

A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge regarding Oral Hygiene among Primary School Students at selected Schools of District Mandi (HP)

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Abstract: Introduction: Oral hygiene is the practice of keeping our mouth clean and disease free. It involves brushing and flossing our teeth and prevent from oral disease affecting the oral cavity and its surrounding structures. Maintaining good oral hygiene is considered to be a lifelong habit, and these oral habits are said to be begin in an early stage of life. The study aims to assess the knowledge level of students of primary school regarding oral hygiene. To find the association between knowledge score regarding oral hygiene among primary school students with their socio demographic variables. Methodology: Pre experimental research design was used to check the effectiveness of structured teaching programme on knowledge regarding oral hygiene among primary school students. Total 60 students were enrolled into the study by using non - probability purposive sampling technique. Self structured knowledge questionnaire was used to assess the knowledge regarding oral hygiene among primary school student. Result: The result of the study depicts that about 60 primary school students, 17 (28.3%) students of primary school had moderate knowledge whereas 43 (71.7%) students of primary school had adequate knowledge and none of them had inadequate knowledge regarding oral hygiene. The association of knowledge of study participants regarding oral hygiene was not found to be statistically significant with any of the demographical factors' studies except the educational qualification and source of information. Conclusion: The result from this study revealed that knowledge regarding oral hygiene among primary school students was adequate. Also, the educational programme significantly improved the knowledge of primary school students so other teaching strategies can be used to increase knowledge regarding oral hygiene.

Keywords: Assess Effectiveness, Knowledge, Oral hygiene, Primary school students

1. Introduction

Oral health is a part of general health. Oral health also influences the quality of life. Dental caries and periodontal disease are the common disease in population¹. Oral disease are a major public health concern owing to their high prevalence and their effect on the individual quality of life². The possible etiological factors leading to this oral disease are genetic predispositions, developmental problems, poor oral hygiene and traumatic incident³. Oral health knowledge is considered to be an essential prerequisite for health related behaviour, although only a weak association seems to exist between knowledge and behaviour in cross sectional studies, nevertheless studies have shown that there is an association between knowledge and better oral health⁴. It is estimated about 60 to 90% of children worldwide suffer from dental caries leading to pain and discomfort⁵.

Oral hygiene is the practice of maintaining the mouth clean and healthy so that oral disease affecting the oral cavity and its surrounding structures are prevented. Maintaining good oral hygiene is considered to be a lifelong habit, and these oral habits are said to be begin in an early stage of life⁶. Although many studies have been carried out from time to time to assess the knowledge and behaviour of people about oral health, there is still a dearth of education regarding the same especially for rural people, who make up for more than 70% of the population in India⁷. According to World Health

Organization, "promotion and oral health is a cost effective strategy to reduce the burden of oral disease and maintain oral health and quality of life⁸. Dental caries, with a prevalence as high as 60 - 80% in children, is a major public health problem in India⁹. Oral cancer has also long been a major problem in the country¹⁰.

Need of Study

Oral diseases present a major public health problem. The study is to describe and analysis the oral hygiene condition and practice among school going children. Oral disease is a major public concern owing to their high prevalence and their effects on the individual's quality of life. Oral cancer has also long been a major public health problem in this country. The possible etiological factors leading to these oral diseases are genetic predisposition, developmental problems. The WHO provides overarching guidance for the prevention of disease. The WHO has placed emphasis on non - communicable diseases with priority given to disease linked by common, preventable and lifestyle related risk factor (such as diet and tobacco use), including oral health, with a particular focus on disadvantaged and poor populations.

Dental caries is a major cause of hospitalization for children in some countries. In India, the prevalence of early childhood caries (ECC) in children aged 8-48 months is reported to be between 44% and 49%. The prevalence of dental caries in India is estimated to be around 54.16%. However, the prevalence of root caries is much higher,

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affecting nearly three out of ten people. In 2020, the global prevalence of dental caries was 46.2% in primary teeth and 53.8% in permanent teeth. The overall prevalence of dental caries in India is 54.16%. The prevalence is higher in western India (72%) and in patients above 18 years (62%) In one study, the prevalence of dental caries was 58.9% in urban areas and 51.4% in rural area. Till date there had been only 2 National health survey in India. First National level epidemiological oral health survey in India was conducted by Dental Council of India in 2004. The second survey was published in 2007. In the year 2016 the first attempt was made to assess the state wise global disease burden in India. 2019 estimated that oral disease affects close to 3.5 billion people worldwide with caries of permanent teeth being the most common condition. Globally, it is estimated that 2 billion children people suffer from caries of permanent teeth and 520 million children suffer from caries of primary teeth.

