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#### RESEARCH ARTICLE

#### **ORAL HYGIENE**

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# Manuscript Info

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# Abstract

Introduction: Oral hygiene is a Oral health is essential for total Overall health and satisfactory quality of life. According to the World Health Organization . Oral health has been defined as a state of being free of mouth and facial pain, oral infections and sores, and oral and other diseases that limit an individual's capacity in biting, chewing, smiling, speaking, and psychosocial well-being. Oral conditions like dental caries and periodontal or gum disease continue to plague humanity. The adverse effects of inadequate care for teeth, gums, bite, and jaws can move beyond the mouth to affect overall physical and psychological health.

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**Objectives:** To assess the knowledge of Middle school children regarding oral hygiene in the selected school of Shankarpur Dehradun..To determine the association between the level of knowledge among middle school children regarding oral hygiene and their selected socio -demographic variables.

**Method:** The research approach present in the study is quantitative research approach aims to assess the knowledge of oral hygiene among middle school age children in selected school of shankarpur Dehradun. In this research study descriptive research design is used to assess the knowledge regarding oral hygiene among middle school aged children, in the S.G.R.R school Sehaspur, Dehradun .This research design is descriptive type of research design. The setting selected for present study is children of 6 to 12 years old in Shree Guru Ram Rai public school at Shankarpur Dehradun.Self structured questionnaire method are used for the data collection.

**Result:** In middle school age students having 65% average knowledge and 34% good knowledge while 1% having poor knowledge. Majority of the students i.e. 58.6% brushed once in a day. This was parallel to studies where students brushed twice a day.

**Conclusion :** In our study it is evident that 11-12<sup>th</sup> years age group i.e 70 % student having more knowledge rather than other age group , the economic status having no corelation with knowledge regarding oral hygiene among students , in comparison middle class students having 80% knowledge . The following conclusion can be drawn from the study findings, which are supported by evidence from the other literature. The school age children are having adequate mean Knowledge score was 16.38 and mean Practice score was 15 regarding oral hygiene. The self administered Structured Interview Schedule

Questionnaire has shown significant association between socio demographical variables and their knowledge.

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Introduction:-

"Every tooth in a man's head is more valuable than a diamond."

World Oral Health Day is observed every year on 20th March. It focuses on highlighting the benefits of good oral health, spreads awareness about oral diseases and promotes maintenance of oral hygiene. The theme of the World Oral Health Day is 'Be Proud of Your Mouth' for 2021-2023.

According to WHO Health is a state of complete physical, mental, spiritual and social well being not merely an absence of disease or infirmity. Children are the precious gift who is considered to be a resource for future. Healthy children of today will be a healthy citizen for tomorrow. Poor dental hygiene among the school children has a lot of effects on the children. One of these effects is physical pain of gums which leads to sleeping disturbance during night time.

Eating problems and behavioral problem in all middle age children also the reason behind this is craving for sweetening agents like toffees, candy, chocolates, cold drinks. This is the fact that the little attention paid to the issue of oral hygiene of school aged children especially in the developing countries could be fatally dangerous in advance cases such as in patients with oral cancer, which is the eighth most common worldwide cancer. Hence the prevention of dental problems is among the most importance for school going children. For them a good quality of life is possible if students maintain their oral health and become free of oral disease.

Oral hygiene is an essential component for prevention of dental diseases. Maintaining good oral hygiene is considered a lifelong habit. More than this these oral habits are said to begin in an early stage of life when child learn new habits and oral hygiene during early days of life also in order to follow healthy oral habits, it is important to have good knowledge and attitude towards oral health. A good knowledge about oral health is essential for oral health related behavior.

Oral health is now recognized as equally important to general health and this is the reason oral diseases can be considered a public health problem due to their high prevalence and significant social impact. It is our primary concern being a oral health educators to impart positive oral health knowledge and behavior in the society as a result of this, knowledge is usually derived from information and then the information is believed to transfer into action.

Oral health is considered as the maintenance of health of the teeth, and gums as well as the tissue of the face and head that surrounds the mouth and oral cavity. Oral health—information is still very much restricted among Indian people, there is no awareness regarding this. However, it is well known fact that majority of health problems take roots of oral problems because this is fact and meant that everything we eat goes through oral cavity. Although many studies have been carried out time to time in order to assess the knowledge and condition of people about oral health but there is still a dearth of education regarding the same especially for rural people who are having lack of education, awareness.

