pISSN 2394-6032 | eISSN 2394-6040

Research Article

DOI: 10.5455/2394-6040.ijcmph20150213

Evaluation of the knowledge, attitude and awareness in prevention of dental caries amongst paediatricians

Poornima P*, Meghna Bajaj, Nagaveni NB, Roopa KB, Neena IE, Bharath KP

Department of Pedodontic and Preventive Dentistry, College of Dental Sciences, Davangere-577004, Karnataka, India

Received: 22 December 2014 **Accepted:** 10 January 2015

${\bf *Correspondence:}$

Dr. Poornima P,

E-mail: drpoornimas@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Early assessment of the oral health status of children has the potential to reduce or even eliminate oral diseases. Paediatricians are considered a perfect and reliable source for oral health control and prevention. In dentistry, clinical practice is directed towards attitudes that promote oral health and the paediatricians occupy a privileged position in this process. The purpose of this study was to evaluate the knowledge, attitude and awareness of paediatricians in the prevention of dental caries in 3 district quarters, India.

Methods: A cross-sectional survey was undertaken among 123 registered paediatricians in Indian Academy of Paediatrics (IAP) Karnataka directory and digest 2011-2013, Karnataka society. Out of which, 42 did not participate as their email address were not available. 29 sets of questions were mailed to all 81 paediatricians.

Results: The response rate of the survey was 90% (70 out of 81), a total of 59% felt that the frequency of Early Childhood Caries (ECC) in their O.P.D was at least once a week. 51% responded that bacteria causing dental caries cannot be transmitted between mother and child. 53% felt that 1 year would be ideal for first dental visit. 64% of pediatricians were not aware that fluoride dentifrices and dental sealants will prevent dental caries.

Conclusions: In general, pediatricians' knowledge, attitudes and awareness regarding oral health and prevention of dental caries was not satisfactory. It is essential to develop oral health information programs to pediatricians.

Keywords: Pediatrician, Knowledge, Dental caries, Oral health, Early childhood caries, First dental visit

INTRODUCTION

Dental caries is an important public health problem and it is the most prevalent oral disease among children. This disease not only causes damage to the tooth, but is also responsible for several morbid conditions of the oral cavity and other systems of the body. The prevention of oral disease and maintenance of oral health are the major challenges of dentistry.

Early Childhood Caries (ECC) is a particularly virulent form of dental caries affecting the primary teeth of infants and toddlers. Prolonged bottle-feeding with sugar containing fluids, especially before sleep, and delayed weaning are frequently cited ECC risk factors.³⁻⁶

Epidemiological studies have also documented low socioeconomic status, minority status, ⁷⁻⁹ low birth weight ¹⁰ and transfer of microbes from mother to child through the sharing of spoons and soothers as ECC risk factors. ^{11,12} 1% to 12% of children younger than six years in the developed world experience ECC. ¹³

The specialized treatment of a paediatric dentist is inimitable. The contributors of the oral health professionals from the fields of dentistry, medicine and related professions are extremely important to raising awareness regarding oral health and prevention. A large number of health professionals are involved with child health care. At public or private health care services, Paediatrician is the first to maintain contact with the child

since birth and has responsibility to inform parents regarding habits, attitude, and actions of a child for a healthy life. Thus, the paediatrician is in the ideal position to orient parents regarding the prevention of oral diseases in children. They are also well positioned to begin this process with an early assessment of oral health and the provision of anticipatory guidance, ensuring that patients establish a dental home in addition to their medical home. ¹⁹

Dental caries can be prevented if the pediatrician recognizes and encourages good preventive habits and refers appropriately. The role of Paediatricians in oral health was formalised in a policy issued by the American Academy of Paediatrics in 2003 and reinforced by another policy issued in 2008.²⁰

Very few studies have been conducted on dental screening and referrals by pediatrician's or the effectiveness of their dental caries preventive activities. The absence of exact statistics on the paediatrician awareness concerning children's caries prevention in India led us to conduct this study. Therefore the purpose of this study was to determine the knowledge, attitude and awareness in prevention of dental caries amongst pediatricians in Davangere, Chitradurga and Shimoga districts in Karnataka.