2. Materials and Methods

Research Design: In this study pre - experimental research design (one group pre - test and post - test design) was used to check effectiveness of structured teaching programme on knowledge regarding oral hygiene among primary school students at selected schools of district Mandi (HP).

Research Variables

Independent variable - Structured teaching programme regarding oral hygiene.

Dependent variables - Knowledge of primary school students regarding oral hygiene among primary schools students.

Socio - demographic variable - age, religion, educational status, father occupation, mother qualification, monthly income of family, area of residence, source of drinking water, type of family, habit of brushing teeth daily, previous knowledge regarding oral hygiene, if yes then source of information.

Target Population: Target population is the entire population in which the researcher is interested and would like to generalize the result of the study. The target population of the present study includes students of primary schools at selected schools of district Mandi (HP).

Sample and sampling technique: Sample refers to unit of population selected to participate in a research study who met the inclusion criteria. In this present study the sample were primary school students. The choice of sampling technique depends on the nature of the problems. In this study sampling technique used was non - probability purposive sampling technique. Sample size of this study consist of 60 primary school students studying in selected schools of district Mandi (HP).

Developmental and Descriptive Tools: Socio - demographic Variables and Self Structured Knowledge Questionnaire.

3. Findings

Finding related to socio - demographic Variables:

- Out of 60 students, most of students age group was 9 - 10 years. Majority i. e 49 (81.7%) are male students. 60 (100%) are class 5th students. 54 (90%) are belongs to Hindu religion. 60 (100%) are belong to rural area. The frequency and percentage of socio - demographic variables of students, regarding age in years out of 60 students 9 years (18.3%) and 10 years (81.7%).
- More than half of the respondents 34 (56.7%) are male students and 26 (43.3%) are female students. All respondents (100%) identified that they are studying in 5th standard.
- More than half of the respondents 54 (90%) are belongs to Hindu religion. 4 (6.7%) are belongs to Muslim religion. 2 (3.3%) are belongs to Christian religion.
- All the respondents (100%) residence in rural areas, with no representation from urban areas.
- Regarding respondents mothers qualification 47 (78.3%) had no formal qualification, 9 (15.0%) had primary education and 4 (6.7%) had secondary education.
- Regarding respondents father's occupation more than half 39 (65.0%) are doing private job, 10 (16.7%) are in govt. job, 6 (10.0%) are unemployment and 5 (8.3%) are self employee.
- More than half of the respondents 35 (58.35%) are belongs from nuclear family, 25 (41.7%) are belongs from joint family. All the respondents 60 (100%) have a habit of brushing teeth daily.
- More than half of the respondents family 40 (66.7%) used hand pump for drinking water, 14 (23.3%) used public tap and 6 (10%) used purified.
- Regarding previous knowledge all the respondents 60 (100%) indicate that they have previous knowledge regarding oral hygiene.

4. Discussion

Objective1: To assess the pre - test and post - test knowledge score regarding oral hygiene among primary school students at selected schools of district Mandi (HP) pre - test results shown that mean \pm SD as 9.52 ± 1.909 , standard error of mean. 246, 9.00 median, 9 mode, 7 range and minimum and maximum score as 6 & 13 respectively. In post test results shown that mean \pm SD as 14.23 ± 1.430 , standard error of mean. 185, 14.00 median, 14 mode, 6 range and minimum and maximum score as 11 & 17 through self structured knowledge questionnaire regarding oral hygiene among primary school students.

Objective2: To compare the pre - test and post - test knowledge score regarding oral hygiene among primary school students at selected schools of district Mandi (HP) the mean pre - test knowledge score is 9.52 with SD 1.909 and mean percentage obtained in post - test knowledge score is 14.23 and SD is 1.430 and the calculated t-value is 16.303* was found highly significant at 0.05 level of significance. Thus, it is established that mean post - test knowledge score were greater than mean pre - test knowledge score, shows the effectiveness of structured teaching programme. Hence research hypothesis H₁ was accepted and null hypothesis H₀ was rejected.

Objective3: To find out the association of post - test knowledge score regarding oral hygiene among primary school students with their selected socio - demographic variables. The association of knowledge score of primary students regarding oral hygiene with their selected socio - demographic variables. The association reveals that the demographic variables had not shows significant association with the knowledge score regarding oral hygiene.

5. Conclusion

The result from this study revealed that knowledge regarding oral hygiene among primary school students was moderate. Also, the educational programme significantly improved the knowledge of primary school students regarding oral hygiene so the other teaching strategies can be used to increase primary students knowledge regarding oral hygiene.

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