

KNOWLEDGE AND ATTITUDE OF SCHOOL TEACHERS IN EDUCATING SCHOOL CHILDREN REGARDING SIGNIFICANCE OF GOOD ORAL HEALTH AND RELATED PRACTICES-A QUESTIONNAIRE BASED STUDY

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ABSTRACT:

School teachers play a vital role in the overall development of a child. With proper knowledge on oral health and related practices they can instill good oral hygiene practices and related behaviours from a very early age. The aim of this present study is to evaluate the knowledge and attitude of school teachers in educating school children regarding oral health. A questionnaire consisted of 15 questions on oral health's knowledge, attitude and practice were formulated and distributed among school teachers. The data obtained were subjected to statistical analysis using SPSS software and chi square tests were done between knowledge and gender, attitude and gender and practice and gender. The results were formulated in tables and graphs. The results showed that 85% of school teachers had good knowledge, 95% had positive attitude and 66% had good practice regarding oral health. The study concludes that school teachers had adequate knowledge and positive attitude in educating school children regarding oral health.

Keywords: Children, Oral health, School, Teachers.

INTRODUCTION:

The school is an important avenue for promoting oral health, especially in developing countries with less resources. (Reddy *et al.*, no date) A school is not just a place for children to receive education but it molds the behavior, attitude and perception towards life (Suresh *et al.*, 2019) Children spend a considerable amount of time in schools at the critical period when their health habits are being formed. According to Kenney a school administrator "schools have a tremendous capacity to be supportive of programs involving preventive dentistry for children" (Lalithambigai *et al.*, 2019). The World Health Organisation's global school health initiative encourages "Health promoting schools" to create a healthy setting for living, learning and working.

The initiative is designed to improve the health of students, school personnel and other members of the community through schools (Hewitt, 1878). Oral disease can be considered a public health problem due to its high prevalence and significant social impact (Gauthier, 1894). Dental caries is the

commonest chronic disease of childhood that interferes with normal nutrition intake, speech, and daily routine activities. Untreated oral diseases in children frequently ends up in serious general health, significant pain, and interference with eating and lost school time. (Prabakar, John and Srisakthi, 2016)

School teachers play a vital role in shaping the behavior and overall comprehensive development of school children. School teachers are more authoritative on children. The school teachers, especially primary school can play an important role in developing healthy habits in their students (Petersen and Esheng, 1998). Teachers need to have a sound knowledge regarding constructive oral health habits to train their students. Children enter Grade I of the primary school between the ages of 5 to 6, and continue until grade 7, approximately 13 years of age. This is a highly appropriate age group to inculcate good oral hygiene habits. Very few studies assessing the oral health knowledge, attitude and practice of school teachers have been reported from this part of the country. (Petersen and Esheng, 1998)

However, previous studies have shown that a teacher's knowledge about oral health was inadequate (Nyandindiet *et al.*, 1996). In contrast, Chiketa *et al.* 1990- showed adequate knowledge of teachers on oral health (Chikteet *et al.*, 1990) Such studies can be helpful to gather the baseline data on the existing knowledge of the school teachers and plan appropriate health education programs for them. Studies that have been conducted on the oral health awareness among school teachers revealed that they have a low level of knowledge towards oral health. It is recommended that health education programs in the schools be conducted by adequately trained teachers (al-Tamimi and Petersen, 1998)

Previously our team has conducted numerous cross sectional studies (Prabakar, John and Srisakthi, 2016; Kannan *et al.*, 2017; Neralla *et al.*, 2019), clinical trials (Prabakar, John, I. Arumugham, *et al.*, 2018; Prabakar, John, I. M. Arumugham, *et al.*, 2018; Khatri *et al.*, 2019; Pratha, Ashwatha Pratha and Prabakar, 2019; Mathew *et al.*, 2020; Samuel, Acharya and Rao, 2020), in-vitro studies (Prabhakar, Murthy and Sugandhan, 2011; Kumar and Vijayalakshmi, 2017; Kumar, Pradeep Kumar and Preethi, 2017; Mohapatra *et al.*, 2019; Pavithra, Preethi Pavithra and Jayashri, 2019) and review (Harini and Leelavathi, 2019) over the past 5 years. Now we are focussing on epidemiological surveys. The aim of the present survey was done to assess knowledge, attitude and practices of oral health in school teachers.

