

Oral Health Knowledge, Attitude and Practice among Indian Preschool Teachers

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Abstract

Aim & Objective: Schools are the valuable platform for promotion of oral health and preschool teachers can prove to be beneficial in disseminating oral health education for children because of the vulnerability to dental diseases during this period. Hence, the objective of the study was to evaluate the oral health knowledge, attitude and self-practices of the preschool teachers.

Material and Method: A cross sectional study was conducted among hundred preschool teachers in Bhopal, India. Schools were randomly selected and the teachers were invited to participate in the study. **Results:** Ninety five percent school teachers had knowledge about importance of oral health care for children. 92.1% of them felt it is important to prevent deciduous teeth from caries. 80.2% of them were aware of the different aids used in oral health care of children like rinsing mouth with water, tooth brushing, tongue cleaning and mouthwashes; 91.1% of the teachers advised the child to rinse his/her mouth after meals, 81.2% knew a child should brush his / her teeth twice daily and 68.3% of them reported about the dental problem in the child to his/her parent. 57.4% responded that the amount of toothpaste applied over the toothbrush for children should be pea sized and 51.5% responded circular technique should be used while brushing the teeth of children. **Conclusion:** Preschool teachers possess satisfactory knowledge regarding dental caries and few of them knew about the importance of regular visit to the dentist. Most of the schools were not linked with a dental school for children's regular dental checkup and most of the preschool teacher's required training in oral health care of children.

Introduction

It is stated that child is the future of a nation so more time and energy should be put into the initial stages of each child's life. Childhood is an important period of life that needs to be monitored closely so that the child grows up to be healthy. Therefore, it is important to initiate basic good oral health habit in childhood so that the appropriate dental norms are established and maintained into adult life. Infant oral health care should be seen as the foundation on which a lifetime of preventive education and dental care can be built [1].

Parents are usually the primary decision makers on matters affecting their children's health and health care [2]. But in the 21st century, there have been advances in lifestyle including education system making preschool a second home for the children. According to Merriam-Webster's learner's dictionary "a preschool is a school for children usually younger than those attending elementary school usually under five years of age". The school going age is the most significant period of a child's life and it is this period during which the children develop skills, beliefs and attitude which they practice throughout their lives. Children spend substantial period of their life at school in close proximity with their school teachers. Therefore, in attempts to achieve the best oral health outcomes for children, teachers should be considered as key person in ensuring the wellbeing of young children. The teachers and the caretakers present there at the school function as a role model for their students hence it is easier for teachers and the caretakers to influence their diet and hygiene practices as well as to impart awareness about the etiology and prevention of common oral ailments. Therefore, provision of oral health knowledge to the children by their teachers at the preschool level can prove to be more fruitful compared to the primary and secondary level because it's the time period during which the children begin to learn the basic oral hygiene practices and are also most prone to dental caries [3].

Previous studies concerning school teacher's knowledge and attitude towards child's oral health concluded that most of the teachers know the importance of primary teeth and also they had a positive attitude towards educating the young for proper oral hygiene but they have incomplete oral health knowledge, inappropriate oral practices and unfavorable approaches to children's oral health.

The aim of this study was to determine knowledge, attitude and behavior of school teachers regarding oral health as they play a pivotal role in providing information to children and hence, a better understanding of the knowledge, beliefs and practices of the teachers and the caretakers should

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Table 1: Distribution of responses of preschool teachers about oral health knowledge.

SNo	Question	Response	
		Yes	No
1	Do you feel the importance of oral health care in children?	95	5
2	Have you ever attended or been trained in oral health care in children	27.7	72.3
3	care centre or school linked with a dentist for child's regular dental check up	44.6	55.4
4	report about the dental problem in the child to his/her parent	68.3	31.7
5	Do you feel the importance of prevention of deciduous teeth from caries	92.1	7.9
6	make the child rinse his/her mouth after meal	91.1	8.9

contribute to formulation of more effective preventive strategies for the benefit of infant and children [4].

Materials and Methods

The present study was conducted in Bhopal, a capital city of Madhya Pradesh utilizing a structured self-administered questionnaire to evaluate the oral health knowledge, attitude and practices of preschool teachers of Bhopal city. Preschools from different areas were randomly selected and a total sample size of 103 teachers of both the genders tutoring the preschoolers was chosen. Voluntary informed consent was obtained from the school authorities before the survey.

The study tool comprised of preformed structured questionnaire based on 15 close ended questions in English language regarding participant knowledge and attitude towards importance of oral health. Proforma was distributed to all subjects and it was developed to give information on knowledge attitude and behavior of school teachers and caretakers regarding oral health. Assessment of oral health

Table 2: Percentage distribution of knowledge and practices of school teachers regarding children's oral health.

