

Oral Health Awareness Among School Teachers in Thiruvallur District of Tamilnadu

John JR¹, Raghavelu R², Selvakumar R³, Rajendran G⁴

ABSTRACT

Objective: The study was done with an aim to know the knowledge, attitude and practices among school teachers regarding oral health.

Methods: A cross-sectional questionnaire survey was conducted among 285 school teachers from 28 schools (government and private schools) located in Thiruvallur district of Tamil Nadu.

Results: Whilst majority of the school teachers had high level of interest towards the importance of oral health, their lack of knowledge was one of the constraints for further promotion of oral health. Additionally, inadequate resources and training programs for teachers were also identified to be significant barriers in promoting positive dental health education.

Conclusion: This study emphasizes the need for regular training programs for school teachers that involves knowledge and positive approaches towards oral health practices. It is also imperative that school management provide adequate resources for the training needs that accommodate oral health awareness and positive approaches for oral health promotion.

Keywords: Oral health, School teachers, Knowledge, Attitude, Practices.

¹ MPH,
School of Science and Health,
Western Sydney University,
Sydney, NSW, Australia.

² BDS,
Department of Public Health Dentistry,
Priyadarshini Dental College and Hospital,
Thiruvallur (Tamil Nadu), India.

³ BDS
Department of Public Health Dentistry,
Priyadarshini Dental College and Hospital,
Thiruvallur (Tamil Nadu), India.

⁴ MDS,
Department of Public Health Dentistry,
Priyadarshini Dental College and Hospital,
Thiruvallur (Tamil Nadu), India.

Contact Author

Dr. James Rufus John
rufus.benaud11@gmail.com

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INTRODUCTION

Education is one of the most powerful weapons that can be used to change the whole world. A teacher is the one who imparts education and hence they can make or break the future generation. They also serve the society by guiding and instructing countless students through various stages of their growth. Thus, promotion of a healthy lifestyle and oral health can be possibly carried out through the teachers.

Positive knowledge and attitude as well as good oral health practices not only promotes healthy teeth and the gums but also prevents any future oral health problems (1). The promotion

of oral health has attained importance to an extent in most of the private schools when compared to the local educational sectors where there is lack of importance of general as well as oral health issues. Peterson in his study reported that the teachers were aware of dental health condition of students and they also agreed to involve in oral health education programs (2). Khan et al (3) in his study showed that only 35% of teachers were involved in providing oral health education.

In developing nations such as India where oral health management is not considered as a priority, it is imperative that the oral health awareness have a community based approach especially

Table 1 : Shows the descriptive statistics about the knowledge of oral health among school teachers

Assessment Of Oral Health Knowledge Of School Teachers	Aware	Unaware
Sweets and soft drinks are an etiological factor for tooth decay	83.9%	15.1%
Dental floss for prevention of gum disease	77.5%	22.1%
Fluoridated tooth paste strengthens teeth	65.3%	34.7%
Oral cancer is associated with tobacco consumption	88.1%	11.9 %

through school teachers. However, the previous studies on oral health awareness among school teachers indicated inadequate knowledge and inaccurate oral hygiene practices. In contrast to this, Dawani, Afaq and Bilal reported that most of the school teachers residing in Sahiwal were aware of the critical interplay of dental plaque and tooth decay(4). Several international studies conducted among developing countries reported that whilst school teachers had inadequate knowledge of oral health practice, were interested in providing oral health education to their students(5).

Hence, the aim of this study is to analyse the oral health knowledge, attitude and practices among school teachers in Thiruvallur district of Tamil Nadu, India.

MATERIALS AND METHODS

The study employed a cross-sectional questionnaire survey which was con-

ducted among primary and high school teachers in Thiruvallur district to estimate their oral health knowledge, attitude and practices. Out of 28 schools in Thiruvallur district, Tamil Nadu including both government and private high schools 10 schools were randomly selected for the purpose of conducting the survey. The estimated sample size was 280 based on 90% power and 0.05% alpha error. The study was approved by the Institutional Review Board of Priyadharshini Dental College and Hospital and the permission to conduct the survey was obtained from the Institutional Ethical Committee of Priyadharshini Dental College and Hospital.