MATERIALS AND METHOD :

Study design:

Cross sectional study

Data collection :

A cross sectional study was conducted in April 2020 among school teachers. It was an online questionnaire based study, conducted to assess the knowledge, attitude and practice of oral health among school teachers in educating school children. 103 school teachers participated in this study. The data collection was done via google forms.

Survey instrument:

A pretested, self administered, closed ended questionnaire comprising the following sections formed the survey instrument. Knowledge section consisted of 5 questions, adopted from a validated questionnaire developed by the World Health Organisation. The goal of developing this questionnaire was to know about school teacher's knowledge regarding oral health in educating school children. An attitude section comprising 5 questions and a practice section comprising 2 questions. Subjects rated their attitudes by using a five point Likert scale (strongly agree to strongly disagree).

Ethical approval:

Ethical approval was obtained from the Institutional Ethical Committee and Scientific Review Board (SRB) of Saveetha Dental College.

Data analysis:

The data collected was entered in Excel sheet and subjected to statistical analysis using SPSS software. Chi square test was done between knowledge and gender, attitude and gender and practice and gender. The independent variables are age and gender while dependent variables are knowledge, attitude and practice of oral health. The level of significance is $p < 0.05$

RESULTS & DISCUSSION:

The importance of forming healthy habits at an early stage cannot be over emphasized. School plays a key in oral health through education that can contribute to raising the children with healthy habits. Thus, preventing the school children from many illness. Educating children on oral health is important because healthy oral habits are developed in early in life (Vishwanathaiah, 2016). A pivotal role is played by school teachers to promote oral health activities in children on a daily basis. (Duijster et al., 2015)

Our aim in this study was to assess the oral health knowledge and attitude of school teachers towards oral health practices by administering questionnaires. Totally, 103 school teachers participated in this questionnaire survey. 31.07% were 23-33 age group, 50.49% were 33-43 age group and 18.45% were 43-53 age group (figure 1). Out of 103 school teachers, 60 were females (58.3%) and 43 were males (41.7%). (figure 2)

55.6 % of female school teachers had good knowledge whereas 44.3 % of male school teachers had good knowledge. Association of gender and knowledge was found to be insignificant (graph 1). Attitude was assessed by Likert scale. Both female and male school teachers had positive attitude towards oral health. 57.1% of female school teachers had positive attitude whereas 42.8% of male school teachers had positive attitude which was found to be statistically insignificant (graph 2). Practice was assessed by Yes or No questions. Both female and male school teachers had good and fair practices related to maintaining oral health. 58.8 % of female school teachers had good practice regarding oral health whereas 41.1% of male school teachers had good practice which was found to be statistically insignificant (graph 3)

Overall good knowledge 85.45%, Fair knowledge 13.59%, poor knowledge 0.97%. Overall positive attitude 95.15% and negative attitude 4.85%. Overall good practice 66.01% and fair practice 33.9%

A study done in Davangere among school teachers concludes that the majority of teachers showed good knowledge on oral health which is similar to our present study (Maganure et al., 2017). A study done in Melmaruvathur among government school teachers, concludes that oral health knowledge was lacking among school teachers which is dissimilar to our present study (Reddy et al., no date). This difference in the finding is due to existing curriculum and continuing oral health programs in our country.

A study done in Mumbai among primary school teachers, concludes that the school teachers demonstrated incomplete oral health knowledge and inappropriate practices which is contrary to our present study (Mota et al., 2016). The study conducted by Veerakishore et al (Reddy et al., 2019) and Uttarasuresh et al (Suresh et al., 2019) among school teachers concludes that the knowledge and attitude of school teachers were found to be incomplete which is opposing our present study. This difference could be attributed in different methodologies are used in studies. The study conducted by FB lawal et al (Lawal and Bankole, 2014) and Sofola et al (Sofola, Agbelusi and Jeboda, 2002) among primary school teachers revealed that majority of teachers had poor attitude and poor practices towards oral health which is dissimilar to our present study.