SNo	Question	Response (%)
1	What are the different aids used in oral health care of children?	
	Rinsing mouth with water	2
	Tooth brushing	5
	Tongue cleaning	2
	Mouth washes	1
	All of the above	90
2	What should be the age for a child to start using tooth brush?	
	1 year	24.8
	2 year	40.6
	3 year	33.7
	4 year	2
3	How many times a child should brush his / her teeth	
	Once daily	10.9
	Twice daily	81.2
	After every meal	7.9
4	When should you replace the tooth brush?	
	15 days	4
	1-2 month	41.6
	3-4 month	33.7
	6month	20.8
5	What type of toothpaste should be advised in children?	
	Fluoridated	45.5
	Non fluoridated	48.5
	Don't know	6

knowledge included information on effect of brushing and other aids used in oral hygiene, use of fluoridated toothpaste effect of sweets and other cariogenic food on teeth. Assessment of attitude was done with questions pertaining to frequency of dental visit, association of the dentist with the school and their interaction with the parent about the dental health of the child.

The participating teachers were explained about the research being carried out and later distributed the proforma to collect the required information. Also, one of the investigators was always available at the time of completion of the questionnaire.

Results

Response rate for the present study is 100 percent with all the school teachers agreed for the study and there were no errors in filling the questionnaire. In this study majority of school teachers were females. Table 1 shows the responses of preschool teachers to the questions on knowledge. Ninety five percent schoolteachers had knowledge about importance of oral health care in children. 23.8% teachers agreed that ideal age to begin tooth brushing should be 1 year, 40.6% think 2 year, 33.7% think 3 years and 2% think 4 years. 92.1% feel the importance of prevention of deciduous teeth from caries. 44.6 % responded their schools were linked with the dentist for the regular dental checkup while 55.4% were not. Table 2 shows oral health attitude and practices of school teachers to children's oral health. 80.2% knew about different aids used in oral health care of children like rinsing mouth with water, tooth brushing, tongue cleaning and mouthwashes, 91.1% advice the child rinse his/her mouth after meal, 81.2% were aware of that child should brush his / her teeth twice daily and 0.68.3% reported about the dental problem in the child to his/her parent. 57.4% responded that the amount of toothpaste applied over the toothbrush for children should be pea sized and

Table 3: Frequency distribution of preschool teachers' attitude towards child's oral health behavior.

SNo	Question	Response (%)
1	What should be the amount of toothpaste applied over the toothbrush for children	
	single thin layer over bristles	26.7
	Pea size	57.4
	thick layer over bristles	8.9
	Don't know	6.9
2	What is the technique used while brushing the teeth of children?	
	Horizontal technique	24.8
	Vertical technique	10.9
	Circular technique	51.5
	Scrubbing technique	12.9
3	Which of the following food item has a greater risk of tooth decay?	
	Milk	1
	Soft drinks	1
	Candies	3
	Sweets	6
	bakery	2
	Chocolates	16
All	71	
4	How often a child should visit the dentist?	
	Every month	7
	Every 6 months	56
	Every 1 year	14
	When there is a dental problem	14
Don't know	6	

51.5% responded circular technique should be used while brushing the teeth of children. 45.5% teachers advised fluoridated tooth paste while 48.5% advised non fluoridated tooth paste. The amount of tooth paste should be pea sized according to 57.5% teachers while 26.7% preferred a single thin layer.

Table 3 shows oral health behavior and attitude of preschool teachers. 14.9% of the teachers advised a child should visit the dentist when they experienced dental pain followed by other reasons, 56.4% felt that regular visit in every 6 month to dentist is necessary for proper care of the teeth. 81.2% responded a child should brush twice a day and 20.8% school teachers were aware of changing the tooth brush in every 6 months followed by 33.7% every 3-4 months, 41.6% every 1-2 months.

Discussion

Oral health is an integral component of preschool health and wellbeing [5]. Good oral hygiene including healthy teeth and gums is an important part of our general health. Nowadays, people are living longer and they want to enjoy a long healthy life which of course includes a healthy smile. Dental care can sometimes be the forgotten part of our healthy lifestyle, and while its importance is often underestimated [6]. Healthy teeth can last us a lifetime with the proper preventive dental care. Due to this trend over the past 20 years a significant amount of emphasis has been placed on prevention of oral disorders, avoiding the need in the future to experience for more extensive health problems.

This study presented a comprehensive report on the level of the oral health knowledge, attitude and practices of preschool teacher's representative of the city of Bhopal, India.

Assessment of knowledge, attitude and practice included important aspects of oral health, such as brushing activity, reason for visiting Dentist, etiology of certain oral diseases and their prevention etc. The study provided a detailed view of the preschool teachers' knowledge about etiology of certain oral diseases and their prevention and, it also highlighted the interest of preschool teachers in promoting oral health.

In our study Ninety five percent schoolteachers had knowledge regarding importance of oral health care in children which is similar to the Aljanakh M et al 2016 [7]. Previous studies involving school teachers in other parts of India are indicative that there is need to improve oral health related knowledge of teachers. Around 80% of the school teachers in our study were females. This is in unison with a study by Kompalli et al., where 82% of the study population was females [8].

