Parental Awareness and Attitudes Towards Preschool Oral Health of Children Visiting a Government Dental Hospital of Kashmir

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ABSTRACT

Introduction: Child's development and oral health habits in childhood are influenced and shaped by parents, especially by mothers. More positive the parent's attitude towards oral health, the better will be the oral health of their children, which is often associated with decreased caries prevalence. The present study was conducted to evaluate parent's awareness and attitudes towards oral health of preschool children attending a Government Dental Hospital in Srinagar.

Material and Methods: The present cross sectional study was conducted on parents of 345 children who visited the Department of Pedodontics and Preventive Dentistry, Government Dental College and Hospital, Srinagar, Jammu and Kashmir. Data was collected by using self designed questionnaire. The questionnaire consisted of 10 questions pertaining to parent's awareness and attitudes towards oral health of preschool children. A total of 322 parents returned the questionnaire and thus were included in the study. The dental examination recorded the number of erupted, decayed, filled and extracted primary teeth (deft).

Results: It was observed that limited participants were having knowledge about the oral health of preschool children.

Conclusion: Our results indicate that parents who had better knowledge regarding oral health, their children were having significantly lesser tooth decay than those who thought otherwise. It is thus recommended to educate the parents on the importance oral health and periodic dental check-ups. Further studies with a larger sample size are warranted to validate our hypotheses.

Keywords: Dental caries, dental visits, knowledge, parents, pediatric dentist.

INTRODUCTION

Oral health is an important component of good health and general well-being of individuals.[1] In the early childhood years, parent's influence the child's development. Good oral health habits in childhood are shaped by parent's, especially by mothers.[2] More positive the parent's attitude towards oral health, the better will be the oral health of their children. The poor attitude of parents toward oral health of infants and young children are correlated with increased caries prevalence.[3] Due to the lack of knowledge of caries risk factors, importance of deciduous dentition and oral maintenance results in increased prevalence of caries.[4] Inequality for seeking dental care services and the age for the child's first dental visit are influenced by variables such as age, mother's level of education, race and income.[5-10]

Primary teeth have an important role in development of speech, chewing, maintaining space and guiding the eruption of permanent teeth. The prevalence of caries in primary teeth in 3-5 year old children is relatively high.[11] Thus, the intervention in the form of dental prevention therapy should start early in a child's life.[12] American Academy of Pediatric Dentists (AAPD) and American Dental Association (ADA) have recommended the first dental visit of child at approximately the time of eruption of first primary tooth or at the latest age of 12 months, twice daily tooth brushing and limited in between meal snacks.[13,14]

Oral health awareness amongst Indian parents is less as compared to the western parents. The level of awareness of the importance of regular visits to a dentist is predominantly missing in the Indian scenario.[15] Most parents are unaware of the role of a pediatric dentist in prevention in their child's life and the importance of dental visits at an early age is underestimated as most of them believe that the deciduous teeth are not important as they are going to exfoliate anyway before the eruption of permanent teeth. The knowledge, attitude and behavior of parents towards dental treatments influence their child to a great extent in building a positive dental attitude.

As dental caries is the most common disease affecting children, preserving the primary teeth until their exact time of exfoliation a priority as it determines the oral health status of the future generations. Thus, this study was conducted to evaluate the parent's awareness and attitudes towards oral health of preschool children attending Government Dental College, Srinagar, Kashmir.

MATERIAL AND METHODS

The present study was conducted on the parents of 345 patients who visited the Department of Pedodontics and Preventive Dentistry, Government Dental College and Hospital, Srinagar, Jammu and Kashmir, between June and September 2016. A total of 345 parents with children within the age group of 2–5 years children who were willing to participate in the study and gave an informed consent were included. Children with special needs and children with any systemic disease were all excluded from the study. A structured questionnaire was formulated with 10 questions in English language and then translated into Urdu language. To test the questionnaire, 10 copies of the questionnaire were distributed among patients in the Dept. of Pedodontics and Preventive Dentistry as a pilot test to check the feasibility of the study. Content and construct validity showed no significant changes. The questionnaire showed high degree

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(0.86) of agreement during test-retest of the questionnaire. Those individuals who participated in the pilot study were not considered for the main study to prevent any possible bias. The questionnaire was collected at the same visit and was used to further modify the questionnaire before starting the main study. A total of 345 copies of the questionnaires were distributed to the patients who attended the Department of Pedodontics and Preventive Dentistry and were asked to return it during the same visit. The dental examination recorded the number of erupted, decayed, filled and extracted primary teeth (deft). Only 322 questionnaires out of 345 were returned giving a response rate of 93.33 %. Twenty three questionnaires were excluded which included questionnaires which were not fully completed or unreturned. Thus, only 322 participants were included and their responses were correlated to caries status of their children (deft).