From this study, it shows that overall knowledge was good, overall attitude among school teachers was found to be positive about 95.1% and overall practice was adequate in our study population when compared to other previous studies.

Limitations:

The main limitation of this study was limited sample size and it was confined to limited geographic location. This can be corrected by the inclusion of school teachers from different districts and states to obtain more response.

CONCLUSION:

The aim of this study was to assess the knowledge, attitude and practice of oral health among school teachers in educating school children. Within this limitation of this study, the study concludes that both male and female school teachers had good knowledge, positive attitude and good practice regarding oral health. More such awareness need to be taken by the government to ensure that adequate knowledge and practices is received by school teachers and thereby imported to the students.

AUTHOR CONTRIBUTIONS:

First author [Nivetha G] performed analysis, interpretation and wrote the manuscript. Second author [Dr. Srisakthi] contributed to conception, data designs, analysis, interpretation and critically revised the manuscript. Third author [Dr. Arvind Sivakumar] participated in the study and revised the manuscript. All the three authors have discussed the results and contributed to the final manuscript.

CONFLICT OF INTEREST:

Nil.

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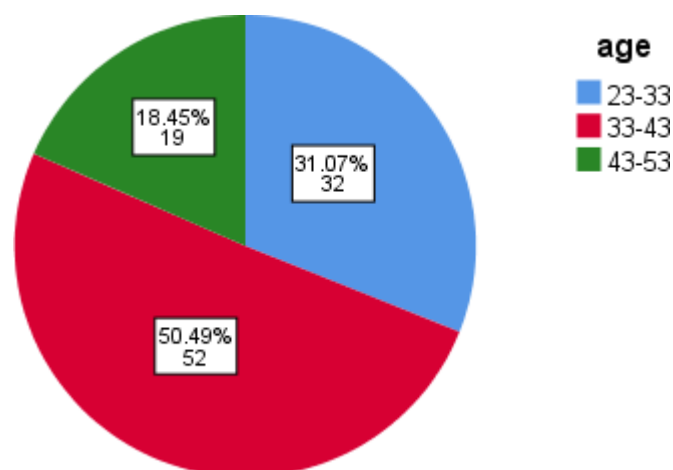


Figure 1: depicts that distribution of study population based on age. Blue denotes 23-33 yrs age group, red colour denotes 33-43 yrs age group and green colour denotes 43-53 yrs age group. 33-43 yrs age group [50.49%] of school teachers were majority among the participants, followed by 23-33 yrs age group [31.07%] and least were 43-53 yrs age group [18.45%]

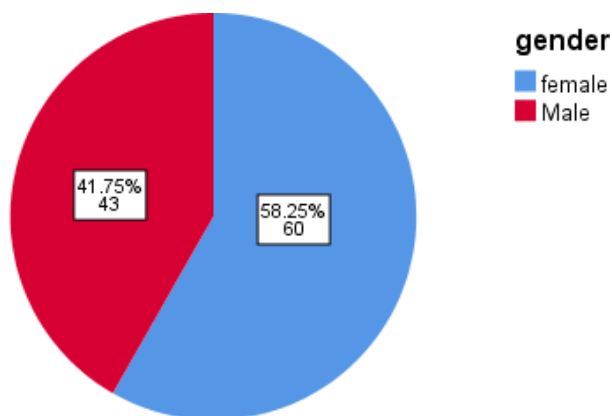
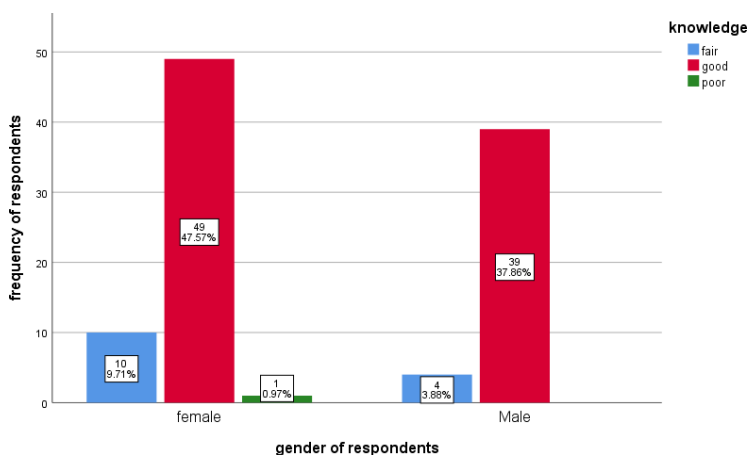
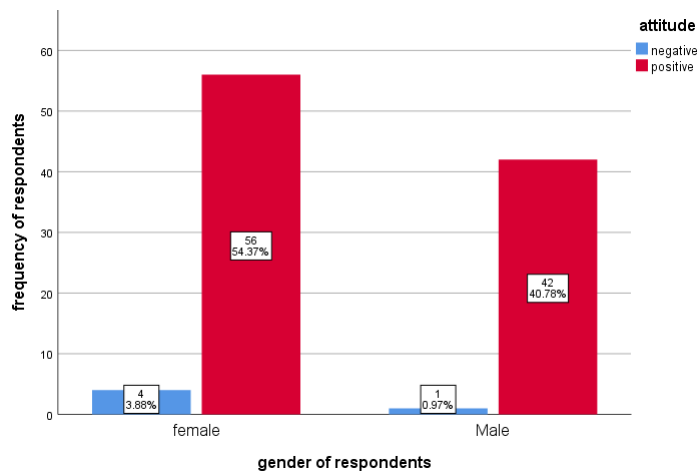


