

Original Article

Assessment of Knowledge and Attitude related to Oral Health among Government Primary School Teachers

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ABSTRACT:

Background: A teacher with adequate oral health knowledge, positive attitude toward dental health can always play an important role in health education of school children and be a role model for children, lay people and the community at large. **Aim of the study:** To assess the knowledge and attitude related to oral health among government primary school teachers. **Materials and methods:** The study was conducted in the Department of Community Dentistry of the dental institution. For the study, we selected 65 government primary school teachers from the district. A preformed structured questionnaire was used for assessing the knowledge of teachers. The questionnaire consisted of 15 questions related to oral health, oral hygiene practices, knowledge of etiology of oral diseases, reasons for visiting dentists. **Results:** Highest number of teachers believes that cause for tooth decay is bacteria alone. Maximum marked answer for prevention of tooth decay was regular brushing along with avoiding sugars. Maximum marked answer for causes of gum disease was consuming sweets. Maximum marked answer for prevention of gum disease was regular brushing. **Conclusion:** Within the limits of present study, we conclude that overall awareness on the causative factors for oral diseases, their prevention was poor among the teachers in the present study.

Keywords: Teacher, oral health, dental caries.

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INTRODUCTION:

During the school years, children spend most of their time with their teachers. Similarly, the knowledge and skills needed to attain their future goals and nurture hidden potentials are acquired during this period.^{1,2} Shaping ways of life and personality development of school children during elementary education is the key responsibility of school teachers and parents. Since school teachers may play a significant role in passing the preventive information and health promotion, it is important that their own oral health knowledge, attitude, and behavior conform to the professional recommendations.^{3,4} A teacher with adequate oral health knowledge, positive attitude toward dental health can always play an important role in health education of school children and be a role model for children, lay people and the community at large.⁵ Similarly, a teacher with poor oral health knowledge, negative attitude, and unfavorable health behaviors may have an adverse impact on children's attitude and behaviors. It becomes important to assess the level of oral health knowledge, attitude and behaviors of

school teachers who are in such a vital position while molding the future generation of the society.⁶ Hence, the present study was planned to assess the knowledge and attitude related to oral health among government primary school teachers.

MATERIALS AND METHODS:

The study was conducted in the Department of Community Dentistry of the dental institution. For the study, we selected 65 government primary school teachers from the district. The ethical clearance was obtained from the ethical committee of the institute. The permission to conduct study was also approved from the principal of concerned schools. A written informed consent was obtained from each participating subjects after verbally explaining the procedure and objective of the study. A preformed structured questionnaire was used for assessing the knowledge of teachers. The questionnaire consisted of 15 questions related to oral health, oral hygiene practices, knowledge of etiology of oral diseases, reasons for visiting

dentists, etc. The collection of data on oral health knowledge from the subjects was done by two investigators using preformed questionnaire. The questionnaires were distributed to the subjects and were requested to complete in 20 minutes. After completion of the questionnaire, the questionnaires were collected and tabulated for further evaluation.

The statistical analysis of the data was done using SPSS program for windows. The significance of the data was checked using Student's t-test and Chi square test. A p-value <0.05 was predefined as statistically significant.

RESULTS:

Table 1 shows the knowledge of oral health for primary government school teachers. We observed that highest number of teachers believe that cause for tooth decay is bacteria alone (n=21). Maximum marked answer for prevention of tooth decay was regular brushing along with avoiding sugars (n=22). Maximum marked answer for causes of gum disease was consuming sweets (n=23). Maximum marked answer for prevention of gum disease was regular brushing. On comparing the results, we observed statistically non-significant results (p=0.412).

regarding oral health. We observed that majority of teachers were aware of benefits of maintaining good oral health. The drawback in the knowledge was not having proper knowledge of dental problems. Teachers are responsible for teaching good habits to maintain oral health to children. So, government should introduce a education camp for every teachers to teach oral health habits to teachers. Sekhar V et al conducted a study with the objective of assessing the knowledge, attitude and practice of school teachers towards oral health. This was a cross-sectional survey conducted among school teachers of the city of Pondicherry. A structured questionnaire was used and 212 teachers were assessed on their knowledge on oral health, attitude and practice regarding their personal oral health, attitude regarding oral health of children and status of oral health education at the schools. All data collected was entered into SPSS version 21.0. Around 47% of the participants felt that bacteria and sugar are the main causes of dental caries, while 42% felt that plaque and calculus are the main agents for periodontal disease. Around 82.5% teachers brushed twice daily. However, only 32% felt it is necessary to visit dentist regularly.

