

# “A Study To Assess The Oral Health Status And Identify Oral Health Problems Of Primary School Children With A View To Develop Planned Teaching Programme Regarding Oral Health And Evaluate Its Effectiveness In A Selected Government School Of South Delhi”

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**Abstract:** A study was conducted on 70 class 5 students of a Government school of New Delhi, India. A “structured interview schedule” was used to assess the oral health knowledge regarding oral health before and after the planned teaching program and identifying the oral health practices and an “observation check” list to assess the oral health status. The study concluded that 60% of the primary school children were having foul smell & approx 50% of them had coated tongue. An illustrated booklet distributed among the students significantly increased the knowledge of the students about outcome of neglected oral hygiene & the appropriate oral health practices. It is recommended that the public health nurse posted under school health services scheme should regularly conduct oral health examination of the primary school children and reinforce their knowledge & practices related to oral hygiene.

**Keywords:** Health Problems, Regarding Oral, Teaching Programme.

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## 1. INTRODUCTION

Oro-dental health is an integral part of total health. Oral health problems like caries, periodontal disease, malocclusion and oral cancer are highly prevalent in India. It is well known that treatment of dental disease is quite costly and the present economic status and health infrastructure is unable to provide adequate curative measures for all. Dental health education at the gross root level can help curtail oro dental health problems in the country. School teachers and various health care workers in rural and urban areas can be the health educators to convey the messages of better dental health practices and preventive measures for the population.

Studies among children conducted by Tewari (1979) in Chandigarh; Samant (1981) in East Bengal; Prasad (1983) in Kerala; Meenakshi (1997) in Rajasthan found that a high percentage of children suffered from dental caries. To the best of the investigator’s knowledge, school health services especially oral health care in the Govt. schools in Delhi is adequate. Further the investigators personal experience during working hours also revealed the lack of oral hygiene in adults. But the oral health problems and oral health practice develops during childhood (6-12 yrs).

**The objectives of the study were:**

1. To assess oral health status and determine oral health problems of primary school children.
2. To identify the oral health practices among primary school children.

3. To prepare a Planned teaching program on “oral Health”.
4. To evaluate the knowledge of primary school children about oral health before and after the administer of planned teaching program.

**Hypothesis:**

H<sub>1</sub>: The mean post-test knowledge score of primary school children will be significantly higher than the mean pre-test knowledge scores at .05 level of significance.

Although the responsibility lies with the children themselves (self care) but family, schools and health institutes’ timely interventions help them to maintain a good oral health status and prevent. The conceptual framework developed and used for this study is represented on the basis of Orem’s self care theory.

**2. METHODOLOGY**

The research approach adopted was descriptive and evaluative with one group pre-test, post-test design.

Independent Variable selected was planned teaching program on oral health using booklet was used for primary school children and the dependent variable was knowledge of the primary school children regarding oral health.

Out of the total study population of 90 students of class 5 of primary school 20 were chosen for the pilot study. Hence they were excluded from the total sample and 70 students were the sample size.

Total enumeration sampling technique was adopted due less number of children in the class V.

A “structured interview schedule” was used to assess the oral health knowledge regarding oral health before and after the planned teaching program and identifying the oral health practices and an “observation check” list to assess the oral health status. Both the tools were developed based on the review of literature, expert opinion and researcher’s own experience.

Nine experts dentists, public health nurses and masters in community health and pediatric nursing did content validity of the tools. Modifications were done and tools were found to be valid.

Data obtained from 70 students were analyzed by descriptive and inferential statistics i.e. frequency, percentage and t-test. The analysis of data is presented in 5 sections Description of sample characteristics.

Findings related to Oral health status.

Findings related to Oral heath problems.

Findings related to Oral heath practices and habits.

Description of analysis of pre and post test of knowledge regarding oral health practices and problems.