METHODS

A cross-sectional survey was undertaken among the pediatricians in Davangere, Chitradurga and Shimoga districts in Karnataka. The list of pediatricians was obtained from the Karnataka IAP member list till 2012. There were 123 registered paediatricians in this society from the respective three districts. Out of which, 42 did not participate as their email address was not available. Through Google form software, request letters along with a set of 29 questions with their options was prepared, and were mailed to all 81 paediatricians. Out of which, 70 of them responded and 11 did not respond. Paediatricians who did not respond to the initial mailing were sent a reminder mail after 1 week, in an attempt to maximize the response rate; telephone calls to encourage participation were made to all paediatricians after initial mailing.

The questionnaire had questions to assess their personal details, knowledge about dental caries, attitude and awareness toward its prevention and practice guidelines and opinions. The queries about their personal details included questions regarding their gender, type of practice, qualification and age, in which city they are practicing, number of years in practice, number of patients seen per day, type of practice and the frequency of Early Childhood Caries (ECC) in their OPD.

The knowledge was assessed based on questions about Early Childhood Caries (ECC), factors causing caries, whether the amount or frequency of sugar intake causes caries, night feeding practices, breast feeding or bottle feeding causes caries and mode of spread of caries. Their attitude towards prevention of dental caries depending on the response to queries on first dental visit, frequency of dental visits, examination of the child's teeth for cavities, importance of tooth brushing and when to begin tooth brushing, recommendation to parents to clean their children's teeth twice daily. Their awareness towards prevention of dental caries with the use of dentifrices and sealants, by routine dental visits, recommendation of pacifier use, do they think paediatrician have a role in preventing oral diseases and do they refer children with oral disease to pedodontists.

Scores were given to each question with respect to knowledge, attitude and awareness section. The maximum score was given to the correct answer and minimum was given to the incorrect answer.

Scoring criteria: The scores were assessed as follows.

<50%: Poor 50-75%: Moderate 75%: Good

RESULTS

A total of 29 questionnaires were mailed to 81 paediatricians, out of which 70 participated and replied back with a duly completed form. The results were tabulated in four sections.

Personal details of respondents were obtained. The sample included pediatricians of both genders 80% males and 20% females, ranging in age from 30 to 70 years (mean age: 35 years). Out of which majority 62% were institutional based practitioners, 9% institutional based non practitioner and 29% private practitioner residing in 3 districts; Shimoga 43%, Davangere 40% and Chitradurga 17%. The majority (64%) pediatricians were MBBS, MD by their qualification, with 61% having 5-20 years of practice, among which 40% of them were seeing 25-50 patients per day with 34% in teaching practice and 31% in solo practice. Most of the paediatricians 59% felt that the frequency of Early Childhood Caries (ECC) in their O.P.D was at least once a week (Table 1).

44% of the pediatrician felt that bacteria is the factor involved in the process of caries followed by the importance of frequent sugar intake in relation to caries etiology (43%), whereas 46% did not respond to night feeding may lead to caries. The majority 73% of pediatrician responded that exclusive breast feeding for more than 14 months cannot cause ECC. But 40% said that Bottle feeding can cause dental Caries, and 51% of them felt that the bacteria causing dental caries cannot be transmitted between mother and child. More than half 54% respondents thought that inadequate tooth brushing and poor oral hygiene can lead to ECC, and 49% thought that family tendency can lead to ECC. Also 23% of them

thought that malposition or crowded teeth cannot lead to ECC (Table 2).

Table 1: Personal details of respondents.

Personal details	%	
Your gender		
Male	80%	
Female	20%	
Type of practitioner?		
Institutional based practitioner	62%	
Institutional based non practitioner	9%	
Private practitioner	29%	
Your qualification		
MBBS, Dch	29%	
MBBS, MD	64%	
MBBS, Dch, MD	7%	
Your age		
30-40	36%	
41-50	29%	
51-60	22%	
>60	13%	
In which city is your principle practice.	10,0	
setting located?	ctice	
Chitradurga	17%	
Davangere	40%	
Shimoga	43%	
Years in practice	,	
< 5 years	16%	
5 to 10 years	30%	
10-20 years	31%	
> 25 years	23%	
No. of patients seen per day?	2370	
<10	6%	
10-25	31%	
25-50	40%	
>50	23%	
Type of practice?	2370	
Solo	33%	
Group	11%	
Teaching	34%	
General hospital	21%	
What is the frequency of early chil		
caries (ECC) in your OPD?		
>once a week	24%	
At least once a week	59%	
Never in a week	10%	
Other	7%	
Culci	, ,0	

Attitude of pediatricians towards prevention of dental caries was obtained, and about half i.e. 53% of pediatricians felt that 1st year would be ideal for the first dental visit and the frequency of dental visit for a child should be once in a year with, 59% pediatricians examine teeth for cavities in children and 44% counsel children and their parents on the importance of tooth brushing, while 64% suggest commencement of tooth brushing

should be initiated after eruption of some milk teeth (Table 3).