Table 1: Primary school teacher's knowledge of oral disease

Knowledge of oral disease		Frequency of teachers
Causes of tooth decay	Bacteria	21
	Bacteria + sugar	13
	Others	18
Prevention of tooth decay	None	13
	Regular brushing	9
	Regular brushing + avoiding sweets	22
	Regular dental visit	19
Causes of gum disease	Others	15
	Irregular tooth brushing	9
	Plaque and calculus	12
	Consuming sweets	23
Prevention of gum disease	None of the above	21
	Regular brushing	29
	Avoid smoking	21
	Vitamin C	9
	Don't know	6

DISCUSSION:

School teachers have traditionally been considered as potentially important primary agents of socialization, with the capability of influencing the future knowledge, attitude and behavior of school children.⁷ Documented evidence shows that teachers and parents can augment dental health behavior.⁸ There is a proposal to train school teachers on how to prevent dental diseases and also provide proper resource material for their training purposes.⁹ It is always better to have baseline information on the KAP among this special group before embarking on the mission of training them.

The present study was conducted to assess the knowledge and attitude of government primary school teachers

While 86% of the teachers felt that children's teeth should be checked by dentist, only 51% agreed that it is their duty to impart oral health education to the students. The authors concluded that the knowledge regarding oral health among school teachers was fair. Oral Health education must be imparted to preschool and primary school teachers as a part of National Oral Health care Program on a regular basis and further studies must be done to assess their awareness levels and make the necessary changes in further education modules. Ehizele A et al compared the oral health knowledge, attitude and practices of public and private primary school teachers and to determine the proportion of teachers presently involved with oral health education of

school children. The study was carried out on 320 private and 320 public school teachers in Benin-City, Nigeria, using self-administered questionnaire. The result revealed that the teachers involved in this study generally had positive attitude to oral health. Many of the two groups of primary school teachers had poor oral health practices. Only 42.4% of the respondents have ever been to the dentist for routine dental checkup or treatment. About 87.6% of teachers still use potentially traumatic materials for interdental cleaning and 60% of teachers consume regularly various forms of refined sugar. Over 90% of the two groups of teachers are presently involved in teaching their pupils basic oral health education although they have a poor knowledge of the aetiology of the two most common oral diseases. The teachers' major source of oral health information is the dentist. This observation suggests that the primary school teachers can serve as oral health educators after organized training to heighten their oral health knowledge and perfect their oral practices.^{10, 11}

Al-Jundi SH et al assessed, by means of a self administered structured questionnaire, the level of knowledge of school health teachers in northern Jordan with regards to the immediate emergency management of dental trauma. The questionnaire surveyed teacher's background, Knowledge of management of tooth fracture, avulsion, and loss of consciousness, it also investigated teacher's attitudes, and self assessed knowledge, as well as knowledge of availability of emergency services in Jordan. The sample consisted of all school health teachers in northern Jordan (220) who attended an oral health education course held by the Jordanian dental association. Only 190 were included in the survey. Sixty-three percent were females, 44% were in their twenties, and 43% in their forties. Their school health teaching experience ranged from 1 to 7 years. Only 20% were officially trained in school health. Less than half of the teachers received first aid training only once in their teaching career, not necessarily as part of school health training. Only 10 teachers were trained in dental first aid, and more than half had a previous experience with handling dental trauma in children. Overall the teachers' knowledge with regards to the emergency management of the trauma cases presented in the report was deficient. Chi-square test showed that, the difference in their responses to the knowledge part of the questionnaire was not statistically significant with regards to age, gender, years of teaching experience, first aid training, or number of seen trauma cases. Generally, the attitude was positive, most teachers wanting further education on the topic, however those who were trained in first aid, thought they were able to give proper action when needed in cases of trauma. Most teachers were unsatisfied with their level of knowledge, and only 30% knew of the availability of after hour emergency services for dental trauma. The present report indicated the gross lack of knowledge among school health teachers with regards to dental trauma emergency management. Educational programs to improve the knowledge and