**Significant findings were:**

Frequency and percentage distribution of children according to their Oral health status:

Oral health status score	Number of children (f)	Percentage (%)
1-3 (poor)	14	20
4-5 (unhealthy)	34	48.6
6-7 (healthy)	22	31.4
TOTAL	70	100

The above table confirms need to emphasis more on promotive health behavior.

Frequency and percentage distribution of children according to their Oral health problems:

Oral Health Assessment		Frequency	Percentage (%)
Foul smell	Present	42	60
Lips	Crack & dry	17	24.3
Tongue	Coated	33	47.2
Gums	Red & swollen	0	0
	Bleed on Touch	17	24.3
	Bleed without touch	2	2.9
Teeth	Cavity	32	45.7

Frequency and percentage distribution of children according to their Oral health practices and habits:

Oral health practices and habits	Frequency	Percentage (%)
Clean teeth twice a day	26	37.1
Use tooth brush & tooth paste to clean teeth	57	81
Use tooth brush & tooth paste to clean tongue	01	1.4
Use plastic tongue cleaner	19	27.1
Use metallic tongue cleaner	25	34.2
Keep brush separately	20	28.5
Rinse mouth always after eating/ drinking	33	47.1
Should visit Dentist regularly	19	27.1

Mean, Median, Mode and SD of Pre-test and post test of knowledge score regarding “oral health” among primary school children:

Knowledge regarding oral health	Mean	Median	Mode	S.D
Pre-test	9.97	10	10.06	2.35
Post-test	15.6	16	16.6	2.17

Maximum Score = 20

The mean computed from post- test knowledge score (15.6) was higher than the mean pretest knowledge (9.97). Moreover, the post test variability is reduced as is seen from the S.D i.e. 2.17, thus suggesting the effectiveness of planned teaching program.

Mean, Mean difference, Standard Deviation difference and ‘t’ value of pre-test and post-test of knowledge score regarding oral health among primary school children.

	Mean	Mean <sub>D</sub>	S.D <sub>D</sub>	SE <sub>M.D</sub>	‘t’ value
Pre-test	9.97	5.76	2.3	.28	20.57
Post-test	15.6				

Tabulate ‘d’ value at .05 and .01 level for df = 69 are 2.00 & 2.65. The ‘t’ value of 20.57 obtained is much more than the tabulated value, cant hence found to be significant at .05 and .01 level for df =69. Thus it is established that the mean gain in knowledge regarding oral health among primary school children exposed to Planned teaching program was significantly high.

### 3. CONCLUSION

Planned teaching program in the form of distribution of booklet and discussion regarding oral health enhanced the knowledge of primary school children.

#### Implications for Nursing Practice:

The knowledge deficit and poor oral health status suggests the need for organizing planned health education program on oral health, apart from their school curriculum, as well in community settings.

#### For Nursing Education:

Nursing curriculum should provide opportunities to the students to plan and conduct oral health education in a variety of setting like school, family, community, industry, hospital, PHC and other health care health agencies. Oral health assessment of children should be emphasized during the health assessment of the child.

#### For Nursing Administration:

There should be for nurses to devote time for giving health education to the clients to promote oral health status. Necessary administrative support should be provided to carry out such activities and conducting cost-effectiveness of the program should be considered. Dental clinics can have sanctioned posts for dental nurses who will work in dental clinics.

#### For Nursing Research:

The nature and severity of the problem is mainly related to the types of food consumption, habit of eating pattern, practice of oral hygiene, therefore, needs to be assessed. Nurses being the large group of health care delivery system should take initiative to conduct such studies in oral health problems.

**For General Education:**

Though primary school's curriculum is having little basic portion of oral health, to be more effective , more content and practical aspect should be included.

**4. RECOMMENDATIONS**

Similar studies can be replicated on large sample, in different settings and different target populations such as schoolteachers, community at large, housewives etc.

A co relational study can be conducted to find the relationship between oral health problems of Primary school children and oral hygiene practices.

A comparative study can be carried out to ascertain the knowledge of oral health among students of government, private and public schools.

The public health nurse posted under school health services scheme should regularly conduct oral health examination of the primary school children.

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