

Oral Health Care Education Barriers For Dental Anxiety Among School Teachers - A Qualitative Study

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Author contribution

RH and SN conceived the ideas; RH and KV collected and analyzed the data; RH and SN led the writing.

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Summary

Background

Oral health care education refers to the process of providing oral health information to the individuals of a specific community.

Rational

Oral health status of the target population is the primary responsibility of the care takers . It is the ability to convey the content with clarity. It should reach out to the general public at a mass level. It instills health care promotions towards a positive stride by empowering and motivating children right from their young ages. Habits instituted a young ages are mostly carried out till the end.

Aim

The present study was conducted to evaluate the oral health care education barriers among school teachers.

Materials and Methods

A qualitative study was designed, planned and conducted among children by school teachers.

Statistical Analysis

Analysis was computed using content analysis and frequency distribution.

Results

The study revealed that knowledge improved drastically after the health education, but there was no difference in knowledge levels between the means of education.

Conclusion

The present study concludes that identifying the barriers of dental anxiety will help in reducing dental anxiety in children

Key words: Dental anxiety, assessment, knowledge, oral health, education.

Introduction

Oral health care education refers to the process of providing oral health information to the individuals of a specific community. These care takers will maintain and improve the oral health status of the target population. It is the ability to convey the content with clarity. It should reach out to the general public at a mass level. It instills health care promotions towards a positive stride by empowering and motivating children right from their young ages. Habits instituted a young ages are mostly carried out till the end. Oral disorders such as dental caries, periodontal diseases and tooth loss are public health issues that occur globally since it has far reaching effects on the overall health and quality of life. There are challenges that needs to be overcome in order to improve oral health particularly in the developing countries. There is an urgency to globally strengthen public health programs ^[1,2,3]

Hence this study was attempted to evaluate the educational approaches for assessing knowledge of educators in response to childhood dental anxiety.

Materials and Methods

Study Design

Target population were children who visited the dental office. Study design was qualitative research. The study followed the guidelines of COREQ checklist. The study was carried out among children who visited the department in Chennai city, over a period of two months

Subjects

Sample size calculation

Based on the previous Indian studies, the prevalence of dental anxiety varied between 20-50%.By keeping an error margin of + or – 5 % and a confidence interval of 95%, the sample size was calculated .44 educators participated in the study.

Inclusion criteria

Children within 14 years were included.

Exclusion criteria

Children with major debilitating disorders and physically challenged children were excluded from the study.

Sampling Technique

Multi stage sampling technique

Data collection

Patient demographics along with dental anxiety status was recorded by way of personal interview through customized structured questionnaires after pilot testing on a subset of samples.

Statistical Analysis

Analysis was computed using content analysis for descriptive data using data coder who was blinded to the identity of the respondent. Coding tree was prepared and responses were categorized into specific themes using key words. In order to check the consistency of the key words, repeat coding and matching was done for every 5th participant by an independent coder. Statistical computation was done using SPSS version 21 for windows. Armonk , NY; IBM Corp.

Results

A qualitative, descriptive and correlation study was designed, planned and conducted among children by educators for children on school teachers. Total number of school teachers who were recruited were 44. Single evaluator collected the information to prevent dilution of information.

Results based on the gender distribution pattern

Table 1 In our study depicts the Gender distribution of the participants among whom there were 50 % females and 50 % of males.

Results based on the knowledge level

Table 2 In our study depicts grading of the knowledge level amongst the participants which showed a maximum score for the average and good category.

Results based on the attitude level

Table 3 In our study depicts grading of the attitude level amongst the participants.

Results based on the distribution of correct answers

Table 4 In our study depicts distribution of correct answers regarding dental anxiety in children amongst the participants. Assessment was done to find out if dental anxiety education has to be given or not. Where dental anxiety education to be given was emphasized, there was an increase from 0.50 0.95 % .

Discussion

The present study was conducted to evaluate the educational approaches for assessing knowledge of educators in response to childhood dental anxiety. The primary focus was to identify the factors responsible for creating dental anxiety in children such that, the dental team can approach children with the motive of reducing dental

anxiety for children of the future society so as develop an anxiety free future community. A qualitative methodological approach provided an in depth view on this aspect. It identified the fact that educators are end users of oral health promotion activities at the school settings.