Table 2: Knowledge about early childhood caries (ECC).

Knowledge about ECC	%	
What factors are involved in the process		
of caries?		
Fluoride	10%	
Tooth	6%	
Time	13%	
Bacteria	44%	
Carbohydrates	27%	
Saliva	0%	
Which is more important in causing		
dental caries?		
Amount of sugar intake	40%	
Frequency of sugar intake	43%	
I don't know	17%	
Do you think that night feeding ma	ı y	
lead to caries?		
Yes	11%	
No	43%	
No response	46%	
Do you think exclusive breast feedi	ng	
more than 14 months can cause EC	CC?	
Yes	6%	
No	73%	
Not aware	21%	
Do you think bottle feeding can cau	ıse	
dental caries?		
Yes	40%	
No	31%	
Not aware	28%	
Do you think dental caries causing		
bacteria can be transmitted betwee	en	
mother and child?		
Yes	29%	
No	51%	
Not aware	20%	
Do you think inadequate tooth bru		
and poor oral hygiene can lead to I		
Yes	54%	
No	17%	
Not aware	29%	
Do you think family tendency can lead to ECC?		
Yes	13%	
No	49%	
Not aware	39%	
Do you think malpositioned or crowded		
teeth can lead to ECC?		
Yes	6%	
No	23%	
Not aware	71%	
2.00411410	7 1 /0	

Table 3: Attitude of pediatricians towards prevention of dental caries.

Attitude of pediatricians	%		
When should be the first dental visit for a child?			
6 months	21%		
1 year	53%		
Dental caries present	19%		
Pain present	7%		
What should be the frequency of dental visit for a child, once in?			
6 months	27%		
1 year	53%		
Dental caries present	17%		
Pain present	3%		
Do you examine teeth for cavities in children?			
Yes	59%		
No	17%		
No response	24%		
Do you counsel children and their parents on the importance of			
tooth brushing?			
Yes	44%		
No	24%		
No response	31%		
When do you suggest commencement of tooth brushing should			
be initiated?			
After eruption of first milk teeth	13%		
After eruption of some milk teeth	64%		
After eruption of all milk teeth	23%		

Table 4: Awareness towards prevention of dental caries and their practice guidelines.

Awareness & practice guidelines	%
Do you think fluoride dentifrices a	nd dental sealants
will help prevent dental caries?	
Yes	24%
No	11%
No aware	64%
Do you recommend the parents to	wash/clean their
children's teeth twice a day?	
Yes	60%
No	10%
No response	30%
Do you refer children with oral dis	sease/dental caries to
pedodontist?	
Yes	86%
No	1%
No response	13%
Does routine dental visit importan	t in preventing dental
caries?	
Yes	87%
No	0%
No response	13%
Do you think the recommendation	of pacifier use?
Always	0%
Does not permit	49%
Does not recommend or restrict	51%
Do you think pediatrician have a r	ole in promoting oral
health/in prevention of oral diseas	e?
Yes	91%
No	0%
No response	9%

Awareness towards prevention of dental caries and their practice guidelines were tabulated in Table 4 were more than half 64% of pediatricians were not aware that fluoride dentifrices and dental sealants will prevent dental caries, but 60% recommended the parents to wash /clean their children's teeth twice a day, and 86% refer children with oral disease/dental caries to pedodontist.

Most of the pediatricians (87%) recommended that routine dental visit is important in preventing dental caries and 51% do not recommend or restrict the use of a pacifier, where as 91% Pediatrician thinks that they have a role in promoting oral health in prevention of oral disease.

DISCUSSION

The US surgeon general's report on oral health, entitled "Oral health in America," highlighted the fact that "Dental caries is the single most common chronic childhood disease and is 5 times more common than asthma and 7 times more common than hay fever." The third national health and nutrition examination survey (1988-1994) showed that 1 in 5 children between the ages of 2 and 5 years had decayed teeth. More ominously, 71% of the decayed primary teeth had not been restored in this 2- to 5-year-old children. ^{21,23}

The present study focuses on the crucial oral preventive role of paediatricians who are considered the primary link between dentists and children. Therefore, this survey was planned to evaluate the knowledge, attitude and awareness of paediatricians in Chitradurga, Davangere and Shimoga districts in Karnataka, in order to ensure that maximum preventive and interceptive benefits can be delivered to children in the domain of oral health.