#### Needs of the study

Current information shows that in developing countries still in some areas of our country parents as well children having lack of awareness regarding oral hygiene, brushing, its effects.

Oral hygiene is an integral part of the learning process since beginning of childhood and continuing into the adult life. Maintaining oral hygiene is essential part of ones life. It enhance moral support, enhance self-esteem, maintain personality.

It is basic manner which child learn during early stages of life by their parents . It comes under learning process, it is effective for good health .If anyone having lack of oral hygiene it may effect their whole body system as mouth is the root of any food that enter from it and may cause different systemic disorders for eg- cardiovascular , rheumatic fever, and other GI system disorders.

That is why we need to do study and check out how many areas children in school having lack of oral hygiene as well as having dental caries and tooth decay problems.

Nurses are the vital source in educating people and making aware them regarding any health issue .He or she carefully assess the knowledge and attitude of adolescents .there may be positive and negative result we can get , but there main aim of the study is to assess the knowledge of children regarding oral hygiene and detect the dental related problems is with the same time provide knowledge dental related issues .

#### **Statement Of Problems**

A descriptive study to assess the knowledge of oral hygiene among middle school age children in selected school of shankarpur Dehradun.

### **Objectives Of The Study:-**

1.To assess the knowledge of Middle school children regarding oral hygiene in the selected school of Shankarpur Dehradun.

2.To determine the association between the level of knowledge among middle school children regarding oral hygiene and their selected socio -demographic variables.

#### Assumption -

- 1. Middle school aged children are having appropriate knowledge about oral hygiene.
- 2. Middle school children are more prone to eat surgery and sweet substance hence causes dental caries.
- 3. Children who practice brushing twice a day have more healthy teeth.
- 4. The children with malocclusion are prone to have dental caries and complications.

#### Limitation -

- 1. The study is limited to those who are willing to participate among middle school aged children.
- 2. The study is conducted only among middle school aged children of particular school at shankarpur.
- 3. Children will not be able to respond properly due to their hyperactivity.

#### Hypothesis-

**H1** – There will be significant association between the demographic variable and knowledge among middle school age children.

H2 – There will be no significant association among middle school age children that is null hypothesis.

#### Methodology:-

#### Research Approach:-

In the present study, quantitative research approach was adopted to accomplish the subjective of the study.

#### Research Design :-

This research design is descriptive type of research design.

#### Variable Under Study

Research variable can be defined as the qualities, attributes ,properties or characteristics that are observed or measured in a natural setting without manipulating and establishing and effect relationship.

The research variable in this study is assessing the knowledge regarding oral hygiene among middle school, aged children.

#### **Independent Variable**

Independent variable is presumed to cause affect, influence or stimulate the outcome. Independent variable are manipulated by the research. In this study independent variable of the study are age, education, knowledge source of information.

#### **Dependent Variabvle**

It refers to outcome or response variable. Dependent variable are the response outcome etc. That measure by the researcher. In this study dependent variable is knowledge regarding oral hygiene.

#### **Setting Of The Study**

The setting selected for present study is in Shree Guru Ram Rai public school at Shankarpur Dehradun.

#### **Population**

In the present study population refers to middle school aged children in selected school of Shankarpur, Dehradun.

#### Target population-

Middle school aged children of Dehradun, Uttrakhand.

#### Accessible Population -

Middle School aged children of S.G.R.R Shankarpur.

#### Sample and Sample Size :-

In present study, sample comprised of middle school aged children studying in S.G.R.R school Sahaspur, Dehradun.

Sample size in the present study consist 100 middle aged children of selected school.

#### Sampling and sampling type

Sampling is necessary because it is more economical and efficient to work with a small group of element .In present study, the middle school aged children were selected by probability sampling .

#### **Criteria For Sampling Selection**

Sample criteria is the list characteristics of the elements that are essential for eligibility to form part of the sample

#### Inclusive criteria:-

- 1. Middle school aged children who are in a age group of 6 -12 years.
- 2. Middle school aged children who are available at the times of study period in school.
- 3. Middle school aged children studying in UKG to 7<sup>th</sup> standard.

#### Exclusive criteria:-

- 1. Middle school aged children who are in a sick leave.
- 2. Middle school aged children who are not responding.

#### **Description Of The Tool**

The Tool Was Organized Into Two Sections.

SECTION I: Demographic variable of the middle school aged children.

SECTION II: Questionnaire regarding knowledge of middle school aged children.

#### SECTION I: Demographic variable of the middle school aged children.

It consist of selected demographic variable like age, residential area, knowledge and a source of information.