Variables		N (322)	%
Gender	Males	181	56.21
	Females	141	43.7
Age	<20 years	40	12.4
	21-30 years	82	25.4
	31-40 years	166	51.55
	41-50 years	34	10.5
No. of Children	One	140	43.47
	Two	159	49.37
	Three or more	23	7.14

Table-1: Demographic distribution of respondents.

STATISTICAL ANALYSIS

Data was entered in Microsoft Excel 2013 software and analysis was done using Minitab 16.1.1 version of statistical software. Descriptive statistics like percentage, mean, and SD (standard deviation) were computed for data presentation. ANOVA test was utilized to find out any significant differences between the responses of the participants.

RESULTS

Demographic information on the participants is presented in Table 1. There were181 males and 141 females among the participants (56.21% and 43.7% respectively). The major age group of parents ranged from 31 to 40 years old. In most of the families there were 2 children. Table 2 shows the association of respondent's knowledge and practices regarding oral health and the mean deft scores. Certain parental beliefs and attitudes of parents significantly increased the caries activity (deft) of their children. The mean deft score of children was found to be 4.64±5.09.

DISCUSSION

Family values help to shape the health-related habits and practices among the family members.[16] During the childhood period, parents have the opportunity to shape their children's

S.No	Parent/Caregiver Knowledge of Oral Health	Options	N (322)	%	Mean deft ± S.D	P value
1	Milk teeth are important for the child	Agree Disagree Unsure	85 217 20	26.39 67.39 6.21	3.8±4.2 5.8±6.0 5.9±5.8	P=0.016*
2	Problems with milk teeth will affect adult teeth	Agree Disagree Unsure	105 212 5	32.6 65.83 1.5	4.2±4.8 4.4±5.0 4.6±5.2	P=0.62
3	Decayed teeth could affect child's health	Agree Disagree Unsure	125 185 12	38.8 57.45 3.7	4.3±5.2 4.9±5.0 3.9±4.4	P=0.18
4	Babies without teeth need their mouth cleaned	Agree Disagree Unsure	108 183 31	33.5 56.8 9.6	3.9±4.8 5.4±5.8 4.8±5.2	P=0.05*
5	Is it essential to take your child for regular dental visits?	Agree Disagree Unsure	149 138 35	46.27 42.85 10.8	3.9±4.8 4.3±5.2 4.4±5.2	P=0.32
6	Medicated syrups may lead to dental decay.	Agree Disagree Unsure	87 209 26	27.01 64.9 8.07	4.2±4.9 5.5±4.8 4.1±4.9	P=0.001*
7	Is it correct to put baby to bed with a bottle	Agree Disagree Unsure	206 108 8	63.97 33.54 2.48	5.2±5.6 4.2±4.9 4.9±5.2	P=0.04*
8	Bottle feeding of the child after 1-year-old is bad for his/her teeth	Agree Disagree Unsure	101 189 32	31.36 58.69 9.9	4.4±5.0 4.8±5.2 4.7±4.9	P=0.75
9	If your child has a toothache, who would you go to?	Doctor Dentist Pediatric Dentist	149 154 19	46.27 47.82 5.9	4.8±5.2 4.7±5.2 4.4±5.0	P=0.72
10	Children should see a dentist on his/her first birthday	Agree Disagree Unsure	93 211 18	28.8 65.5 5.59	4.1±4.7 5.5±5.3 5.2±5.4	P=0.02*

* ANOVA (P value<0.05)

Table-2: Association of respondent's knowledge and practices regarding oral health and the mean deft scores

behavior by encouraging and discouraging particular habits. It is important for parents especially the mothers to have adequate knowledge on oral health promotion and have a positive attitude and practice to guide their young ones. According to the results of our study, parents showed inadequate knowledge about oral health. Less than half of the participants (46.27%) were of the belief that it was essential to take the child for regular dental visits. However, contradictory results were seen in studies conducted by Romi et al.[17] and Chan et al[18], where majority of the parents believed that parents should take their children for regular dental visits. It is thus recommended to educate the parents on the importance of oral health and periodic dental check-ups.