Appropriate breastfeeding is recognized as the best feeding method for infants. However, nocturnal breastfeeding, at will-breast feeding, and weaning delayed beyond the age of 2 years could all have a harmful effect on dentition similar to that produced by bottle feeding.²⁴⁻²⁶ A study done by Sabbagh et al. 2011, the majority of paediatricians (81.3%) were familiar with the harmful effects of night breast feeding. 24,27 In a previous study by Murthy et al. 2010, more than 50% of them felt that only bottle fed children gets ECC. But there is evidence to show that infants who sleep with the mother and nurse all night long have an increased risk of caries. 4,28,29 Less than half the pediatricians knew that cavity causing bacteria can be transmitted from the mother^{12, 29} to children, which is also cited in the pediatric literature.30 However in the present study, the majority (73%) of pediatrians responded that exclusive breast feeding for more than 14 months cannot cause ECC. But 40% paediatricians said that bottle feeding can cause dental caries, whereas 51% of them do not agree with the transmission of caries from mother to child.

Gabriella et al. in 2006 did a study and concluded that more than half (56%) of the respondents knew all the main risk factors of dental caries i.e. inadequate cleaning of the teeth, gingivitis and malposition teeth. Similarly, in the present study, more than half (54%) respondents thought that inadequate tooth brushing and poor oral hygiene can lead to ECC, and 49% thought that family tendency can lead to ECC whereas 23% thought that malposition or crowded teeth cannot lead to ECC. ³¹

In the present study, 53% of the paediatricians felt that 1 year would be ideal for the first dental visit. This is in accordance with the AAPD (American Academy of Paediatric Dentistry) guidelines and AAP (American Academy of Pediatrics) which say that the first dental visit should be within 6 months of the eruption of the first tooth per year. ^{27,30} This is supported by similar studies. ^{13,14,16,17,21} Early visits to the dentist allow preventive measures, early diagnosis, and orientations regarding proper diet and oral hygiene as well as the prevention of non-nutritive sucking habit. ^{17,32,33} Half of the paediatricians were not aware of the biannual dental visit that is recommended by AAPD. ³⁴

A previous study by Lewis et.al.¹⁷ reported that many respondents were unaware of the first signs of tooth decay, and Sanchez et.al.³⁵ reported that 83% of physicians performed oral examinations during children's physical examinations. Although in the present study, 59% of pediatricians reported to examine teeth for cavities in children and 44% counsel children and their parents on the importance of tooth brushing, while 64% suggested commencement of tooth brushing should be initiated after eruption of some milk teeth.

Therefore, having knowledge on diagnosis of caries, as reported by Prakash et al. ¹³ and Murthy et al. ³⁰ in which more than 60% of the paediatricians felt that tooth brushing should begin after few teeth have erupted though AAPD guidelines say that brushing should begin with the eruption of the first tooth.

Raquel et al.² reported the paediatricians' demonstrated satisfactory knowledge on orientations regarding oral hygiene, although they made this recommendation at a lower percentage than the 100% reported by Brickhouse et al. 17 There seem to be questions regarding the use of fluoride; however, fluoride is mainly used in fluoridated water, fluoridated dentifrices, and the topical application by an oral health professional. The decision to use fluoride therapy must consider the risk of caries versus the risk of fluorosis. Patients identified as at greater risk of caries are candidates for more aggressive fluoride therapy.³⁶ It is evident that the use of fluoridated dentifrices requires a certain degree of care. Sabbagh et.al.²⁴ concluded that only 11.3% of paediatricians prescribing fluoride which was similar to the present study in which 24% paediatricians recommend fluoride dentifrices to prevent caries and 60% recommended the parents to wash /clean their children's teeth twice a day.

Lewis et al. ¹⁶ reported that only 60.8% of paediatricians were aware of the fact that 3 months of age infants do not need fluoride supplementation. However, in the present study, the pediatrician's knowledge of caries prevention and potentials of fissure sealants were found to be limited, considering that 64% of pediatricians did not even know what fissure sealants are. Similar results were also reported by previous studies. ^{27,35,37}

In a study by Murthy et al.²⁹ majority of (>90%) paediatricians felt that assessment of dental caries and counseling about prevention of it should be a part of well child care. Almost all of them agreed to have a role in promoting oral health, this result is similar to that reported by Sanchez et.al.³⁵ which was similar to the present study in which 91% Pediatricians think that they have a role in promoting oral health in prevention of oral disease. Sabbagh et al.²⁴ reported that 78% of pediatricians routinely examined the oral cavity. This reflects an awareness of their role in promoting oral health care. However, Al-Hussyeen et al.²⁷ reported that almost half of pediatricians did not routinely include dentition in their examinations.