The study findings provided exhaustive and extensive information about oral health promotion activities. It can lay the foundation stone for future endeavors on oral health promotion activities at the school level. Improving the oral health status of children and school staff personal is an event of prime and utmost importance for both State and Union health Departments. This is in accordance with similar studies done by Moore R et al. [4-8]

Our study depicts the Gender distribution of the participants among whom there were 50 % females and 50 % of males. This is in accordance with similar studies done by

Armfield JM [9-11] et al. **Our study** depicts grading of the knowledge level amongst the participants which showed a maximum score for the average category. This is in accordance with similar studies done by Mindus P [10-12] et al

Our study depicted grading of the attitude level amongst the participants which showed a maximum score for the excellent category. This is in accordance with similar studies done by Schwartz E [13-15] et al.

Our study depicts distribution of correct answers regarding dental anxiety in children amongst the participants. Assessment was done to find out if dental anxiety education has to be given or not. Where dental anxiety education to be given was emphasized, there was an increase from 0.50-0.95 %. This is in accordance with similar studies done by Locker D [16-19] et al.

Our study depicts the distribution of educators according to the answers for method of dental

anxiety education. This is in accordance with similar studies done by Klingberg ^[20-21] et al.

The National Oral Health Policy has launched Health care programs in various states across the country with emphasis being laid towards imparting information, knowledge and communication about oral health. Though the results cannot be generalized since it is based on personal opinions, choices and attributes of each respondent, it highlights qualitative insights on the topic. It showcases their apprehensions and motivation on the key focus areas of oral health and awareness towards reducing dental anxiety in children.

Dental anxiety has a cumulative effect over time. It keeps reinforcing the existing imaginative fears and mental emotions, such that removing the fear barriers and motivating children out of dental anxiety, will be a herculean task. Thereby it is imperative to identify the barriers during the young and formative years, such that mal adaptive behaviors and dental negligence can be avoided totally in future.

Children when approached at the right time, through the right sources can contribute towards a healthy future society. When good habits based on oral health awareness programs are inculcated during younger ages, they contribute in a massive way towards future health perspectives. When oral health improvement aspects are delivered through their favorite teachers or educators, it has long standing effects on dental anxiety perspectives, since the good habits are inculcated and implemented spontaneously.

One study done by V Ramroop et al ^[22] assessed the dental health knowledge of primary school teachers for their attitudes towards the prevention of dental diseases and to identify any barriers to the implementation of oral health promotion programs in schools. The assessment was done through a self administered questionnaire. The

results revealed that school teachers were well informed about the causes and prevention of dental decay and prevention of gum diseases. Knowledge of the appropriate management was also adequate. The majority of teachers demonstrated positive attitudes towards dental health and it's incorporation into the school curriculum. Teacher's attitude to their own involvement in school based dental education was also positive. Lack of training, resources and time within the curriculum were identified as major barriers to the implementation of a dental health education program in primary schools. Developing teacher training programs that include oral health knowledge and an evidence based approach to dental health education within the school setting could enable primary school teachers to play a significant role in oral health promotion for young children.

Another study done by Fabiola Mayumi Miyuchi Kubo et al ^[23] explored the barriers encountered by primary school teachers in implementing oral health education in their settings. A semi –structured questionnaire was answered by 89 primary school teachers aged 18-65 years, working in primary public school in Brazil. The data were quantitatively analyzed by means of discourse of collective subject DCS, which is based on a theoretical framework of Social Representations theory. The majority of teachers said that they were teaching their students some oral health content. They reported difficulties due to lack of teaching materials. They also expressed their need for partnerships with dental schools. The results emphasized the need for health and educational sectors to support primary school teachers in the implementation and education of health education school programs.