The permission to conduct the study was obtained from the Heads of the institutions from all the schools through a letter explaining the purpose and the procedures of the study. A questionnaire with 20 closed ended questions was distributed to all the teachers of

the selected schools. A pilot study was conducted to collect and evaluate the feasibility and validate the questionnaire.

Oral health knowledge, attitude and practice was assessed with questions pertaining to tooth decay, gum diseases, effects of sweet and soft drinks on teeth, frequency of visiting dentist, methods of cleaning teeth and management of dental trauma in school. The completed questionnaires were then collected from the total of 285 teachers.

RESULTS

Sociodemography

Out of 285 school teachers, 110(38.6%) were males and 175(61.4%) were females. 91(31.9%) of the respondents were aged between 21-30 years, 102(35.8%) were aged between 31-40 years while 72(25.3%) were 41-50 years and 20(7%) were above 50 years.

Knowledge

On query related to the cause of tooth decay 204(71.6%) of the respondents stated bacteria was the cause of tooth decay, 63(22.1%) bleeding gums, 13(4.6%) smoking as the cause for tooth decay and 5(1.8%) had no knowledge about dental decay. Regarding the knowledge about dental plaque, 55(19.3%) responded that it was soft debris on tooth, 77(27%) stated it was staining of teeth, 100(35.1%) meant hard debris on tooth and 53(18.6%) had no idea about dental plaque (Figure 1) Similarly, as seen in table 1, 239 teachers (83.9%) were aware that soft drinks cause tooth decay. Regarding the need to use dental floss to prevent gum disease 221(77.5%) agreed to it whereas 63(22.1%) thought that it was not required. In relation to the function of fluoride in strengthening teeth, whilst 186 teachers (65.3%) responded that it helps to strengthen teeth, 99 teachers (34.7%) were ignorant about the positive impact of fluoride on teeth. However, there was a major consensus where 251 teachers (88.1%) agreed and were aware of the critical association of tobacco consumption with oral cancer.

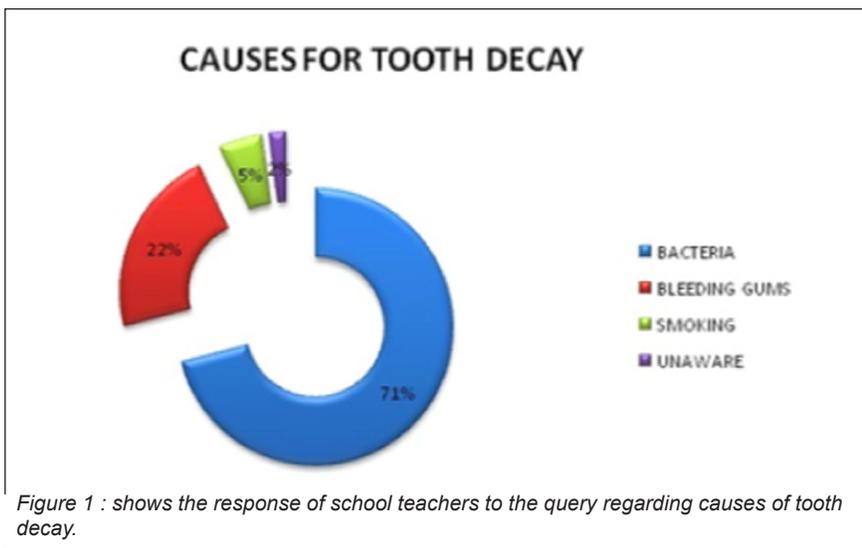


Figure 1 : shows the response of school teachers to the query regarding causes of tooth decay.