Sabbagh et al.²⁴ concluded that only 47.7% of pediatricians instructed their patients to visit the dentist, however, they did not check out parents compliance or appointment availability. They either referred them to general dentists (39.7%), or to the pediatric dentists (23.4%). However in the present study, 86% pediatricians refer children with oral disease/dental caries to pedodontist.

CONCLUSION

Our study indicates that most of the pediatricians in Chitradurga, Davangere and Shimoga district had a good attitude towards oral health care, but had moderate knowledge and lacked proper awareness about dental caries.

This survey indicates that pediatricians overwhelmingly believe that they have an important role in the promotion of oral health. Lack of familiarity with oral health issues may make it difficult for them to promote prevention of dental caries. Given the frequency with which pediatricians encounter dental caries, additional oral health related training in pediatric residency could be considered. With their attitude towards prevention of dental caries, even setting up of dental home along with medical home by 1 year of age for all children could be initiated in our public health centres.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

institutional ethics committee

REFERENCES

- Chakraborthy M, Saha JB, Bhattacharya RN, Roy A, Ram R. Epidemiological correlates of dental caries in an urban slum of West Bengal. Indian J Public Health. 1997;41:56-60.
- Balaban R, Aguiar CM, da Silva Araújo AC, Dias Filho EB. Knowledge of paediatricians regarding child oral health. Int J Pediatr Dent. 2012;22:286-91.
- 3. Tinanoff N, O'Sullivan DM. Early childhood caries: overview and recent findings. Pediatr Dent. 1997;19:12-6.
- 4. Brice DM, Blum JR, Steinberg BJ. The etiology, treatment, and prevention of nursing caries. Compend Contin Educ Dent. 1996;17:92,94,96-8.
- 5. Weinstein P. Research recommendations: pleas for enhanced research efforts to impact the epidemic of dental disease in infants. J Public Health Dent. 1996;56:55-60.
- 6. Febres C, Echeverri EA, Keene HJ. Parental awareness, habits, and social factors and their relationship to baby bottle tooth decay. Pediatr Dent. 1997;19:22-7.
- 7. Broderick E, Mabry J, Robertson D, Thompson J. Baby bottle tooth decay in Native American children in head start centers. Public Health Rep. 1989;104:50-4.
- 8. Bruerd B, Jones C. Preventing baby bottle tooth decay: Eight-year results. Public Health Rep. 1996;111:63-5.
- 9. Shiboski CH, Gansky SA, Ramos-Gomez F, Ngo L, Isman R, Pollick HF. The association of early childhood caries and race/ethnicity among California preschool children. J Public Health Dent. 2003;63:38-46.
- 10. Alvarez JO, Eguren JC, Caceda J, Navia JM. The effect of nutritional status on the age distribution of dental caries in the primary teeth. J Dent Res. 1990:69:1564-6.
- 11. Li Y, Caufield PW. The fidelity of initial acquisition of mutants Streptococci by infants from their mothers. J Dent Res. 1995;74:681-5.
- 12. Berkowitz RJ, Jones P. Mouth-to-mouth transmission of the bacterium Streptococcus mutans between mother and child. Arch Oral Biol. 1985;30:377-9.
- 13. Prakash P, Lawrence HP, Harvey BJ, McIsaac WJ, Limeback H, Leake JL. Early childhood caries and infant oral health: pediatricians and family physicians' knowledge, practices and training. Paediatr Child Health. 2006;11(3):151-7.
- 14. Subramaniam P, Babu KLG, Bbu PS, Naiudu P. Oral health care of children: gynecologists and pediatricians' perspective. J Clin Pediatr Dent. 2008;32:253-8.
- 15. DI Giuseppe G, Nobile CGA, Marinelli A, Angelillo IF. Knowledge, attitude and practices of pediatricians regarding the prevention of oral diseases in Italy. BMC Public Health. 2006;6:176.

