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A QUASI EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS ON KNOWLEDGE AND ATTITUDE OF MOTHERS REGARDING IMPORTANCE OF DENTAL HYGIENE TO PREVENT DENTAL CARIES AMONG SCHOOL CHILDREN

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ABSTRACT

The study aims to evaluate the effectiveness of structured teaching programme regarding importance of dental hygiene to prevent dental caries among mothers of school children in terms of knowledge and attitude in selected rural areas of Coimbatore. Data's were collected throughout the selected areas of Coimbatore. The mothers of the respective children were approached and an initial rapport were established with the mother details of the study were explained to them questionnaire method were fixed for data collection and sampling technique used for collecting the data. The result shows that knowledge level of mothers are adequate and proper education to mothers helps to reduce the prevalence of dental caries among children.

KEYWORDS

Dental care, Hygiene, School children, Tooth decay, Cavity, Infection, Bacteria, Teeth, Enamel, Oral hygiene and Brushing.

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INTRODUCTION

Dental health is an integral component of school children. Though the modern life style changes the children gets dental caries easily. Many children are affected with dental caries at early age. Dental caries also known as tooth decay or cavity. The bacterial infection is usually demineralization hard tissues. It results the destruction of organic matter of the teeth. Teeth decay is caused by specific types of acid producing bacteria that cause damage in the presence of fermentable carbohydrates such as sucrose factor and another important cause is the food trapped in between the teeth.

The current statistics shows that 42 percent of 2-11 aged children have dental caries in their primary teeth. 23 percent of children have untreated dental caries and 21 percent of children have dental caries in the permanent teeth. The earliest sign is the appearance of a chalky white spot on the surface of teeth indicates demineralization of enamel. The affected areas of teeth change colour and soft to touch. Another important symptom is constant pain. It also causes bad breath and foul taste. This infection can spread in surrounding areas also. The preventive measure includes proper brushing and personal hygiene. The primary focus of brushing is to remove and prevent formation of plaque. It consist mostly bacteria. Oral hygiene is mostly preferred here. Children belonging to lower income families have more decay in the permanent teeth. In older days it was little prevalence but after 1990's significant dispositive were found in same population¹⁻⁹.

STATEMENT OF THE PROBLEM

A study to evaluate the effectiveness of Structured teaching programme regarding importance of dental hygiene to prevent dental caries among mothers of school children in terms of knowledge and attitude in selected rural areas of Coimbatore district.

OBJECTIVE OF THE STUDY

- To find out the pretest knowledge and attitude of mother's regarding dental care.
- To find out the post test knowledge and attitude of mothers regarding dental hygiene to prevent dental caries among school children.
- To evaluate the effectiveness of structured teaching programme of knowledge and attitude of mothers regarding importance of dental hygiene to prevent dental caries among school children.
- To determine the relationship between knowledge and attitude of mothers with selected demographic variables like age, education, occupation, income, religion.

HYPOTHESIS OF THE STUDY

The mean post test knowledge score regarding dental hygiene to prevent dental caries among school children will be significantly higher than the mean pretest knowledge score of mothers.

The mean post test score regarding attitude of mothers regarding dental hygiene to prevent dental caries among school age children will be significantly higher than the mean pretest attitude score of mothers.

There is a significant relationship between knowledge and attitude of mother regarding importance of dental hygiene to prevent dental caries among school children.

Demographic variables of mothers of school children

Table No.1 shows the mothers detail. Majority of the mothers age are between 30-35 years. 46.6 percentage of mothers had School level education. 60 percentage of mothers are house wife's. 50 percent of mothers income lies between 3001-5000. 63 percent of mothers are Hindu's.

Knowledge of mothers regarding dental hygiene

Table No.2 shows the knowledge of mothers about the dental hygiene. In the pre-test 2(6.7%) has adequate knowledge. 15(50%) has moderately adequate. 13(43.3%) has Inadequate knowledge.

In post-test 20(66.7%) has adequate knowledge. 9(30%) has moderately adequate. 1(3.3%) has Inadequate knowledge.