#### SECTION II: Ouestionnaire regarding knowledge of middle school aged children.

It consist of 30 objective types of multiple choice questions, all questions have only correct response each correct response was awarded single score according to the key and zero score was awarded for their wrong response. The total maximum score for all the items was 25.

#### **Development of Tool**

The following Steps were involved in the development of the tool

- 1. Review of Research literature and opinion of expert.
- 2. Developing Structured questionnaire.
- 3. Establishing Scoring of the tool.

4. Assessing items for content validity.

# Development of structured knowledge questionnaire Definition-

A set of printed or written question with a choice of answer devised for the purpose of a survey or statistical study.

**Section B-** Self structured questionnaire on pattern of brushing , frequency of brushing teeth, pattern of oral hygiene , knowledge about oral hygiene.

Description Of the structured Knowledge Questionnaire

S.NO	TOOL	PURPOSE	DATA COLLECTION
1.	Structured knowledge questionnaire	To assess the knowledge regarding oral hygiene among middle school aged children.	Paper and pencil.
	( Demographic characteristics)		

#### **Description Of Structured Knowledge Questionnaire**

It consist of two parts:

SECTION 1: Demographic variables.

Frequency and percentage to describe the sample characterized

SECTION 2: Finding related to knowledge of mean, median, standard deviation of pre- test knowledge score.

#### Categorization of Structured knowledge questionnaire

Score (0-9) --- Below Average Knowledge

Score (10-17) --- Average Knowledge

Score (18-25) --- Good Knowledge

#### **Reliability Of The Tool**

Reliability is the degree of consistency and accuracy with which an instrument measure the attributes or variable for which it is design to measure.

The tool was administered on 10 samples and reliability was established by internal method of reliability ( split half method ).

Reliability was 0.7.

#### List For Data Analysis

S.No	Demographic variable		Frequency(f)	Percentage(%)
1	Age	6-7 year	0	0%
		8-9 year	30	30%
		10-11 year	0	0%
		11-12 year	70	70%
2	Standard	1st-2nd class	0	0%
		3rd -4th class	0	0%
		5th-6th class	40	40%
		7th -8th class	60	60%
3	Economic status	middle class	14	14%
		upper class	0	0%
		BPL	86	86%

		upper middle class	0	0%
4	Source of information regarding oral hygiene	mass media	0	0%
		parents	80	80%
		teacher	20	20%
		peer group	0	0%
5	Occupation of parents	farmer	34	34%
		shopkeeper	30	30%
		government employ	0	0%
		private employ	36	36%

Section-2: Interpretation of level of knowledge. Total score = 25

N=100

S.No.	LEVEL OF	SCORE	FREQUENCY	PERCENTAGE
	UTILIZATION			
1	Good Knowledge	18-25	34	34%
2	Average knowledge	10-17	65	65%
3	Poor Knowledge	0-9	01	1%

The above table reveals that 34% of samples were having good knowledge, 65% of samples were having average knowledge and only 1% of samples having poor knowledge regarding dental caries.

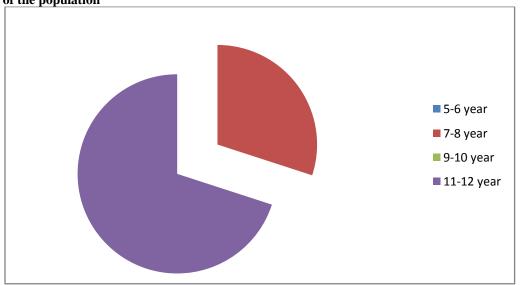
**Table** (3):- Mean, Median, Mode And Standard Deviation Of Knowledge Assessed Among Middle School Age Children. N = (100)

Children. $N = 0$	(100)					
LEVEL	OF	MEAN	MEDIAN	MODE	CALCULATED	LEVEL OF
KNOWLEDGE					VALUE ( chi)	SIGNIFICANCE
Middle school children Age (6-12 years )	age	16.38	16.5	15	0.7	The level of knowledge is significant.
Age (0-12 years)						significant.

