

Oral health education in public schools of Rawalpindi city

Sadia Sajjad^a, Saima Azam^b

Abstract

Introduction: Oral diseases can have a negative impact on the functional, social and psychological well being of children and are a result of inappropriate oral health behaviors. Oral health behaviors develop at an early stage. As at this stage, children and adolescents are receptive to new information and healthy oral habits can be established which will have a positive impact on oral health. The objective of this study was to assess the oral health education implementation in Public Schools of Rawalpindi City.

Material and Method: It was a cross-sectional descriptive study. Simple random sampling technique was used and 12 schools were selected by lottery method. From these schools, teachers were selected by non-probability convenience sampling. A closed ended questionnaire was given to the respondents along with group discussions. SPSS version 19 was used to assess the results.

Results: Public primary school teachers have very little dental knowledge but 100% of them agreed with the importance of oral health and the idea that oral diseases are preventable. They lacked contribution from the school authorities for any action in this respect. All of the respondents emphasized about the inclusion of oral health in their curriculum which would be feasible for them to carry out practically.

Conclusions: Public schools are an underutilized resource for health education. They can provide a supportive environment for promoting oral health.

Keywords: Oral health; primary schools; curriculum

Introduction

Health is a complete state of well-being. It includes social, physical and mental well-being. From this statement, it is evident that health is a combination of many factors, which have to be in coordination for the healthy state. In this industrialized world, equal importance is given to oral health along with the general health. Any disease or problem in oral cavity or mouth can have devastating effect on the overall body functions. Among oral diseases, dental caries and periodontal diseases are more prevalent.¹ Their initiation is from a young age and premature loss of primary teeth is considered to be a predisposing factor for occlusal and space anomalies in the mixed and permanent dentition.² Both of these diseases are

preventable. It is an established fact that tooth decay is prevalent in people of lower socio-economic status as compared to people belonging to higher income bracket.³ Likewise, in Pakistan dental caries is the most prevalent oral disease. In another study conducted in Pakistan, prevalence of caries among children was 60.90% and only 4.05% of these teeth were filled.⁴ In another study carried out in poor locality schools of Lahore city, 71% was the caries prevalence rate among the 11-14yr old children.⁵ It was evident from such studies that caries can be prevented by behavior modification at an early age and public schools were the best place to apply preventive measures at a community level.⁶ In this regard, oral health education through schools is the most effective way of delivering the knowledge and improving the oral health of students at a very young age. Teachers of public schools are the main source to get involved in oral health education and they have shown positive attitude in this regard.⁷ Evidence has shown that people with positive attitudes towards oral health are influenced

^a Corresponding Author: BDS, MPH; Community Medicine Department, Yusra Medical & Dental College, Islamabad. Email: sadia.abubakar@gmail.com

^b BDS, FCPS; Associate Professor, Head of Operative Dentistry, Islamabad Medical & Dental College, Bahria University, Islamabad.

by better knowledge to take care of their teeth.⁸ It is quite commendable that over a period of time, general awareness level of teachers has increased. This may be due to their willingness to educate themselves for the health issues and the availability of the learning material through internet and other such resources. Teachers with adequate oral health knowledge can encourage oral health education in a proper manner.

Material and Methods

This was a cross - sectional study carried out in Federal Government Primary schools of Rawalpindi city. The duration was of three months starting from 1st September to 30th November 2014. A list of government school was taken from the concerned authorities. The sampling frame was developed from the list of federal schools and 12 schools were selected by random lottery technique.

Variables	Numbers	Percentages
Brushing Technique (twice daily)	108	61.42%
Variables	Numbers	Percentages
Purpose of visit to Dentist (toothache)	126	71.59%
Are oral diseases preventable?	146	82.95%
Can teachers play positive role in oral health education?	129	73.29%
Source of information regarding oral health(Tv media)	111	63.04%
Implementation of Oral health program in schools(mostly answered no)	125	71.04%

The sample was around 176 primary school teachers keeping in mind the percentage of oral health knowledge of these teachers. The

teachers were selected through non probability convenience sampling. The consent was taken from the school authorities for the study. A closed ended questionnaire was given to the selected respondents to assess their participation in oral health education in public section. The questions included oral disease prevention, sources of oral health awareness, means of delivering oral health education, any oral health program in schools, oral hygiene checking in assemblies and importance of teacher's role towards this cause (Table I). Further reasons of lack of implementation were discussed. SPSS version 19 was used for statistical analysis.