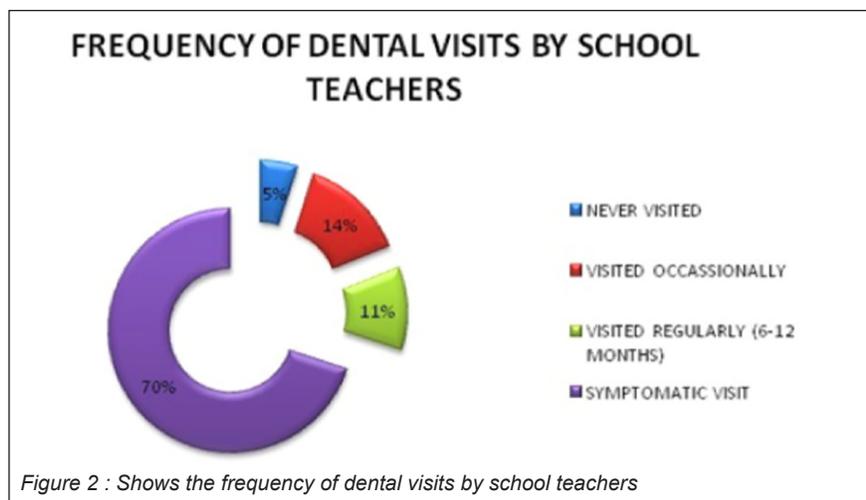


Figure 2 : Shows the frequency of dental visits by school teachers

Attitude

Regarding self-decision of dental treatment needs 237(83.2%) teachers felt that it is necessary for them to decide their dental treatment needs, 23(8.1%) teachers had never visited a dentist, 71(24.9%) had been visiting the dentist occasionally and 55(19.6%) teachers visited the dentist regularly every 6-12 months. Among those who did not visit a dentist 40(14%) had fear of dental treatment, 22(7.7%) stated unavailability of dentist nearby, 44(15.4%) felt that the cost of treatment was high and 179(62.8%) did not visit a dentist since they had no pain or discomfort in teeth and gums as seen in figure 2.

Practices

All respondents brushed their teeth regularly, with 71(24.9%) of them brushing once a day and 210(73.7%) brushing twice a day. Regarding the frequency of changing tooth brush, 25(8.8%) used the same tooth brush for more than three months. 254(89.1%) of the respondents used tooth brush and paste for cleaning their teeth. On query about rinsing their mouth after every meal, 246(86.3%) stated that they did.

DISCUSSION

There was an excellent response rate in this study indicating a great level of interest among school teachers concerning oral health issues. The national oral health policy emphasizes the need

to train and equip school teachers with knowledge and resources regarding prevention of oral diseases by means of training programs(6). Therefore, the present study was conducted among school teachers to attain the threshold knowledge, attitude and practices concerning oral health and to stress the need to train the teachers regarding this issue. It is important to note that teachers had fair amount of knowledge around oral health but were unaware of the future directions.

For example, 51 school teachers (17.9%) knew the protective effect of vitamin C on the gingival tissues from bleeding similar to Lang’s study(7). This fact was probably because of the traditional beliefs in teachers that vitamin C and their sources such as citrus fruits help prevent bleeding gums and that it was more effective than brushing with toothpaste. On the other hand, only 186 teachers (65.3%) were aware of the importance of fluoride in strengthening the teeth and preventing dental decay which was lesser in comparison to Elena and Petr’s study(8). This is because there is lack of awareness regarding beneficial effects of fluoride when compared to other western countries where the importance of fluoride is well known.

Nearly 239(83.9%) believed that consumption of soft drinks affects dental health which is much high when com-

pared to other study by Peterson(9). The reason for this could be that nowadays it has been established by media that soft drinks consists of fertilizers and acids which are harmful to both oral cavity and general health.

Whilst school teachers are to some extent aware of the importance of the tooth-brushing frequency and the significance of fluoridated toothpaste on teeth, it is unfortunate that there is rather a major negligence towards the significance of routine visits to the dentist, thereby lacking appropriate knowledge concerning major oral health issues. Thus school teachers are incapacitated in their ability to appropriately disseminate oral health education to the students and to recognise students who are at high risk of oral diseases.

Overall, the findings of this study showed an optimum level of awareness and understanding of oral health with positive attitude and behaviour towards prevention of oral diseases among teachers. This is a good sign of encouragement as teachers’ role and involvement in promoting positive oral health practices can substantially help create a positive environment in schools, shaping a holistic approach to oral health as well as overall health of students (10).

CONCLUSION

As school teachers play a critical role in students’ life not only in terms of academic achievements, but also in regards to their cognitive development and lifestyle activities, this study emphasizes the need for regular training programs for school teachers that involves knowledge and positive approaches towards oral health practices. In addition, it is also imperative that school management and organisation provide adequate resources for the training needs and make teachers accountable for their oral health knowledge rather than considering this as an optional continuing education. Therefore, it

is vital to empower school teachers in rooting positive health behaviours among students to promote their health and well-being.

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