

## A Study to Assess the Effectiveness of Child to Child Programme on Knowledge Regarding Prevention of Dental Caries among School Children in Selected School of Nagpur City

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### Reprint Request

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### Abstract

A Pre-experimental design was adapted for the study, 50 younger children were selected by using stratified random method and 10 change agents were selected by using purposive sampling technique based on their academic performance. Change agents knowledge was assessed by pretest questionnaire and each change agent was assigned 1 topic. The investigator trained them and makes them to do rehearsal and same questionnaire given to determine their adequate level of knowledge on the next day. The change agents were assigned with 5:1 students. The samples were assembled as a small group in a common place and change agents were imparted knowledge regarding prevention of dental caries to the sample for 45 minutes by using PPT presentation. Evaluation of child to child programme approach was assessed by conduction of post test using self administered questionnaire on the 7<sup>th</sup> days to all the samples. The result shows that there is significant difference between pre test and post knowledge. The pre test mean was 8.6 and the post test mean was 11.5. Paired t test shows that it is invariably significant at  $p < 0.01$  which was statistically acceptable level of significance. Hence, child to child approach was effective in improving the knowledge of school children.

**Key words:** Prevention of Dental Caries; School Children.

### Background of the study

Dental caries is rapidly emerging oral health problem amongst the children of India. Its incidence in different states varies between 31 and 89%. In India almost 74% of people live in rural areas. It is observed that because of illiteracy, poverty, ignorance, misconception and superstition people of rural areas have developed undesirable health attitudes and practices. About 30- 50% of rural school children suffer from much morbidity like anemia, worm infestation, under nutrition and dental /oral problems. The vast population in the rural area could be approached through, health education to protect against health related problems. Approaching every individual in the rural area is herculean task with

poor sustainability. Mass media have their limitations in such population. Under these circumstances teaching to children offers the most cost effective strategy to approach every family. Innovative approaches to education for health are essential to gain the interest, support, involvement and commitment.

### Need for the study

Almost 88% of dental caries are attributed to poor dental cleaning practices, inadequate sanitation and hygiene. Simple act of oral washing at critical times can reduce the number of dental caries cases by up to 35%. Regular Oral hygiene practices helps to protect the children from oral problems.

Educating the children regarding causes, signs, symptoms, treatment and prevention of oral problems, has resulted in better knowledge, attitude and healthy practices amongst, the school children and their family members. The present study is an attempt to enhance the knowledge regarding oral hygiene among school children. Health education to school children in their formative age is the most effective method for protection and promotion of their health. Primary school children are more open minded and are likely to be receptive to changes in ideas and agreeable to modifications of their habits.

### Objective of the study

1. To train the elder children about dental caries via power point presentation.
2. To evaluate the effectiveness of planned teaching among elder children.
3. To select 10 elder children to perform child to child education programme on dental caries.
4. To assess knowledge of younger children regarding dental caries.
5. To evaluate the effectiveness of child to child programme regarding dental caries among the younger children.

### Research design

Pre-experimental- one group pre test post test design

#### Sampling technique

Stratified sampling technique

#### Sample size

50 children

### Variables

#### Independent variable

Child-to-Child Programme on knowledge regarding prevention of dental caries among school children

#### Dependent Variable

Knowledge regarding prevention of dental caries among the school children.

### Description of the tool

The tool constructed in the study consist of two parts

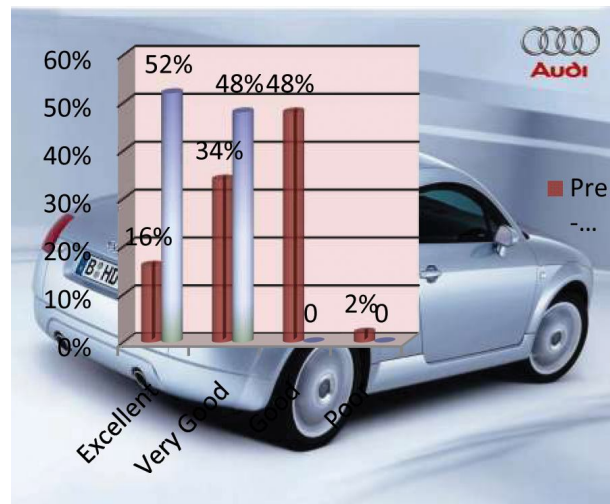
**Section 1:** Responses related to demographic variables

**Section 2:** Responses related to Knowledge items.

### Result / Major Findings of the study

The maximum subject 37(74%) belongs to the age group of 10-12yrs; 13(26%) belongs to the age group of 12-14yrs. It is evident that most of them 34(68%) belongs to Hindu religion; 4(8%) belongs to Christianity; 2(4%) were Muslims; 10(20%) belongs to others religion. With regards to residence 39(78%) belongs to Urban area; 11(22%) belongs to Rural area. In context to class, 19 (38%) belongs to 5<sup>th</sup> standard; 31(62%) belongs to 6<sup>th</sup> standard. With regards to type of family 33(66%) belongs to joint family; 17(34%) belongs to nuclear family. In context to frequency of dental check-up done by children about 18(36%) check once in a year, 17(34%) twice in a year , 9(18%) thrice in a year, 6(12%) never have check ups .

**Fig.1:** Comparison between Pre-Test and Post Test level of knowledge score



The findings shows that, in Pre-test, most of them 24(48%) had good knowledge score, 17(34%) had very good knowledge, 8(16%) had excellent knowledge score and 1(2%) had Poor Knowledge Score.

In Post test most of the children 26(52%) had Excellent level of knowledge score, 24(48%) had Very Good knowledge Score.

### **Nursing implication**

#### *Nursing Education*

The study implies on prevention of dental caries. The study also implies that the child to do proper brushing. The study held to raise awareness among school children.

#### *Nursing Practices*

Nurse plays an important role to improve the knowledge of children regarding the prevention of dental caries, complications and home remedies of dental caries to improve the oral hygiene of child. The education programme helps to increase the knowledge of the child regarding the prevention of dental caries and to improve oral hygiene.

#### *Nursing Research*

The research has always been of vital role in improving the knowledge of child regarding prevention of dental caries. This study threw light upon the necessary and responsibility of the nurse to improve knowledge of child about prevention of dental caries.

### **Recommendation**

On the basis of finding of the study the following recommendation have been made for study;

1. Similar study can be done on the largest sample for generalization of findings.
2. A similar study can be included in the syllabus of school children.
3. The effectiveness of information booklet verses other method of teaching on prevention of dental caries can be evaluated.

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