

## **“A study to evaluate the effectiveness of conventional method regarding oral hygiene among school going students.”**

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### **Objectives**

1. To assess the knowledge of the school going students regarding oral hygiene before the administration of conventional method.
2. To determine the effectiveness of the conventional method in improving the knowledge towards oral hygiene among school going students.
3. To find association between pre-test levels of knowledge regarding oral hygiene with selected socio-demographic variables.

### **ABSTRACT**

**Back ground of the study:** There was a dearth of published literature that demonstrates the impact and effectiveness of school based oral health education (OHE) program in karad Taluka. A vital component of overall health and life quality is oral health. To reduce the cost of the disease prevention and control of the plague, gum disease and maintained oral hygiene. The knowledge regarding oral health was used in school going students.

**Materials and method:** A study was conducted on 30 samples. The samples were selected by using non probability purposive sampling technique. Data collection about oral hygiene was done by using self-structured questionnaire before and after the intervention with teaching on oral hygiene by conventional method.

**Result:** The knowledge score for pre- test mean was 9 and post- test mean 12. The knowledge score for pre -test S.D was 3 and post- test S.D was 2. Mean difference between both pre and post- test was -2.600. The obtained P value is <0.0001 and ‘t’ value is 4.924.

**Conclusion:** There was significant difference in pre-test and post-test knowledge regarding oral hygiene. A conventional method of teaching improves the knowledge towards oral hygiene among school going students.

**Key words:** Oral hygiene, Conventional method.

## **INTRODUCTION**

Oral health is important for general health and wellbeing and oral diseases have a considerable impact on individuals, families and the community. Children who suffer from poor oral health are 12 times more likely to have restricted-activity days than those who do not. [1, 2]

Schools can be considered as a healthy atmosphere for promoting children's health, self-esteem and behavioral skills. Schools can also be utilized for teaching preventive dental health practices, as they have shown positive outcomes for improving oral health and knowledge in both developed and developing countries. [3, 4]

This study aims to use conventional method to educate school going students to maintain oral hygiene.

### **Materials and method:**

**Research approach:** The research approach selected for this study was "Quantitative research approach".

### **Research design:**

The research design selected for this study was one group pretest and posttest design.

### **Setting of the study:**

The study was conducted in selected "Anandrao Chavan School.

### **Sample and Sampling Technique:**

#### **Sample:**

The sample for present study was students from selected school.

#### **Sample size:**

In this study the sample size was 30 school going students.

#### **Sampling technique:**

Sampling technique for present study is Non probability convenient sampling technique.

**Population:** In this study the population was school going students.

### **Criteria for sample selection**

#### **1. Inclusive Criteria :**

- Students who are willing to participate in the study.
- Students who are present at the time of the data collection.

- Student between age group of 8-12 yrs.
2. **Exclusive Criteria:**
- Children who are not willing to participate in the study.

**Tools for data collection:** Development of the tool. Based on the objective of the study, a self-structured knowledge questionnaire was prepared to assess the knowledge of the school going students.

**Procedure for Data Collection:**

- Formal permission was obtained from Ethical committee.
- The investigator got permission from school headmaster to conduct the study.
- The investigators introduced themselves to the students and parents. Purpose of the study was explained to each students and parents and informed consent was obtained
- The demographic data was collected from the respondents. The pre-test was taken to assess the knowledge of school going students through the self-structured questionnaire. Then video method was administered on the same day. The post test was taken after 1 week using the same tool. Collected data was then tabulated and analyzed.

**Plan for Data Analysis**

Collected data was analyzed by using descriptive and inferential statistics.

1. Organize data on master sheet.
2. Compute mean and standard deviation of data
3. Classify knowledge score
4. Computed 't' and 'p' value of data.
5. Used inferential statistics to assess significance of data.

Results

Section- I

Table 1: Frequency and percentage distribution of school going student's according to the socio demographic variables. [N=30]

Characteristics		Frequency	Percentage
1)Age	A) 10 yrs.	15	50%
	B) 11 yrs.	13	43.33%
	c) 12 yrs.	2	6.6%
2) sex	A) Female	5	16.6%
	B) Male	25	82.33%
3) Religion	A) Hindu	22	77.33%
	B) Muslim	4	13.33%
	C) Christian	1	3.33%
	D) Other	3	10%
4)Education	A) Father		
	a) Illiterate	0	0%
	b) Primary	9	30%
	C) Secondary	8	26.66%
	d) Graduate	7	23.33%
	e) Post graduate	6	20%
	B)Mother		
	a) Illiterate	0	0%
	b) Primary	8	26.66%
	C) Secondary	8	26.66%
d) Graduate	7	23.33%	
e) Post graduate	7	23.33%	
5) Type of family	A) Joint family	12	40%
	B) Nuclear family	18	60%
	C) Extended family	0	0%
6) Type of diet	A) Veg	0	0
	B) Non veg	8	26.66%
	C) Mixed diet	22	73.33%

The above table shows that, (15) 50% samples age was 10 years, majority (25) 82.33% were male, majority (22) 77.33% were Hindus, (9) 30% father had taken primary education, (8) 26.66% mother had taken primary and secondary education, (18) 60% were from nuclear family and (22) 73.33% were taking mixed diet.