awareness of this group of adults, who are usually the first line of advice in case of dental trauma in schools, are mandatory. These programs should be properly designed to insure that proper information is retained with a positive effect on attitude, and self assessed competence. Almas K et al conducted a study with aim to find out the knowledge and practices of oral hygiene methods among primary and secondary school teachers in Riyadh, Kingdom of Saudi Arabia (KSA). The study was carried out using a self-administered questionnaire. Almost 86% of male and 90% of female teachers felt that dental caries is due to the wrong method of tooth brushing, while sugar and sugary drinks were considered the main factor by 90% of male and 98% of female teachers. Seventy-five percent of male and 72% of female teachers considered irregular tooth brushing a cause of gums disease with 32% of male and 39% of female teachers not knowing details with regards to microbial relationship of gum disease. Tooth brushing preference was common among 45% male and 49% female teachers due to perceived effect of better cleaning, while almost an equal percentage of male and females (62%) used miswak due to Sunnah. Thirty-three point five percent of female teachers brushed 3 times a day as compared to 19% male teachers. On daily basis brushing 3 times, a day was common among >5000 SR monthly income group. Male teachers preferred horizontal tooth brushing (40%) while female teachers preferred circular tooth brushing (45%). Miswak was more commonly used by male teachers as compared to female teachers. Female school teachers had a higher income as compared to male schoolteachers. Thirty-two percent of females and 28% of male teachers were regular attendees to the dentist. Males were more satisfied by their oral health as compared to female teachers and 56% of male and 63% of female teachers visited the dentist only on having pain (toothache). It was concluded that there is much resemblance in knowledge and practice of oral hygiene habits among male and female schoolteachers and there is a need to enhance their knowledge regarding oral health and disease. Both need more awareness regarding oral health promotion to have a positive role in school oral health education for their students in collaboration with oral health care workers.^{12, 13}

CONCLUSION:

Within the limits of present study, we conclude that overall awareness on the causative factors for oral diseases, their prevention was poor among the teachers in the present study.

REFERENCES:

1. Kay E, Locker D. Effectiveness of Oral Health Promotion: A Review. London, UK: Health Education Authority; 1997.
2. Ashley FP. Role of dental health education in preventive dentistry. In: Murray JJ, editor. Prevention of Dental Disease. Oxford, UK: Oxford University Press; 1996. pp. 406-414.

3. Woodgroove J, Cumberbatch G, Gylbier S. Understanding dental attendance behavior. *Community Dent Health*. 1987;4:215–221.
4. Tai BJ, Jiang H, Du MQ, Peng B. Assessing the effectiveness of a school-based oral health promotion programme in Yichang City, China. *Community Dent Oral Epidemiol*. 2009;37:391–398.
5. Gill P, Chestnutt IG, Channing D. Opportunities and challenges to promoting oral health in primary schools. *Community Dent Health*. 2009;26:188–192.
6. Almas K, Al-Malik TM, Al-Shehri MA, Skaug N. The knowledge and practices of oral hygiene methods and attendance pattern among school teachers in Riyadh, Saudi Arabia. *Saudi Med J*. 2003;24:1087–1091.
7. Thomas S, Tandon S, Nair S. Effect of dental health education on the oral health status of a rural child population by involving target groups. *J Indian Soc Pedod Prev Dent* 2000;18:115-25.
8. Lal S, Paul D, Vashisht BM. National oral health care programme (NOHCP) implementation strategies. *Indian J Community Med* 2004;29:3.
9. Sgan-Cohen HD, Saadi S, Weissman A. Dental knowledge and attitudes among Arab schoolteachers in northern Israel. *Int Dent J* 1999;49:269-74.
10. Sekhar V, P. S, M.A. E, et al. Knowledge, Attitude and Practice of School Teachers Towards Oral Health in Pondicherry. *Journal of Clinical and Diagnostic Research : JCDR*. 2014;8(8):ZC12-ZC15. doi:10.7860/JCDR/2014/9779.4676.
11. Ehizele A, Chiwuzie J, Ofili A. Oral health knowledge, attitude and practices among Nigerian primary school teachers. *Int J Dent Hyg*. 2011 Nov;9(4):254-60. doi: 10.1111/j.1601-5037.2010.00498.x. Epub 2011 Jan 24.
12. Al-Jundi SH, Al-Waeili H, Khairalah K. Knowledge and attitude of Jordanian school health teachers with regards to emergency management of dental trauma. *Dent Traumatol*. 2005 Aug;21(4):183-7.
13. Almas K, Al-Malik TM, Al-Shehri MA, Skaug N. The knowledge and practices of oral hygiene methods and attendance pattern among school teachers in Riyadh, Saudi Arabia. *Saudi Med J*. 2003 Oct;24(10):1087-91.

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