EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF DENTAL CARIES AMONG PRIMARY SCHOOL CHILDREN IN SELECTED SCHOOL AT KOLLAM DISTRICT

*Sr. Teena Kavungal

Associate Professor, Holy Cross College of Nursing, Kottiyam, Kollam.

*Corresponding Author: Sr. Teena Kavungal

Associate Professor, Holy Cross College of Nursing, Kottiyam, Kollam.

ABSTRACT

The aim of the study was to evaluate the effectiveness of structured teaching programme on knowledge regarding prevention of dental carries among primary school children in a selected school at kollam district. The objectives of the study were to evaluate the effectiveness of structured teaching programme on prevention of dental carries among primary school children, and to find out the association between pretest knowledge scores regarding prevention of dental carries and the selected socio demographic variables. Pre-experimental, one group pre test post test group design was used with 30 samples. The data was analyzed using descriptive and inferential statistics. The study findings revealed that in the pre test 20% had average knowledge and 80% had poor knowledge. After the structured teaching programme in the post test 93.33% had good knowledge, 6.67% had average knowledge. The calculated paired "t" test value was 19 and the table "t" value was 2.05. There was no significant association between the pretest knowledge score and selected demographic variables ($\chi 2 > 0.05$) Thus It was concluded that there was a significant improvement in posttest score when compared to pre-test score, so the structured teaching programme on prevention of dental caries was effective among primary school children.

KEYWORDS: Structured Teaching Programme, Dental Caries, Primary School Children.

INTRODUCTION

Dental caries is one of the principle oral problem in children among preschoolers. The health and wellbeing of school age children has become a high profile issue lying in the heart of numerous government initiatives and policies receiving considerable public attention. Dental carries is a common disease during childhood in India. Over 40% of the children in India are found to be affiliated with dental caries and a large percentage of children reside in rural areas and most of them are in need of dental care. Sudha P conducted a study in Mangalore on prevalence of dental caries among 5-13 year school children. The result of the study revealed that dental caries prevalence in 5-7 years is 94.3%, 8-10 years is 82.5% and 11-13 yrs is 82.5%. the study also revealed that prevalence of caries in low socio economic group is higher ie, 96.2% than the high socio economic group 77.1%.[1] A study was conducted on dental health status among primary school children in Trivandrum by David J. Dental carries was measured by WHO criteria. The study found that 27% dental caries prevalence in permanent dentition. Dental caries was higher in children who did not use tooth brush, and consumed sweet. children living in urban area was associated with more dental caries.[2] A cross sectional study was conducted in Bhopal to assess the knowledge and practice in relation to oral health and oral health behaviors by Petersen PE. It was found that dental carries prevalence proportion 57% and 75% children reported tooth brushing only once a day and 31% used plastic tooth brush and general level of knowledge on dental Health was very low.[3] Sogi GM, Bhasker DJ (2002) conducted a study in Davangere town to determine the relationship of dental caries and oral health status with socio economic status. Findings of the study reports that the dental caries and oral health status of children was strongly correlated with socio-economics status.[4] A pre experimental study was conducted by HP Kaur to evaluate the effectiveness of structured teaching programme on knowledge about dental caries and its prevalence among primary school children. findings of the study shows that among 250 students 64.4% of were suffering with moderate level of prevalence, 88.4% had normal teeth and 10.4% had severe dental caries, and 6.8% had mild dental caries.[5] A study to assess the effectiveness of structured teaching programme on knowledge and attitude regarding dental hygiene among primary school children in a selected school Chennai by D Amarlal. Findings shows that maximum of 40.02% of samples score with poor knowledge in pre test and 70.08% 0f samples score with good knowledge in post test.[6]

Statement of the problem
"A study to assess the effectiveness of structured teaching programme on knowledge regarding prevention of dental carries among primary school children in a selected school at kollam district"

Objectives
1. To assess the knowledge regarding prevention of dental caries among primary school children.
2. To evaluate effectiveness of structured teaching programme on knowledge regarding prevention of dental caries among primary school children.
3. To find out association between pre-test knowledge scores regarding prevention of dental caries and the selected demographic variables.