In the present study, majority of the parents (67.39%) were unaware of the importance of deciduous teeth where only 26.39% agreed that the importance of deciduous teeth. 47.82% and 5.9% of the parents were of the opinion to take their children to a dentist and a pediatric dentist respectively in case of toothache. These findings were in line with another study.[19] The results were also conflicting to another study where the majority of caregivers believed that baby teeth were important.[20] A recent study showed that 33.9% of the parents thought that the primary teeth are not important and 45.1% thought it is better to extract the primary teeth if there is pain instead of treating them.[21] The reason could be attributed to ignorance, high costs of dental treatments, parent's low socioeconomic status and lack of higher education and lack of knowledge regarding the existence of specialist dentists for children. Further motivation is needed to establish positive attitudes towards pediatric preventive dentistry among the parents.

Our results indicate that parents who believed that baby teeth are important, their children were having significantly lesser tooth decay than those who thought otherwise, which makes it apparent that those parents who consider the importance of deciduous teeth are more likely to raise children with noticeably less dental caries.

In the present study, majority of the parents (64.9%) were unaware that medicated syrups could lead to dental caries. The results were similar to another study.[22] This could be due to lack of knowledge among the parents and pediatricians regarding the factors causing dental caries.[23] It is thus important to make parents and pediatricians aware of the cariogenic potential of Liquid Oral Medications. Pediatricians should be advised to prescribe sugar free syrups and parents should also be instructed to keep the oral cavity of their children clean after administering doses of these syrups.

Most of the parents were of the opinion that it was correct to put the baby to bed with a bottle. Parent's attitudes toward putting the baby to bed with a bottle were significantly associated with increased caries activity (deft). This might be attributed to the fact that nursing bottle caries occurs as a result of prolonged feeding of the baby at night. Parent's responses to the question of whether bottle feeding beyond 12 months of age was harmful to primary dentition helps in identifying children at increased risk for caries. All such practices should be discontinued by the parents. More than half of the respondents (56.8%) did not consider cleaning the babies mouth without teeth important. It is recommended to clean the mouths of those babies whose teeth haven't erupted yet using either a gauze-piece which has to be rolled over a finger or by using commercially available silicon brushes.

Only 32.6% of the parents were aware that problems associated with primary teeth can affect the permanent teeth. These findings were conflicting to studies conducted by Al Zaharani[24] and Alaa et al,[25] who reported that 71% and 60% respectively were aware of the same. A direct relationship between caries in the deciduous teeth and increased likelihood of caries development in the permanent teeth has already been recognized. According to a previous study, a relationship between caries in the primary and the permanent teeth has been established.[26]

In the present study, only 28.8% parents believe that the first dental visit should be at 1 year of age. The results are comparable to another study, where it was observed that 39% of the parents were of the same belief and 21% reported it to be as 6 months.[22] Alaa et al reported that most parents were of the belief that the first dental visit should be between 3-6 years of age, because at 1 year of age all teeth have not erupted.[25] Al Shan et al showed that only 23% of the parents were of the belief of having the first visit by 1 year of age.[27] The preventive process should begin at early stages of life to ensure a successful outcome. The ADA and the AAPD recommend that the first dental visit should be within 6 months of the eruption of the first primary tooth or at the latest age of 12 months.[13,14] The objective of an early dental visit is to build a healthy relationship between the child and the dentist and for communicating different preventive methods to parents. Therefore, the infant oral health care visit acts as a foundation for preventive dental care. During this period, parents have the opportunity to shape their children's behavior by encouraging and discouraging particular habits.[28]

It is therefore the responsibility of physicians, pediatricians and general dentists who see these children early in life, to advise the parents to take their children to a pediatric dentist for routine check up once they have attained the age of one year. A first dental visit at the age of one enables the dentist to lay the foundation of preventive education and dental care to help and ensure the child an improved oral health.

A key limitation of this study could be recall bias as a result of retrospective interviews to recall children's past exposures and experiences. Prospective long term studies are warranted at the beginning of pregnancy to properly assess the relationship between knowledge and attitudes and early childhood oral health.

CONCLUSION

Overall, majority of parents believed that primary teeth were not important and responded inappropriately to the questions assessing knowledge and attitudes about early childhood oral health. Dental caries was found out to be significantly higher in children whose parents did not agree that deciduous teeth were important for the child, babies without teeth needed their mouth cleaned, medicated syrups could lead to dental decay and children should see a dentist on his/her first birthday In addition, parents also were of the belief that allowing an infant to nurse in bed all night was safe and agreed that bottle feeding beyond 1 year of age could not be detrimental to the primary dentition. Such findings help the dental personnel to modify oral health prevention activities and making oral health promotion efforts effective in improving the oral health of young children. Thus, it

is essential to make parents aware of the importance of periodic dental visits and clearing the misconceptions regarding parental attitudes and practices towards the oral health of their children. Further motivation is needed to establish positive attitudes towards pediatric preventive dentistry among the parents.

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