Table No.3 shows the attitude levels of mothers about the dental hygiene. In the pre-test 10(33.3%) has agreed, 19(63%) has Disagreed and, 01(3.33%) has strongly disagree. In post-test 21(70%) has agreed and 9(30%) has disagreed.

Data on effectiveness of the structured teaching programme on knowledge and attitude of mother regarding importance of dental hygiene to prevent dental caries

Table No.4 describes the knowledge of mothers. The Mean value for pretest shows 9.9 and the post test result show 16.2. The standard deviation result for pretest shows 0.96 and for the post test shows 1.15. The mean deviation is 6.3 and the t value is 1.75. It is significant at 0.05 level ($p < 0.05$). Hence the stated hypothesis is accepted. It is inferred that the

structured teaching programme is effective and it will promote the knowledge of the mothers.

Table No.5 denotes the attitude of mothers. The Mean value for pretest shows 12 and the post test result show 16.4. The standard deviation result for pretest shows 0.98 and for the post test shows 1.01. The mean deviation is 4.4 and the t value is 1.18. It is significant at 0.05 level ($p < 0.05$). Hence the stated hypothesis is accepted. It is inferred that the structured teaching programme is effective and it will promote the attitude of the mothers.

MAJOR FINDINGS OF THE STUDY

Among the samples most of them are between 30-35 years, maximum respondents are house wife's, majority has school education, their income lies between 3000-5000 per month and maximum belongs to Hindu religion.

Their knowledge level shows that most of them had moderate knowledge during pre test and had adequate knowledge during their post test.

The effectiveness of structured teaching programme shows that there is a significant increase in the post test than the pre test. So the structured teaching programme was very effective.

Regarding the association of knowledge and attitude of dental hygiene, the result shows that association between knowledge and attitude of dental hygiene to prevent dental caries with age, education, income, occupation of the samples and sources of information where the hypothesis was rejected in variable regarding dental hygiene to prevent dental caries at significant at $p < 0.05$ level.

Table No.1: Frequency and percentage distribution of mothers N=30

S.No	Demographic Variables	N	Percentage
1	Age		
	24-29 years	10	33.3
	30-35 years	12	40
2	36-41 years	8	26.6
	Education		
	Literate	4	13.33
3	School	14	46.6
	College	12	40
4	Occupation		
	Coolie	7	23.3
	House Wife	18	60
5	Business	5	16.6
	Income		
	1000-3000	8	26.6
6	3001-5000	15	50
	> 5000	7	23.3
7	Religion		
	Hindu	19	63
	Christian	6	20
8	Muslim	3	16.6

Table No.2: Frequency and percentage distribution of knowledge among the mothers

S.No	Level of Knowledge	Pre test		Post test	
		N	%	N	%
1	Adequate	2	6.7	20	66.7
2	Moderately adequate	15	50	9	30
3	Inadequate	13	43.3	1	3.3

Table No.3: Frequency and percentage distribution of knowledge among the mothers

S.No	Level of Attitude	Pre test		Post test	
		N	%	N	%
1	Agee	10	33.3	21	70
2	Disagree	19	63.33	9	30
3	Strongly Disagree	01	3.33	0	0

Table No.4: Mean, Standard deviation and t value of mother's knowledge

S.No	Variable	Mean	St. Dev	Mean	't' Value
1	Pre-test	9.9	0.96	6.3	1.75
2	Post-test	16.2	1.15		

Table No.5: Mean, Standard deviation and t value of mother's attitude

S.No	Variable	Mean	St. Dev	Mean	't' Value
1	Pre-test	12.0	0.98	4.4	1.18
2	Post-test	16.4	1.01		

CONCLUSION

The study reveals that most of the selected samples had moderate and adequate knowledge in pre test, after post test majority of them had adequate knowledge regarding dental hygiene to prevent dental caries. There is a significant difference in the pretest and post test values of the control group, they were not exposed to the structured teaching programme. This is understood that proper education will surely change the attitude and knowledge among the mothers of school children, It makes the mothers to achieve a healthy teeth in their children and also helps to reduce the prevalence of dental caries among children.

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CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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