

# A Study to Assess the Effectiveness of Awareness Programme on Knowledge and Attitude Regarding Oral Cancer among Construction Site Workers in Gorakhpur, U.P.

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## ABSTRACT

Oral cancer includes cancers of the mouth and the back of the throat. Oral cancers develop on the tongue, the tissue lining the mouth and gums, under the tongue, at the base of the tongue, and the area of the throat at the back of the mouth. Oral cancer accounts for roughly three percent of all cancers diagnosed annually in the United States, or about 53,000 new cases each year. Oral cancer most often occurs in people over the age of 40 and affects more than twice as many men as women. Most oral cancers are related to tobacco use, alcohol use (or both), or infection by the human papilloma virus. The study was conducted to assess the effectiveness of awareness programme on knowledge and attitude regarding oral cancer among construction site workers. The study found that in pretest 56(93.3%) had adequate knowledge, 2(3.3%) had moderate knowledge and 2(3.3%) had inadequate knowledge. After the awareness programme, in posttest 40(66.7%) had adequate knowledge, 16(26.7%) had moderate knowledge and 4(6.7%) had inadequate knowledge and none of the participants had average and inadequate knowledge. Paired “t” test showed significant increase in the knowledge scores. The mean pretest knowledge scores of participants (24.17) was significantly higher than their mean pretest scores (19.05). The calculated „t” value (t=19.56) was greater than the table value at (0.05) level of significant. Similarly, the mean pre-test attitude scores of positive statement was (71.75) and for negative statement it was (12.63) was significantly higher than their mean pretest score positive statement was (60.22) and for negative statement it was (10.72). The calculated t value(13.45) was greater than the table value at (0.05) level of significant and it was concluded that there was highly significant gain in knowledge and attitude regarding oral cancer. There was significant association between religion and pre-test knowledge scores (p<0.05). Awareness program implemented during the study had equipped the workers with better knowledge and attitude regarding oral cancer. Information provided in the program helped the participants to know the various forms of oral cancer and also helped the participant to change their attitude against oral cancer. So there was no association between knowledge scores and attitude scores regarding construction site workers. There was no correlation scores between pre-test knowledge scores and attitude scores. The study concluded that there was an effectiveness of awareness programme on knowledge and attitude regarding oral cancer among construction site workers

**Key words:** Assess, effectiveness, awareness programme, knowledge, Attitude, oral cancer, construction site workers.

## **INTRODUCTION**

Oral cancer includes cancers of the mouth and the back of the throat. Oral cancers develop on the tongue, the tissue lining the mouth and gums, under the tongue, at the base of the tongue, and the area of the throat at the back of the mouth. Oral cancer accounts for roughly three percent of all cancers diagnosed annually in the United States, or about 53,000 new cases each year. Oral cancer most often occurs in people over the age of 40 and affects more than twice as many men as women. Most oral cancers are related to tobacco use, alcohol use (or both), or infection by the human papilloma virus.

The Global Burden of Disease Study 2017 estimated that oral diseases affect 3.5 billion people worldwide. According to the International Agency for Research on Cancer, cancers of the lip and oral cavity are among the top 15 most common cancers worldwide, with nearly 180 000 deaths each year.<sup>3</sup> In India, 20 per 100000 population are affected by oral cancer which accounts for about 30% of all types of cancer. Over 5 people in India die every hour every day because of oral cancer and the same number of people die from cancer in oropharynx and hypo pharynx.

Oral cancer, a type of mouth cancer, where cancerous tissues grow in the oral cavity. Oral or mouth cancer most commonly involves the tongue. It may also occur on the floor of the mouth, cheek lining, gingiva (gums), lips or palate (roof of the mouth). Most oral cancers look very similar under the microscope and are called squamous cell carcinoma. Squamous cell carcinoma is the most common type of mouth cancer. Squamous cells are found in many places around the body, including the inside of the mouth and under the skin.