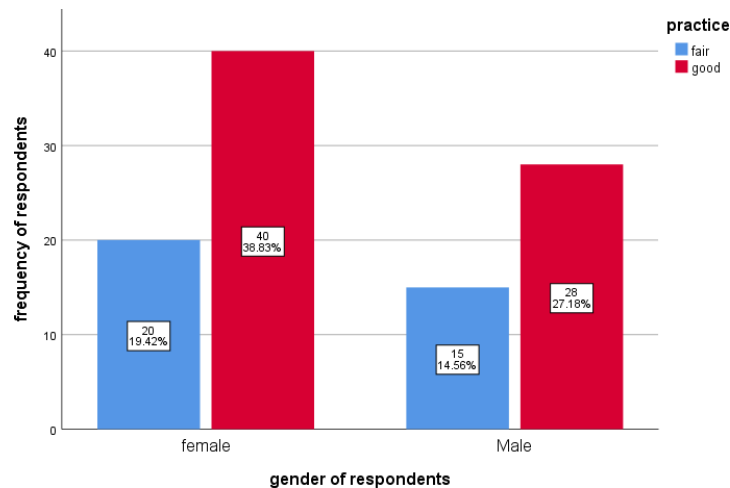
Figure 2: Depicts that distribution of study population based on gender .Blue denotes female and red colour denotes male.It shows that more number of female teachers[58.65%] willingly participated when compared to male teachers[41.75%]



Graph 1: This graph represents the association between gender and knowledge of school teachers towards oral health.X axis represents gender and Y axis represents frequency of respondents. Blue colour denotes fair, red colour denotes good and greencolour denotes poor knowledge. Association between gender and knowledge of school teachers was done using Chi-square test (p value=0.376) and was found to be statistically insignificant. Even though male and female school teachers had good knowledge towards oral health, female teachers were better than males.



Graph 2: This graph represents the association between gender and attitude of school teachers towards oral health. X axis represents gender and Y axis represents frequency of respondents. Blue colour denotes negative attitude and red colour denotes positive attitude. Even though majority of teachers in both genders had positive attitude, Female teachers were found to be better than their male counterparts. Association between gender and the attitude of school teachers was done using Chi-square test (p value=0.312) and was found to be statistically insignificant.



Graph 3: This graph represents the association between gender and practice of school teachers towards oral health. X axis represents gender and Y axis represents frequency of respondents. Blue colour denotes fair practice and red colour denotes good practice. Association between gender and practice of school teachers was done using Chi-square test (p value=0.870) and was found to be statistically insignificant. More number of female school teachers [38.83%] had good practice towards oral health when compared to male teachers [27.18%].