More or less 71% teacher's contemplated consumption of sugary food to be the causes of dental caries respectively, which is higher compared to a study performed in the Caribbean, where 65% of respondents held consumption of sugar intake to be responsible for dental caries [9].

Majority of schoolteachers possessed basic knowledge about the dental caries and these findings are quiet similar to schoolteachers of Kosovo and parallel to reports from other countries [10-11]. Similar percentages recognized the common risk factors for dental caries and this information correlated with findings of other studies conducted [12-14].

In our study 81.2% preschool teachers advocated child should brush his / her teeth twice daily which are similar to the study of Polk DE et al 2014 [15]. The interest shown by teachers in our study to be involved in oral health promotion may strengthen the 'health promoting schools' concept of WHO [16].

In India, the National Oral Health Care Program, the project under Director General of Health Services and Ministry of Health and Family Welfare, was initiated in year 1998. The program aims to achieve optimal oral health for all by 2020. Amongst that numerous policies developed by the program, one of the policies was concerning the training of school teachers and health workers in different parts of the India [17]. Although the sample size was a limitation of the study, it highlights the importance of training the preschool teachers for promoting oral health among preschool children in India.

Conclusion

The present study concluded that over all teachers had adequate knowledge about oral diseases, their etiology and prevention. However, majority of teachers expressed great interest to perform additional duties to promote oral health and to facilitate activities in schools for oral health promotion. We recommend relevant policy changes to be implemented to link the schools to dental hospitals, so that regular checkup and health education program could be conducted in their institutions on regular basis, thereby improving the oral health of the entire community.

References

1. Volpato LE, Palti DG, de Oliveira Lima JE, Machado MA, Aranha AM, Bandeca MC, et al. When and Why Parents Seek Dental Care for Children under 36 Months. *Journal of International Oral Health*. 2013; 5: 21-25.
2. Alaki SM. Mother's Awareness of their Children's Dental Status: A Study among a Group of Mothers of Children Diagnosed with Early Childhood Caries. *Journal of King Abdul Aziz University*. 2013; 20: 65.
3. Dawani N, Nisar N, Khan N, Syed S, Tanweer N. Oral health knowledge, attitude and self-practices of pre-school teachers of karachi, pakistan. *Jpda*. 2013; 22: 47-51.
4. Manjunath G, Kumar NN. Oral Health Knowledge, Attitude and Practices among School Teachers in Kurnool-Andhra Pradesh. *Journal of Oral Health & Community Dentistry*. 2013; 7: 17-23.
5. Schroth RJ, Brothwell DJ, Moffatt ME. Caregiver knowledge and attitudes of preschool oral health and Early Childhood Caries (ECC). *International Journal of Circumpolar Health*. 2007; 153-167.
6. Bhat PK, Kumar A. Preventive oral health knowledge, practice and behavior of patients attending dental institution in Bangalore, India. *Journal of International Oral Health*. 2010; 2: 27-37.
7. Aljanakh M, Siddiqui AA, Mirza AJ. Teacher's knowledge about oral health and their interest in oral health education in Hail, Saudi Arabia. *International journal of health sciences*. 2016; 10: 87-93.
8. Kompalli PV, Mahalakshmi M. Knowledge, Attitude and Practices of School Children and Teachers of Khammam towards Oral Hygiene. *Web med Central dentistry*. 2013; 4:1-6.
9. Ramroop V, Wright D, Naidu R. Dental health knowledge and attitudes of primary school teachers toward developing dental health education. *West Indian Medical Journal*. 2011; 60: 576-580
10. Peterson PE and Esheng Z. Dental caries and oral health behavior situation of children, mother's and school teacher's in Wuhan, China. *Int. Dent J*. 1998; 48: 210-216.
11. Al-Tamimi S, Peterson PE. Oral health situation of school children, mothers and school teachers in Saudi Arabia. *Int. Dent J*. 1998; 48: 180-186.

12. Khan N, Al-Zarea B, Al-Mansour M. Dental caries, hygiene, fluorosis and oral health knowledge of primary school teachers of Riyadh, Saudi Arabia. *Saudi Dent J.* 2001; 13: 128-132.
13. Elena B, Petr L. Oral Health and Children Attitudes among Mothers and School-teachers in Belarus. *Stomatologija Baltic Dent Maxillofac J.* 2004; 6: 40-43.
14. Bokhari SH, Almas K. Oral hygiene practices, knowledge, and dental attendance pattern of secondary school teacher's. *J Pak Dent Assoc.* 2001; 10: 9-12.
15. Polk DE, Geng M, Levy S, Koerber A, Flay BR. Frequency of daily tooth brushing: predictors of change in 9-11 year old US children. *Community dental health.* 2014; 31: 136-140.
16. Kwan SY, Petersen PE, Pine CM, Borutta A. Health-promoting schools: an opportunity for oral health promotion. *Bulletin of the World Health Organization.* 2005; 83: 677-685
17. Petersen PE, Esheng Z. "Dental caries and oral health behavior situation of children, mothers and school teachers in Wuhan, People's Republic of China". *International Dental Journal.* 1998; 48: 210-216.