

## Structured Teaching Program on Knowledge Regarding Prevention of Dental Caries among Mothers of School going Children

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### Abstract

A structured teaching program was conducted to assess the knowledge of mothers of school going children regarding prevention of dental caries. The sample of this study comprise of 40 mothers of schoolgoing children. Collected data was analyzed by using description and inferential statistics. The mothers mean value for the pre test 0.37 with the mean% of 37%. The mean value of post test is 0.73 with the mean% of 73%. The data analysis revealed that there is a significant association between income of family and remaining variable were found to be non significant. The study revealed that the mothers of school going children gained adequate knowledge regarding prevention of dental caries.

**Keywords:** Prevention; Dental Caries; Mothers of School Going Children.

### Introduction

Childhood is an age span ranging from birth to adolescence the term childhood is non-specific and can imply a varying range of years in human development. Children are curious and responsive and they can learn, adopt and practice thing easily. The common problem among the school going children's are dental caries it (tooth decay) is a major oral health problem in most industrialised countries, affecting 60-90% of school children [1].

Dental caries, also known as tooth decay or a cavity, it is an infection usually bacterial in origin, that cause demineralization of hard tissues and destruction of the organic matter of the tooth, usually by production of acid hydrolysis of the food debris accumulated on the tooth surface. The demineralization exceeds saliva and other demineralization factor such as from calcium and fluoridated toothpastes, these tissues progressively breakdown, producing dental caries [2].

It is also associated with failure to thrive; can affect appearance self-esteem, speech, and school performance; and is associated with future caries in both the primary and permanent dentitions. Premature loss of primary molars due to early childhood caries can result in loss of arch space, leading to crowding of the permanent teeth, affecting aesthetics and potentially requiring orthodontic correction [3].

Factors involving in caries teeth are ignored and poverty. The terminal stage of the disease is after much damage has been done. Not knowing the importance's to save the tooth is ignorance and poverty only enhances further and limits any action to be taken till a point the disease has reached the terminal phase. All over the world reported a prevalence of dental caries varying from 30%-80% [4].

Overall caries prevalence in total sample was recorded to be 63.20% caries prevalence in the boys groups was 65.91% and girl group was 59.03% the difference between both the groups was statistically significant. Among the total children 85.07% needed treatment. It was further calculated that out of the total children 51.20% children needed sealant 85.73% needed one surface filling, 5.20% children needed pulp care and crown. 4.13% children needed extractions and 19.87% children needed other care which in this case was mostly veneers, preventive

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and interceptive orthodontics [5].

In view of above matter the researcher felt that there is a need for the study among mothers of school going children on prevention of dental caries to reduce mortality in selected area of Jeolikote, UK.

#### *Problem Statement*

A study to assess the effectiveness of Structured Teaching Program on prevention of dental caries among mothers of school going children in selected hospital, Haldwani, Uttrakhand.

#### *Objectives of the Study*

1. Assess pre-test knowledge score on prevention of dental caries among mothers of school going children in selected hospital, Haldwani, Uttrakhand.
2. Find out the effectiveness of Structured Teaching Program on prevention of dental caries among mothers of school going children in selected hospital, Haldwani, Uttrakhand.
3. Find out the association between post test knowledge score and selected demographic variables among mothers of school going children in selected hospital, Haldwani, Uttrakhand.

#### **Materials & Methods**

The research design adopted for the present study is pre experimental research design in that one group pretest posttest design. The setting of the study is Sushila Tiwari Hospital Haldwani, Uttrakhand. The population of present study include mothers of school going children. Simple random sampling is the type of probable sampling was found appropriate for the study. The sample of the present comprised of 40 mothers of school going children. In the present study the tool consist of two parts: Section A encompassed of demographic variable and Section B Comprise of Knowledge questionnaire regarding prevention of dental caries with 20 items. It is a multiple choice questionnaire in which score 1 was awarded to correct response and 0 for wrong response.

The investigator had collected the data after getting formal permission from the authority from the selected hospital Haldwani, Uttrakhand and approval was obtained to conduct the study. The participants were selected by simple random sampling technique using lottery method & informed about the purpose of the study also written consent was taken from the participants. On an average each participant took 30 minutes to complete the pre test questionnaires after that structured teaching

**Table 1:** Demographic Characteristics of Respondants

N=40

S. No.	Variable	Category	Frequency	Percentage%
1.	Age	19-22 years	13	33
		23-26 years	18	45
		27-30 years	09	22
2.	Education	Primary	3	08
		Higher secondary	24	60
		Graduate	12	30
		Post graduate	01	02
3.	Occupation	House wife	34	85
		Govt. job	00	00
		Private job	06	15
		Business	00	00
4.	Religion	Hindu	31	78
		Muslim	09	22
		Christian	00	00
		Others	00	00
5.	Type of family	Joint	23	58
		Nuclear	17	42
6.	Order of children	1	18	45
		2	22	55
7.	Income	5000	13	33
		8000	09	22
		10,000	18	45

program was given to the respondents on the same day. After seven days post test was conducted with same tools to the participants. The study was conducted in 2016. Subsequent with coding the data, it was analyzed in accordance with the objectives of the study.