Another study by Harender Singh et al ^[24] was done to assess the knowledge, attitude and practices among school teachers in Chitwan district, Nepal. The key focus participants were

teachers. A cross-sectional study was conducted on 550 school teachers of both private and Government sectors. Descriptive analysis was done and data analyzed using Chi square test. A five point Likert scale was applied to compute knowledge, attitude and practices among school teachers. Most of them had adequate knowledge about periodontal diseases in comparison with dental caries. Private school teachers (57- 20.7%) had good knowledge in comparison with Government school teachers (27- 9.8%). An almost equal percentage of private and Government teachers showed fair knowledge about oral health (73.5% : 202) and (74.2% : 204) respectively, among them males showed better knowledge about oral health , when compared to females.. The study concluded that there is an incredible need to improve oral health knowledge and attitude among school teachers concerning different problems of the oral cavity and the avoidance of dental diseases. These enhancements can be applied through regular training of teachers by oral health seminars and other programs.

Another study by Vikrant Mohanty et al ^[25] was done to assess oral health care related perception, utilization and barriers among school teachers. It was a qualitative study. Health perceptions play an important part influencing health care utilization. Oral health messages and practices advocated by teachers can ensure better compliance by the students. The study aimed to assess qualitative insight regarding the perception and outlook of the school teachers understanding probable barriers regarding oral health care seeking behavior.

Phenomenology type of qualitative research design was used among 44 school teachers of Senior Secondary Government School , Delhi selected through convenient sampling. One-one in depth interview was taken in 3 sections- demographic details, knowledge of oral health and it's significance , along with commonly

followed and recommended oral hygiene practices and their views regarding barriers to oral health. Summative content analysis was conducted. Frequency distribution was analyzed using SPSS version 21.

The results showed that the mean age of teachers was 33.7 + 7.02 years (27-41) years. Every participant in the study felt that oral health is an integral part of overall health. On an inquiry it was noted that awareness affects general health (15.2%) followed by bad oral health that affects academic performance (9.6%). Regarding perceived barriers for dental service delivery, the major block was lack of awareness (47.7%) followed by financial barrier (29.5%). The study concluded that the responses gave an insight regarding the basic need for further subject specific oral health education programs as a key for changing the existing scenario. Future seminars and workshops remain the mainstream to appraise the knowledge for school staff.

The study indicated that the comprehension and understanding of the questionnaire was effective and acceptable in terms of general public. The knowledge acquired from media and peer groups can only attribute towards baseline inputs. All the participants ascertained that oral health awareness schemes and programs are important on a periodic basis for betterment of their existing knowledge and on improvement furthermore.

Limitations

Since the age ranges and sample sizes were small the findings could not be generalized.

Conclusion

The present study concludes that identifying the barriers of dental anxiety will help in reducing dental anxiety in children.

Clinical Implications

Similar studies such as this with more multivariate factor analysis will help us to explore and evaluate further more on this aspect in order to inculcate more positive behavioral attitudes.

DECLARATION OF INTERESTS : The authors declare no conflicts of interest.

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Legends

Table 1: Gender distribution

Number of participants		N %
Female	22	50
Male	22	50

Table 2: Grading of knowledge level

No of correct answers	Interpretation
10	Poor
12	Average
12	Good
10	Excellent

Table 3: Grading of the attitude level

No of correct answers	Interpretation
15	Superior
10	Average

10	Good
9	Excellent

Table 4: Distribution of correct answers regarding dental anxiety in children

		Pre		Post
	N	%	N	%
Dental anxiety education should be given	20	50	40	0.95
Dental anxiety education should not be given	4	0.09	3	0.08

Table 5: Distribution of education according to the answers for method of dental anxiety education

Method of dental anxiety education	Pre		Post	
	N	%	N	%
Using pamphlets	14	0.31	16	0.36
Using brochures	14	0.31	16	0.36
Using A-V aids	16	0.36	12	0.27

Annexure I : Questionnaire Copy

Evaluation of Educational approaches for assessing knowledge of educators in response to childhood dental anxiety

S. No	Questionnaire	Options
1	Do you have knowledge about oral health education ?	Yes No
2	Are you convinced about being questioned about oral health education ?	Yes No
3	Do you feel that your knowledge about oral health education is adequate ?	Yes No
4	Do you feel that you need more awareness programs for oral health education?	Yes No
5	If yes, what will be your choice of the program a. Seminar b. Symposium	a b