- 16. Lewis CW, Grossman DC, Domoto PK, Deyo RA. The role of pediatrician in the oral health of children: a national survey. Pediatrics. 2000;106:e84.
- 17. Brickhouse TH, Unkel JH, Kancitis I, Best AM, Davis RD. Infant oral health care: a survey of general dentists, pediatric dentists, and pediatricians in Virginia. Pediatr Dent. 2008;30:147-53.
- 18. Douglas AB, Douglas JM, Krol DM. Educating pediatricians and family physicians in children's oral health. Acad Pediatr. 2009;9:452-6.
- 19. Johnsen DC. The role of the pediatrician in identifying and treating dental caries. Pediatr Clin North Am. 1991;38:1049-52.
- 20. Schafer TE, Adair SM. Prevention of dental disease. The role of the pediatrician. Pediatr Clin North Am. 2000;47:1021-42.
- 21. Ismail AI, Hashim Nainar SM. Children's first dental visit: attitudes and practices of US pediatricians and family physicians. Pediatr Dent. 2003;25(5):425-30.
- 22. US Dept. of Health and Human Services. Oral health in America: a report of the surgeon general. Rockville, MD: US Dept of Health and Human Services, National Institutes of Dental and Craniofacial Research, National Institutes of Health; 2000.
- 23. Vargas CM, Crall JJ, Schneider DA. Sociodemographic distribution of pediatric dental caries: NHANES III, 1988-1994. J Am Dent Assoc. 1998;129:1229-38.
- Sabbagh HJ, El-Kateb M Al Nowaiser A, Hanno AG, Alamoudi NH. Assessment of pediatricians dental knowledge, attitude and behavior in Jeddah, Saudi Arabia. J Clin Pediatr Dent. 2011;35(4):371-6.
- 25. American Academy of Pediatric Dentistry. Guidelines on periodicity of examination, preventive dental services, anticipatory guidance and oral treatment for children. Reference manual. Pediatr Dent. 2008-2009;30(7):112-8.
- Dini EL, Holt RD, Bedi R. Caries and its association with infant feeding and oral health related behaviours in 3-4 year old Brazilian children. Community Dent Oral Epidemiol. 2000;28(4):241-8.
- 27. Al-Hussyeen A, Al-Sadhan S, Al-Dhalaan R, Al-Ghanim B. Pediatricians knowledge and practices towards children's preventive oral health care in Saudi Arabia. Egypt Dent J. 2003;49:827-34.
- 28. Wyne AH, Adenubi JO, Shalan T, Khan N. Feeding and socioeconomic characteristics of nursing caries children in a Saudi population. Pediatr Dent. 1995;17:451-4.
- 29. Murthy GA, Mohandas U. The Knowledge, attitude and practice in prevention of dental caries amongst pediatricians in Bangalore: a cross-sectional study. J Indian Soc Pedod Prevent Dent. 2010;28(2):100-3.

- 30. American academy of Paediatrics policy statement. Oral risk assessment timing and the establishment of the dental home. Pediatrics. 2003;111:1113-6.
- 31. Di Giuseppe G, Nobile CG, Marinelli A, Angelillo IF. Knowledge, attitude and practices of Pediatricians regarding the prevention of oral diseases in Italy. BMC Public Health. 2006;6:176-8.
- 32. Nowak AJ, Casamassimo PS. The dental home: a primary care, oral health concept. J Am Dent Assoc. 2002;133:93-8.
- 33. American Academy of Pediatric Dentistry. Policy on the dental home. Ref Manual. 2010;32:25-6.
- 34. American academy of Paediatric Dentistry policy statement. Pediatr Dent. 2009;31:1-302.
- 35. Sanchez OM, Childres NK, Fox L, Bradley E. Physicians' views on pediatric preventive dental care. Pediatr Dent. 1997;19:377-83.

- 36. American Academy of Pediatrics-Section on Pediatric Dentistry and Oral Health. Police Statement. Preventive oral health intervention for pediatricians. Pediatrics. 2008;122:1387-94.
- 37. Tsamtsouris A, Gavris V. Survey of pediatricians attitude towards pediatric dental health. J Pedo. 1990;14:152-7.

DOI: 10.5455/2394-6040.ijcmph20150213 Cite this article as: Poornima P, Bajaj M, Nagaveni NB, Roopa KB, Neena IE, Bharath KP. Evaluation of the knowledge, attitude and awareness in prevention of dental caries amongst paediatricians. Int J Community Med Public Health 2015;2:64-70.