Table 1 depicts the characteristics of demographic variables included in the present study. The age group shows majority of respondents 18(45%) were in the age group of (23-26) and 13(33%) were from age group (19-22) and 09 (22%). With regard to the education majority of mother 24(60%) were higher secondary educated, where as 12(30%) were graduate and 03(8%) were primary and post graduate

were 1(2%) respectively. Regarding Occupation majority of respondents 34(85%) were housewife, and remaining 06(15%) were in private job. Pertaining to the religion majority of respondents 31(78%) were Hindus, and remaining 09(22%) were Muslim. Related to type of family majority 23(58%) were from joint family and 17(42%) were from nuclear. In order of children majority 22(55%) were having 2 children and 18(45%) were having 1 children. Related to income majority of respondents 18(45%) of mothers family were having 10,000 income, 13(33%) of mothers family were having 5000 income, 09(22%) of mothers family were having 8000 income.

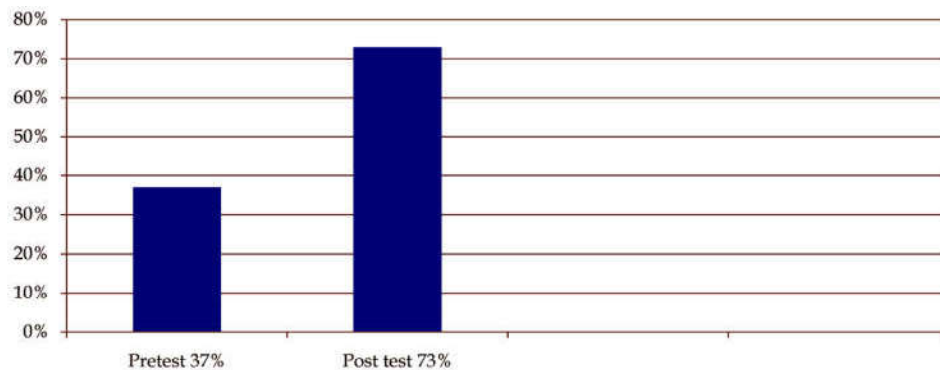
**Table 2:** Comparison of Pre and Post test score of mothers on prevention of dental caries N=40

Mothers Level of knowledge	Mean	Pre test Mean %	SD	Mean	Post test Mean %	SD	t- test
	0.37	37	1.64	0.73	73	1.45	17.2

Table 2 represents the Comparison of Pre and post test score of mothers of schoolgoing children on prevention of dental caries. In pretest Mean, Mean percentage & SD of mothers level of knowledge were 0.37, 37 & 1.64 respectively. In post test Mean, Mean

Percentage & SD of mothers levels of knowledge were 0.73, 73 & 1.45 respectively.

Table 3 displays association between the knowledge score of mothers with their selected demographic variables.



**Fig. 1:** Bar graph on pre & Post test mean score of mothers on prevention of dental caries.

**Table 3:** Association between selected demographic variables and knowledge score of mothers regarding prevention of dental caries

S. No	Variables	Chi square value
1.	Age	9.49**
2	Education	12.59**
3	Occupation	12.59**
4	Religion	12.59**
5	Type of family	5.99**
6	Order of children	5.99**
7	Income of family	9.49*

\*\* Non Significant \* Significant at p<0.05 level

## Discussion

### Demographic Characteristics of Respondent

The majority findings of the demographic variables

are described. It is revealed that there 18(45%) were in the age group of (23-26) years. The education level among them is (60%) in majority. The majority of mother (77.5%) were Hindus. There is a great majority

(57.5%) of mother belongs from joint family and majority of mothers (55%) were having 2 children's and the income of family is (45%).

*Assess the Knowledge Score of Mother of School Going Children on Prevention of Dental Caries*

The data of Table 2 revealed that the mean value of mothers for pre test is 0.37 with the mean% of 37%. & SD values were 1.64.

*Find out Effectiveness of Structured Teaching Program on Prevention of Dental Caries among Mothers of School Going Children in Selected Hospital, Haldwani .U.K.*

The data of Table 2 revealed that the mean value of mothers for post test is 0.73 with mean% 73% & SD value were 1.45 after the structured teaching program. Figure 1 shows comprison of pre & Post test score of mother's knowledge on prevention of dental caries.

*Explore the Association of Pre Test and Post Test Knowledge Score of Mothers Regarding Prevention of Dental Caries with Selected Demographic Variables*

Analysis revealed that there is significant association between Income of family and the remaining variables are found to be non significant at  $P < 0.05$  level.

*Implication*

Health education is a primary response of the nurse who is called to be care giver with knowledge expertise. The nursing personnel are challenged to provide standard and quality nursing care. The Nurse should take into consideration to provide education regarding prevention of dental caries mothers of children.

*Recommendations*

- The study can be replicated in large samples for

better generalization.

- A structured teaching programme on knowledge & practice regarding prevention of dental caries can be conducted.

**Conclusion**

Dental caries, also known as tooth decay or a cavity, it is an infection usually bacterial in origin, that cause demineralization of hard tissues and destruction of the organic matter of the tooth, usually by production of acid hydrolysis of the food debris accumulated on the tooth surface. It is preventable condition .Childrens are more prone to get dental caries. Prevention is beter than cure. Through health education dental caries can be prevented.

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