Hypothesis
Hypotheses will be tested at 0.05 level of significance.
H1: The mean post-test knowledge regarding the prevention of dental caries will be significantly higher than pre-test scores among primary school children.
H2: There will be significant association between pre-test knowledge scores regarding prevention of dental caries and the selected demographic variables.

METHODOLOGY
Research Approach
A quantitative research approach was adopted for this study.

Research Design
One group pre-test post test research design was used.

Research setting
Auxillum English medium school at kollam District.

Population
All the students studying in 1st to 4th standard of Auxillium English Medium School.

Sample
30students studying in 4th standard of Auxillium English Medium School.

Sampling technique
Simple random sampling technique.

Data Collection Method
Tools used were
1. Structured questionnaire regarding prevention of dental carries.
2. Socio demographic Performa.

Method of data collection
1. Written permission was obtained from the principal of the school, parents and children.
2. The sample 30 was selected based on the sampling criteria using simple random sampling technique that is. lottery method.

3. Pre-test was conducted and structured teaching programme regarding prevention of dental caries was given and then post test done after a week.

Data Analysis
1. Descriptive: Frequency, percentage, means. And standard deviation were used.
2. Inferential: Chisquare test and paired t test were used for the analysis and interpretation of data.

RESULT
Data from 30 samples was tabulated, analyzed and interpreted considering the objectives and hypothesis of the study by using descriptive and inferential statistics. The study findings revealed that in the pre test 20% had average knowledge and 80% had poor knowledge. After the structured teaching programme in the post test 93.33% had good knowledge, 6.67% had average knowledge. Thus it was concluded that there was a significant improvement in posttest score when compared to pre-test score, so the structured teaching programme on prevention of dental caries was effective among primary school children.
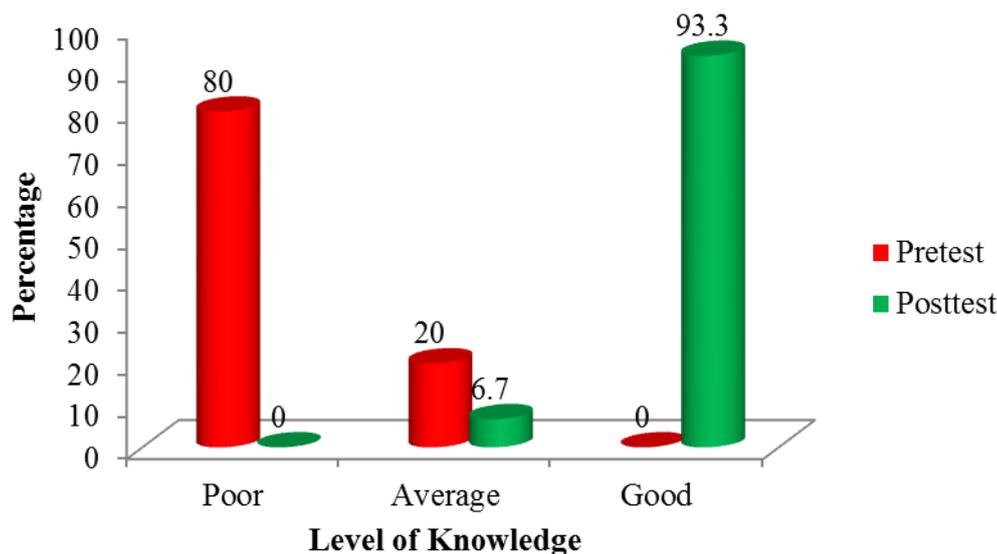
Figure 1: Represents 93.3% of samples had good knowledge score in the post test, whereas 80% of sample had poor knowledge score in the pretest.