Results

The mean age of primary teachers of public schools was 37.78 which was similar with another study held in public schools of Karachi city⁹ in which the mean age was 38.9% and 11% were males and 89% female teachers. In this study, gender consisted of 35 (20%) male as compared to 141 (80.11%) female primary school teachers. The mean income of public school teachers was 33,405 Pakistani rupees. As far as education was concerned, following was the distribution of education levels. Seven (4%) had secondary degree, 19 (10.79%) had higher secondary degree, and 54 (30.7%) had graduation and the higher percentage was that of post-graduation which was 95 (54%). It was significant to note that most of the respondents knew about the recommended brushing technique which was twice daily (61.49%). The purpose of the visit to the dentist was mostly due to tooth ache / or whenever some problem arises 126 (71.59%). 111(63.06%) teachers got dental information from the TV, media and 37 (21.02%) said it was through visit to the dental office. The most encouraging finding was their positive attitude towards the prevention of the dental diseases, 146 (82.95%) primary teachers agreed to this statement. 176 (100%) teachers said that oral health is integral part of the overall health.

As far as oral health education was concerned, 10(5.68%) was the percentage of the visit of dentists in public schools, 44 (25%) respondents were of the opinion that parents are responsible for oral health education. One hundred and twenty nine (73.29%) teachers agreed to the fact that teachers can play a vital role in the awareness of the oral health in the school premises. 142 (80.68%) primary school teachers agreed that oral health education should be the part of school curriculum (Figure 1) if we want to achieve long lasting effects and 10(6.68%) teachers were against the inclusion in curriculum. The question regarding oral health awareness program being implemented in public schools, the respondents replied in negative 125(71.02%) said there was no such program in any form at any level present in their schools (Figure 2).

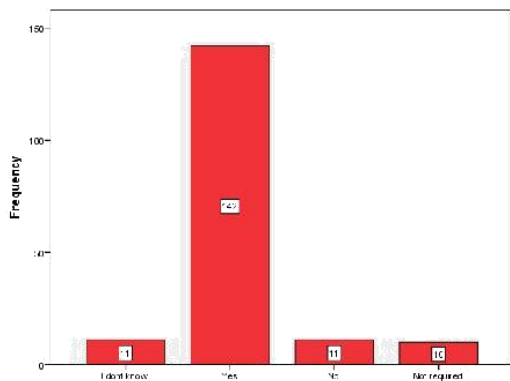


Figure 1: Public school teachers willing for including oral health education in school curriculum

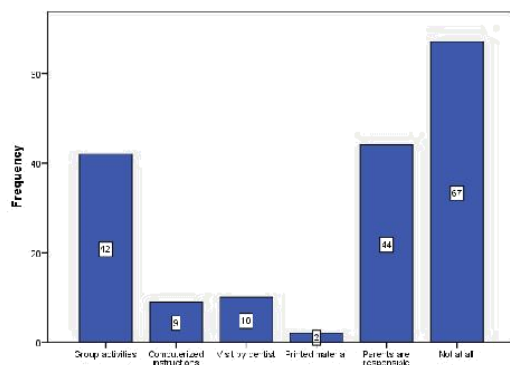


Figure 2: Response of teachers regarding different Oral health practices being implemented in public schools

Discussion

The study was done to assess the attitude of public school teachers towards oral health education and the presence of any oral health program in public schools. In one of the studies of Bhopal city of India,¹⁰ the practices and approach of school teachers were assessed. The study showed that 54.7% public school teachers agreed to the fact that oral health is integral part of general health. It was also noted that half of the private and half of the public teachers had attempted to give oral health education. 90% of the teachers agreed that the oral health education can be beneficial to the children. In the present study, 80.68% teachers agreed that oral health education in the form of lectures could be beneficial to the students and that it can be implemented in school setting easily.

The important thing was the knowledge of recommended tooth brushing among respondents, where 73.35% practiced tooth brushing twice a day which was lower than the study done in Karachi city¹¹ resulting in percentage of 90%. In the same study, 34% school teachers responded positively to the delivery of oral hygiene practices to the students. Sixty-three percent teachers responded negatively and the main reason was lack of school authority interest and policy matters. The same reason was put forward by the primary public school teachers of Rawalpindi city. 54.5% respondents agreed to the preventive measures listed in the questionnaire with higher percentage given to regular tooth brushing.

According to the Pakistan economic survey 2015,¹² total strength of dentists was 15,106. The number is quite small as compared to the growing population of our country. A large number of the children avail public schools, which is why we need collaborative efforts by school authorities and dental community. More dental visits should be arranged in public schools along with inclusion of oral health education in their curriculum. The

positive thing in this study's results was the willingness of teachers to give oral health education and they emphasized that it should be included in school policy and thus in curriculum.

Conclusions

Majority of the population belonging to middle class and low socioeconomic status attend public schools. They are more prone to dental diseases because of lack of awareness and access to health care. As we are a developing country with limited resources, this problem can be addressed by implementation of a policy that is practical and feasible. In this regard teachers of public schools can play a vital role in oral health education.

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