
3.	Do you prescribe flouride tablets/ mouth washes?	67	69.8	29	30.2	96
4.	Do you advise for dental sealants to reduce dental caries?	72	75.8	23	24.2	95
5.	Do you recommend to the parents to clean their children teeth?	9	9.5	86	90.5	95
6.	Do you inform the parents about the importance of oral hygiene?	4	4.1	93	95.9	97
7.	Do you encourage the patients with dental problems for treatment?	0	0	97	100	97

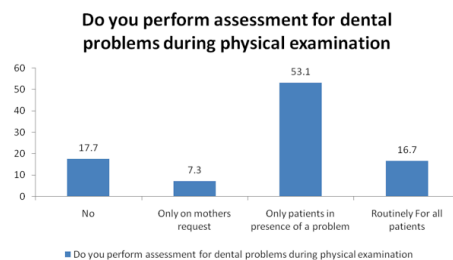
DISCUSSION

Oral health is an integral part of complete health and a fundamental factor of quality of life. Children may be affected by a number of oral diseases, most commonly, dental caries. Several factors are associated with high levels of dental caries among children including a lack of oral health knowledge among parents and children, lack of adequate oral and regular dental visits by children.⁴ Contemporary guidelines for oral disease management recommend early professional intervention so that the effects of oral disease can be reduced or eliminated.⁵

Primary care physicians ought to play a more active role with regard to oral health issues as they are more likely to see children at a young age. Frequent and more regular visits permit them to play a vital role in the oral health of children. These medical health care professionals are in an opportune position and see children at an early age allowing them to perform simple yet essential oral health activities that would

in turn lower the burden on dental professionals and increase the likelihood that dental care for these patients would be met. Insufficient research was done into the factors affecting physicians oral health knowledge, comfort levels in assessing dental caries risk and the need for dental referral.

Figure 1. Responses about performing assessment for dental problems in physical examination.



In the survey by Olga et al. (1996) 68% of the physicians recommended the first visit to the dentist at 3 years of age, following the popular belief that behavior at this age is more manageable⁶. There seem to be diverse opinions among pediatricians and family physicians regarding the ideal age for referring patients to the dentist the first time.

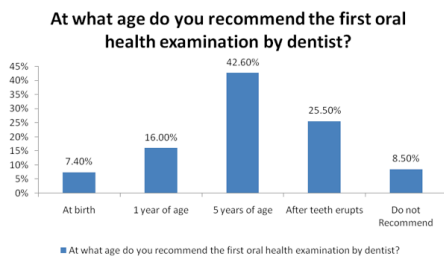
These differences may be due to the absence of common guidelines. Systemic and topical fluoride is one of the most effective preventive measures in reducing dental caries. . However, a substantial number of physicians (30%) recommended fluoride dentifrice use before 1 year of age. Previous studies have shown that toothpaste use and ingestion are substantial sources of systemic fluoride.

Other preventive measures such as prenatal counseling, nutritional counseling, and sealants were favored by respondents in this study. Physicians provided information to patients regarding oral health and referred them to the dentist. Few respondents understand the function and indications of pit and fissure sealants adequately.

It has been previously reported that intense educational programs can improve physicians' knowledge and attitudes towards fluoride supplementation. Rabiei et al. (2012) revealed a great need for planning of a

continuous medical education program in primary care among the physicians⁷.

Figure 2. Response to the question regarding recommendation of first oral health examination by dentist.



CONCLUSIONS

The results of this study show that there is a need for education about preventive oral care and fluoride supplementation among the general practitioners. Our results also suggest that the curricula of medical and specialty training programs should be evaluated to assure ample time to educate physicians about oral health prevention.

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