Table 1: Shows the effectiveness of structured teaching programme regarding prevention of dental caries among primary school children.

Scores	Mean	SD	t value	p
Pretest	8.76	2.98	19*	0.000
Post test	21.5	2.51		

*$t_{(29)}$=2.05, p<0.05

DISCUSSION
Data from 30 samples was tabulated, analyzed and interpreted considering the objectives and hypothesis of the study by using descriptive and inferential statistics. The study findings revealed that in the pre test 20% had average knowledge and 80% had poor knowledge. After the structured teaching programme in the post test 93.33% had good knowledge, 6.67% had average knowledge. The calculated paired "t"test value was 19 and the table"t" value was 2.05. Thus the calculated "t value is higher than the table value. Hence the null hypothesis was rejected and research hypothesis was accepted. There was no significant association between the pretest knowledge score and selected demographic variables (χ2 >0.05). Thus it was concluded that there was a significant improvement in posttest score when compared to pre-test score, so the structured teaching programme on prevention of dental caries was effective among primary school children.

Nursing implications
Nursing Education
The study brought forth the call for health professionals specially nursing students and staff nurses, to undertake a special role of motivator in the healthcare team, as educator and health care provider through various interventions of health awareness among the public.

Nursing Administration
The Nurse administrators can enable the nursing personnel to develop newer skills through in-service education and continuing education programme regarding prevention of dental caries among the children and parents.

Nursing Research
The incidents of dental caries among primary school children are more prevalent now days than other age group. So there is need for extended and intensive research in this area. The health professionals specially staff nurses and nursing students should do encourage in expanding the body of knowledge among children and caregivers at home.

Limitations of the study
1. The study was restricted to small sample size, which limited the generalization of the result.
2. The study was focused only on the knowledge of the students

Recommendations
1. Similar study can be conducted with large samples to assess the attitude and practice regarding prevention of dental caries.
2. A comparative study can be done regarding the prevention of dental caries among children in urban and rural areas.

3. A co relational study can be done on dietary behavior and dental caries among children.

CONCLUSION

Dental caries is a lifetime diseases and the highest priority risk group is between 6-12 years of age. Oral health is integral to general health and essential for wellbeing of all children in their developmental stage. The findings of study highlights the need for conducting school health programme in a systematic way such as School program should be promoted through integration into the school curriculum and oral health care preventive services to target the growing problem of dental caries among school children.

REFERENCES

1. Sudha P, Bhasin S, Anegundi RT. Prevalence of dental caries among 5-13-year-old children of Mangalore city. Journal of Indian Society of Pedodontics and Preventive Dentistry, 2005 Apr 1; 23(2): 74.
2. David J, Wang NJ, Åstrøm AN, Kuriakose S. Dental caries and associated factors in 12-year-old school children in Thiruvananthapuram, Kerala, India. International journal of paediatric dentistry, 2005 Nov; 15(6): 420-8.
3. Christensen LB, Petersen PE, Bhambal A. Oral health and oral health behaviour among 11-13-year-olds in Bhopal, India. Community dental health, 2003 Sep; 20(3): 153-8.
4. Sogi GM, Bhasker DJ (2002) conducted a study in Davangere town to determine the relationship of dental caries and oral health status with socio economic status. Findings of the study reports that the dental caries and oral health status of children was strongly correlated with socio-economics status.
5. Kaur HP. A Pre Experimental Study to assess Effectiveness of Structured Teaching Programme on Knowledge about Dental Caries and its Prevalence among Students in Selected Schools of District Gurdaspur, Punjab. International Journal of Nursing Education and Research, 2017; 5(1): 83-6.
6. Priya M, Devdas K, Amarlal D, Venkatachalapathy A. Oral health attitudes, knowledge and practice among school children in Chennai, India. Journal of Education and Ethics in Dentistry, 2013 Jan 1; 3(1): 26.