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Effectiveness of video assisted teaching programme on knowledge among mother of under five children regarding prevention of childhood dental fluorosis at selected area at Kondancheri

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Abstract

Statement problem: A study to assess the effectiveness of video assisted teaching programme on knowledge among mother of under five children regarding prevention of childhood dental fluorosis at selected area at Kondancheri.

Aims and objective: To assess the knowledge among mothers of under five children regarding prevention and management of childhood dental fluorosis. To evaluate the effectiveness of video assisted teaching programme on knowledge among mothers of under five children regarding prevention and management fluorosis. To find the association between post test knowledge scores among mothers of under five children regarding prevention and management of dental fluorosis.

Methods: This chapter include research approach, research design, settings of the study, population, sample size and sampling techniques, criteria for the selection of the sample, description of the tool, testing tool, data collection procedure and plan for data analysis. Research design: The research design adopted for the pre test study was one group pre test, post test, pre-experimental design.

Result: The 30 mothers of under five children had Among 30 samples shows the mean score of knowledge for inadequate (8.59), moderate (11.5), and standard deviation score for inadequate (1.0414), moderate (0.8366) in pre test. Among 30 samples shows the mean score of knowledge for moderate (14.66) and adequate (18.425) and standard deviation score for moderate (0.577) and adequate (1.2466) in post test. test score of mean is 8.94 and standard deviation score is 1.39. The post tesdt score of mean is 18.22 and standard deviation score is 1.46. the pre test mean score is 8.94 lower than post test mean score is 18.22. The mean difference was 9.28 and paired value was 35.8594, p value is <0.5. The result was significant (S). The findings revealed that the knowledge regarding prevention and management of dental fluorosis among under five mothers was average and there is a need to improve the knowledge about dental fluorosis and create awareness by conducting health education programmes.

Keywords: Effectiveness, video assisted teaching programme mothers of under five children dental fluorosis

Introduction

Dental fluorosis or "mottled teeth" has long been recognised as an endemic problem affecting areas of the world with high levels of naturally occurring fluorides in the drinking water. It is one of the common but major emerging areas of research in the tropics. It is considered as endemic in 17 states of India. recent World Health Organization (WHO) report and other studies suggest dental fluorosis to be a major public health problem in most of the developing countries, affecting 60-90% of the school children in spite of the declining trends in the most developed countries. The decline in dental caries among children in highly developed countries started to emerge around 1970 and the percentages of caries free children in different age categories have increased since then. This was mainly attributed to the increased use of fluorides from all sources, especially toothpastes. On the other hand, certain developing countries, have reported an increase in dental caries. The economic, socialand political changes in the developing world have had a significant impact on diet and nutrition, with a shift from traditional to a more westernized life-style. A recent study amongschool going children in an endemic fluoride area in Andhra Pradesh found the prevalence ofdental caries among 12 and 15-year-old children to be 55.3% and 57.3%. Prevalence of dental fluorosis was 73% among 12 years and 70.1% among 15 years children. Dental caries and dental fluorosis are two dental diseases among the school children in endemic fluoride areas. Around 17 states in India are endemic to dental fluorosis.

Esthetics changes in permanent dentition are the greatest concern in dental fluorosis, which are more prone to occur in children who are excessively exposed to fluoride between 20 and 30 months of age. It is also important to remind that the critical period to fluoride overexposure is between 1 and 4 years old, and the child would not be at risk around 8 years old. Dental fluorosis can be prevented by monitoring the amount of fluoride that children up to 6 years old are exposed, therefore, the dentist must be aware of the main sources of fluoride to prevent fluorosis and instruct parents or caregivers on how daily dose should be managed in orderto achieve success in prevention. More recently systematic reviews summarizing these extensive database have indicate that water fluoridation and fluoride toothpaste both substantially reduce the prevalence and incidence of dental caries when articial drinking water fluoridation schemes began several reports estimate that 10% of children consuming water fluoridated between 0.9 -1.2 parts per million would develop mild dental fluorosis. There was a general assumption that drinking water would be the only source of exposure to fluorides. An video assist teaching programme given to the mothers regarding prevention and management of dental fluorosis is imperative to understand the prevention disease and inform better preventive strategies.