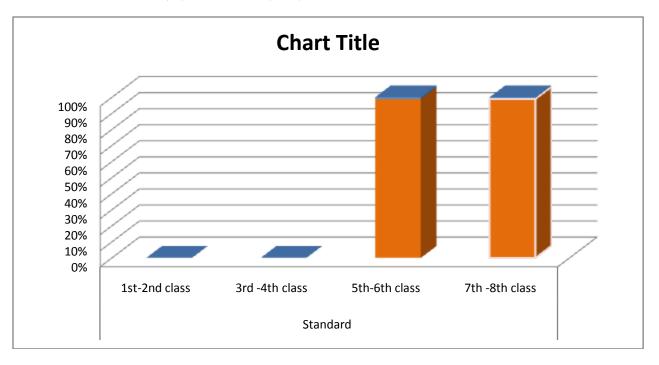
Among 25 questions the mean value among 100 sample is 16.38, median value among 100 sample is 16.5, mode is 15, the calculated value of chi is 0.7 which is greater than 0.05.

According to the age the table reveals that 5-6 years 0 (0%), 7-8 30 (30%), 9-10 0 (0%). 11-12 70 (70%).

df=4 Age of the population

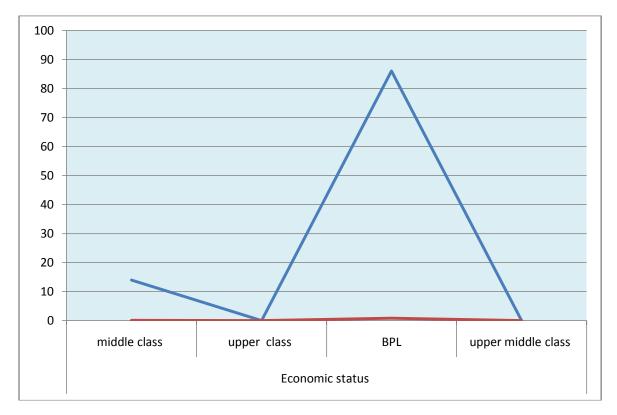


According to score among the middle school age children the mean score was  $1-2^{nd}-0(0\%)$ .  $3-4^{th}$  class 0.0%. ,  $5-6^{th}-40$  (40) %.  $7-8^{th}-60$ - (60% ) df=1.1

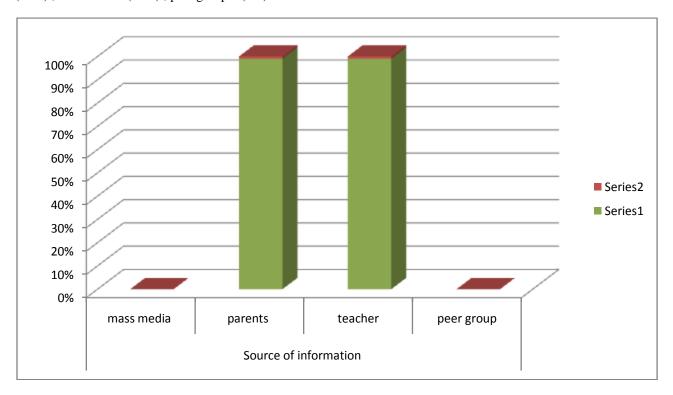


#### **Class Standard**

According to score among middle school age children the mean score for economic status of students were middle class -14 ( 14%), upper class -0 (0%), BPL 86 (86%), upper middle 0 (0%),

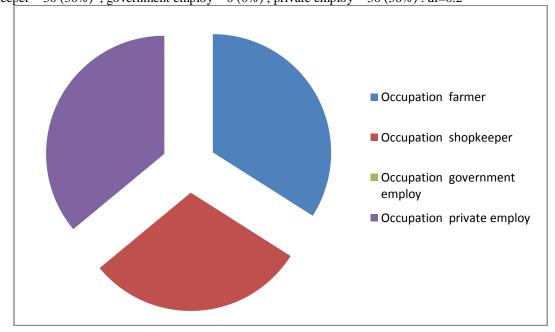


According to the score among middle school age children the mean score was mass media -0 (0%), parents 80 (80%), teacher - 20 (20%), peer group 0 (0%) df=0.905

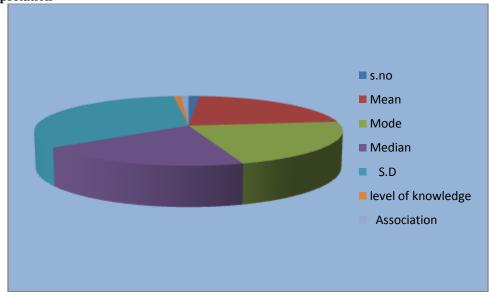


#### **Source of information**

According to score among middle school age children the mean score of occupation was farmer -34 (34%) shopkeeper -30 (30%), government employ -0 (0%), private employ -36 (36%). df=0.2



Occupation of parents Score Interpretation



P < 0.05 = 0.7

According to the score among the middle school age children the data analysis score is mean = 16.38, Mode = 16.5, Standard deviation = 24.99, level of knowledge = 65% whereas association between demographic variables and knowledge among middle school age children.