Table No. 2 Comparison of frequency and percentage distribution of pre-test and post-test level of knowledge of school going student's regarding oral hygiene. [N=30]

Sr.No	Knowledge score	Pre test		Post test	
		Frequency	Percentage	Frequency	Percentage
1.	Poor (0-6)	4	13.33%	0	0%
2.	Average (7-12)	24	80%	18	60%
3.	Good (13-16)	2	6.66%	12	40%

The above table depicts that 13.33% samples have poor knowledge, 80 % have average knowledge, and 6.66% have good knowledge in pretest. 60 % have average knowledge, and 40 % have good knowledge in posttest.

Table No.3: Mean and standard deviation of knowledge level of knowledge of school going student's regarding oral hygiene. [N=30]

Knowledge score	Pre-test	Post test	Mean D	Paired test
Mean	9	12	-2.600	P= <0.0001 T= 4.924
SD	3	2		

The above table reveals that knowledge score for pre- test mean was 9 and post- test mean 12. The knowledge score for pre -test S.D was 3 and post- test S.D was 2. Mean difference between both pre and post- test was -2.600. The obtained P value is <0.0001 and 't' value is 4.924.

Table No.4 Association between pre-test knowledge score with selected socio demographic variables [N=30]

SR. NO	Socio demographic variable	Poor	Average	Good	Chi square	'P' Value	Result
		0-6	7-12	13-16			
1.	Age				15.211	0.0043	S*
	A) 10 yrs.	2	8	0			
	B) 11 yrs.	2	16	1			
	C) 12 yrs.	0	0	1			
2.	Sex				2.283	0.3194	NS
	A) Male	2	19	2			
	B) Female	2	5	0			
3.	Religion				19.352	<0.0001	S*
	A) Hindu	4	23	0			
	B) Muslim	0	1	2			
	C) Christian	0	0	0			
	D) Other	0	0	0			
4.	Education				19.352	<0.0001	S*
	A)Father:						
	A) Illiterate	0	0	0			
	B) Primary	2	11	1			
	C) Secondary	2	13	1			
	D) Graduate	0	0	0			
	E) Post-graduate	0	0	0			
	B)Mother						
	a) Illiterate	0	0	0			
	b) Primary	2	11	1			
C) Secondary	2	13	1				

	d) Graduate	0	0	0			
	e) Post graduate	0	0	0			
5.	Type of family						
	A) Joint	2	4	2			
	B) Nuclear	2	19	0	7.917	0.0947	NS
	C) Extended	0	1	0			
6.	Type of diet						
	A) Non veg	2	20	1			
	B) Veg	2	4	1	2.981	0.2252	NS
	C) Both	0	0	0			

The above table shows that socio demographic parameters like Age, religion, education values was significant and sex, type of family, type of diet was non-significant.

### Discussion:

Present study depicts that 13.33% samples have poor knowledge, 80 % have average knowledge, and 6.66% have good knowledge in pretest. 60 % have average knowledge, and 40 % have good knowledge in posttest. A study done by [5][Abdulhadi Ibrahim Ali Alhayek](#), [Mousa Jafar Alsulaiman](#) etal in 2018 found that the conventional method have been noticed to be effective in delivering the relevant information the children must know about the oral health. Present study shows that knowledge score for pre- test mean was 9 and post-test mean 12. The knowledge score for pre -test S.D was 3 and post- test S.D was 2. Mean difference between both pre and post- test was -2.600. The obtained P value is <0.0001 and ‘t’ value is 4.924. Present study reveals that socio demographic parameters like Age, religion, education values was significant and sex, type of family, type of diet was non-significant.

### Conclusion:

Study finding shows that there is significant difference between the pre-test and post-test level of knowledge regarding oral hygiene among school going students. Therefore, study concluded that conventional method was effective to increase the knowledge regarding oral hygiene among school going students.

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**Conflicts of interest:** No

### Ethical approval:

The institutional ethical committee of Krishna Institute of medical science “deemed to be university”, karad issued an ethical clearance certificate.

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