Methods and Materials

The chapter includes research approach, research design, settings of the study, population, sample size and sampling technique, criteria for the selection of samples. The quantitative approach with quasi experimental research design with pretest and posttest was used to conduct the study in rural area kondancherry.30 samples were selected by using a non-probability convenience sampling technique, The criteria for sample selection the client with in age 21-40years. The description of tool, the research had developed questionnaires after review of literature to assess the knowledge and attitude of under-five mothers regarding dental fluorosis. The study was conducted in rural area Kondancherry. The subjects who met the inclusion criteria were selected by using convenient sampling technique. The researcher explained about the purpose and benefits of the study to the samples. The researcher assured ofconfidentiality and anonymity. The demographic variables were collected by using the questionnaire. The questionnaire to assess the pretest knowledge towards dental flurosis were distributed to fill in by the subjects. After collecting back the questionnaire, teaching session by video assisted teaching regarding dental flurosis was conducted. After 7 days, the post test was conducted to assess the knowledge and attitude towards controlling blood pressure by using the same questionnaire.

Result and Discussion

Section A. Frequency and Percentage Distribution of Demographic Variables among Under Five Mother

With regard to the distribution Shows that out of 30 samples, among 15 samples(50%)were in the age group of 20-25 years among this sample,15 samples (50%) were in the age group of 25-30 years among this sample, 16 samples(53%) are Hindu, 8 samples (27%) are Christian, 6 samples (20%) are Muslim, 12 samples (40%) are no formal education, 12 samples (40%) are studied secondary education, 3 samples (10%) are studied higher secondary education, 3 samples (10%) are graduate, 18 samples (60%) are house wife, 8 samples (27%) are labour, 4 samples (13%) are doing agriculture, 18 samples (60%) are nuclear family, 12 samples (40%) are joint family, 13 samples (43%) are having one child, 13 samples(44%) are having two childrens, 4 samples (14%) are having three Childrens, 20 samples (67%) are brushing teeth once a day, 10 samples (33%) are brushing teeth two times a day, 100 samples are lived in Kondancheri area.

Section B: Asses The Effectiveness of Booklet Teaching on Knowledge Among Mothers of Under Five Regarding Prevention and Management of Childhood of Dental Fluorosis in Pre Test And Post Test Score (N=30)

Table 1: Among 30 samples out of 23 samples (77%) have inadequate knowledge, 6 samples(20%) have moderate knowledge and 1 samples (3%) have adequate knowledge in pre test.

Level of Knowledge	Pre Test	Frequency Percentag	Post Test	Frequency Percentage
Inadequate	23	77%	0	0
Moderate	6	20%	3	10%
Adequate	1	3%	27	90%

Among 30 samples out of 3 samples (10%) have moderate knowledge, 27 samples (90%) have adequate knowledgeand none of them had inadequate knowledge in post test.

Table 2: Comparsion of mean score and standard deviation score of Pre-Test and Post-test knowledge based on inadequate, moderate and adequate.

Variables	Mean	Standard deviation	Mean difference	Paired 't' Test	
				't' Value	P value
Pre Test	8.94	1.39	9.28	t = 35.8594 p = <.05 df = 49 (S)	
Post Test	18.22	1.46			

Shows that pretest score of mean is 8.94 and standard deviation score is 1.39. The post tesdt score of mean is 18.22 and standard deviation score is 1.46. the pre test mean score is 8.94 lower than posttest mean score is 18.22. The mean difference was 9.28 and paired value was 35.8594, p value is <0.5. The result was significant (S).

Section C

Table 3: Distribution of Statistical Value of Pretest and Post Test Knowledge Score in dental flurosis. (N = 30)

Demographic variable		Table value	Inference
Age of the mother	0.446	df=4,*p*<0.05	NS
Religion	0.803	df=4,*p*<0.05	NS
Education of mother	3.578	df=6,*p*<0.05	NS
Mothers occupation	0.819	df=4,*p*=<0.05	NS
Composition of mother	0.147	df=2,*p*=<0.05	NS
No. of. siblings	1.52	df=6,*p*=<0.05	NS
One day how much time brush your teeth	50	df=4,*p*=<0.05	NS

Shows that is association between the demographic variables of mothers of under five regarding prevention and management of dental fluorosis. There was statistically significant found significant one day how much time brush your teeth.

Conclusion

The findings revealed that the knowledge regarding prevention and management of dental fluorosis among under five mothers was average and there is a need to improve the knowledge about dental fluorosis and create awareness by conducting health education programmes.

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Authors Contribution

All the authors actively participated in the work of the study. All authors read and approved the final manuscript.

Conflicts of Interest

The authors declare no conflicts of interest.

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