Section -V: Finding related to relationship between and demographic variable and knowledge assessment .

Table no.4:- Association of knowledge and socio demographic variable.

S. No	Demographic	K	nowledge level		Chi square	Significance	
	variable	Inadequate	Moderate	Moderate Adequate		_	
	Age in years						
1.	9-10	4	27	1		N	
	11-12	8	55	5	0.95	s	
					Df=2		
	Standard						
2.	5 <sup>th</sup> -6 <sup>th</sup> class	3	15	12		N	
	7 <sup>th</sup> – 8 <sup>th</sup> class	9	50	11	0.905 Df=2	s	
3	<b>Economic Status</b>		<u> </u>				
	Middle class	8	28	3		N	

	Upper Class	1			28 4		1.537 Df=2				
	BPL	1		12		4				S	
	Upper middle class	3		5		3					
4.	Source of Informa	ation									
	Mass media	2	2		5				N		
	Parents	10	17		25			5.27 DF=3			
	Teachers	3	4	10					S		
	Peer group	2	10		8						
5.	Occupation						<u> </u>				
	Farmer	1	1		25 5		5 3 D		N		
	Shopkeeper	4	4 28		8	8			S		
	Government	8		20	1						
	Employ										

#### Discussion:-

Discussion of the study results means, what does the result or data from the research and to interpret result in light of what was already known about the subject and explain new understanding of the problem after taking results answer the questions under study.

This chapter deals with the discussion of the study results with appropriate review of literature , and study findings which are based objectives of the study .

The present study has been undertaken to assess the knowledge among middle school age children regarding oral hygiene in selected school of shankarpur , Sahaspur Dehradun.

The present study was descriptive in nature that was conducted among 100 samples of teenagers fulfilling the inclusion criteria from selected school of shankarpur Dehradun .

The findings of the study according to the objectives were -

Objective -1 To assess the knowledge regarding oral hygiene among middle school age children.

In middle school age students having 65% average knowledge and 34% good knowledge while 1% having poor knowledge.

Majority of the students i.e 58.6% brushed once in a day. This was parallel to studies where students brushed twice a day.

**Objective -2** To assess the association between demographic variables and knowledge of the structured questions. The association between demographic variable and demographic variables is significant association and H1 hypothesis that there is significant association between demographic variable and knowledge of students.

The finding of the study are discussed under the following sections-

**SECTION-** A Percentage and frequency distribution of demographic characteristics of sample.

**SECTION-B** Utilization score of mobile phone among study samples.

SECTION-C Knowledge score of study samples regarding oral hygiene among middle school age children.

**SECTION- D** Correlation between demographic variable and knowledge assessed among middle school age children.

#### **Objective:-**

- To assess the knowledge of Middle school children regarding oral hygiene in the selected school of Shankarpur Dehradun
- 2. To determine the association between the level of knowledge among middle school children regarding oral hygiene and their selected socio -demographic variables.

#### **Development Of Tool:-**

Following steps were carried out in preparing the tools for the present study.

- 1. Review of literature
- 2. Preparation of the blue print

#### SECTION I: Demographical Data

It consist of selected demographic variable like Age, residential, education, source of information, occupation of parents .

#### SECTION II: Self Administered questionnaire

It consist of 25 objective type of multiple choice questions, all questions have only one correct response each correct response was awarded single score according to the key and zero score was awarded for the wrong response. The total maximum score for all the item was 25.

#### **Conclusion:-**

There is a clear need for primary intervention for oral hygiene among middle school age children, of shankarpur Sahaspur Dehradun. In our study it is evident that 11-12<sup>th</sup> years age group i.e 70 % student having more knowledge rather than other age group , the economic status having no corelation with knowledge regarding oral hygiene among students , in comparison middle class students having 80% knowledge . The following conclusion can be drawn from the study findings, which are supported by evidence from the other literature. The school age children are having adequate mean Knowledge score was 16.38 and mean Practice score was 15 regarding oral hygiene. The self administered Structured Interview Schedule Questionnaire has shown significant association between socio demographical variables and their knowledge. Using the statistical formula we have computed the association between the demographic variables and their knowledge.