## **NEED FOR THE STUDY**

In India, around 77,000 new cases and 52,000 deaths are reported annually, which is approximately one-fourth of global incidences. The increasing cases of oral cancer are the most important concern for community health as it is one of the common types of cancers in India. Oral and oropharyngeal cancer is a major part of the global burden of cancer and is the sixth most common cancer in the world, with increasing rates of incidence and rising mortality rates. Late diagnosis, high mortality rates and morbidity leading to important disfigurement are characteristics of the disease worldwide. Oral cancer is a universal health problem and is more common in the developing countries than in the developed countries

The major risk factors attributed to oral cancer occurrence are the use of tobacco; chewing, snuffing, or smoking and the consumption of alcohol. Also, in a systematic review, it was found that there is an association between socioeconomic status and oral cancer prevalence, the World Health Organizations global policy on oral health, which also considered oral cancer prevention, emphasized that the involvement of oral health professionals in early detection, diagnosis and treatment as an integral part of national cancer control programmes

## **STATEMENT OF THE PROBLEM**

“A study to assess the effectiveness of Awareness Programme on knowledge and attitude regarding oral cancer among construction site workers in selected rural area of Uttar Pradesh.”

## OBJECTIVES

The objectives of the study were: -

1. To assess the knowledge and attitude regarding oral cancer among construction site workers in selected area of Uttar Pradesh.
2. To evaluate the effectiveness of awareness program on knowledge regarding oral cancer among construction site workers in selected area of Uttar Pradesh.
3. To find out the relationship of the knowledge and attitude regarding oral cancer among construction site workers in selected area of Uttar Pradesh.
4. To find out the association between pre-test knowledge scores among construction site workers with their selected demographic variables.
5. To find out the association between pre-test Attitudes scores among construction site workers with their selected demographic variables.

## HYPOTHESIS

**H<sub>1</sub>:** There is a significant difference between pretest and post-test knowledge scores and attitude scores regarding oral cancer among construction site workers in selected area of Uttar Pradesh.

**H<sub>2</sub>:** There is a significant relation between post-test knowledge scores and attitude scores regarding oral cancer among construction site workers in selected area.

**H<sub>3</sub>:** There is a significant association between pre-test knowledge scores and attitude score among construction site workers with their selected demographic variables.

## METHODOLOGY

Research approach- Quantitative evaluative research approach was used in this study.

Research Design-Quasi experimental

Sample- construction site workers

Sample size-60 sample

Sample technique -Convenient sample techniques was used to select the sample.

## DESCRIPTION OF THE TOOL

The tool consists of self- questionnaire with three sections A, B and C as follows:

**Section A:** Demographic data consisting of items seeking information about the baseline data such as age, income, size of family, education, religion etc.

**Section B:** Consisted 30 items in knowledge about oral cancer like general information, about construction site workers and causes symptoms and treatment. A score of one was given for correct answer and zero for wrong answers. Thus, the maximum score was 30 and the minimum score was zero. The scoring was just done by counting the correct responses and according to the total score obtained.

The questionnaire consists of 30 multiple choice questions. Each item had 4 choices out of which one was correct answer and the remaining 3 were wrong answers.

**Section C:** Attitude scale consists of 11 questions with responses strongly agree (SA), agree(A),

uncertain (UN), disagree(D), strongly disagree (SD).The positive statements had the scoring of 5,4,3,2,1 whereas the negative item had 1,2,3,4,5.

## RESULT-

**Section-I:** Distribution of frequency and percentage according to Socio-Demographic Variables among construction site workers.

**Section-II:** Assessment of pre-test level of knowledge and attitude regarding oral cancer among construction site workers.

**Section-III:** Assessment of Post-test level of knowledge and attitude regarding oral cancer among construction site workers.

**Section-IV:** Comparison of pre-test and post-test knowledge and attitude scores with respect to construction site workers regarding oral cancer.

**Section-V:** Relationship of post-test knowledge and attitude score with respect to construction site workers regarding oral cancer.

**Section-VI:** Association between the pre-test knowledge scores with respect to construction site workers regarding oral cancer with their selected socio demographic variables.

**Section-VII:** Association between the pre-test Attitude scores with respect to construction site workers regarding oral cancer with their selected socio demographic variables.

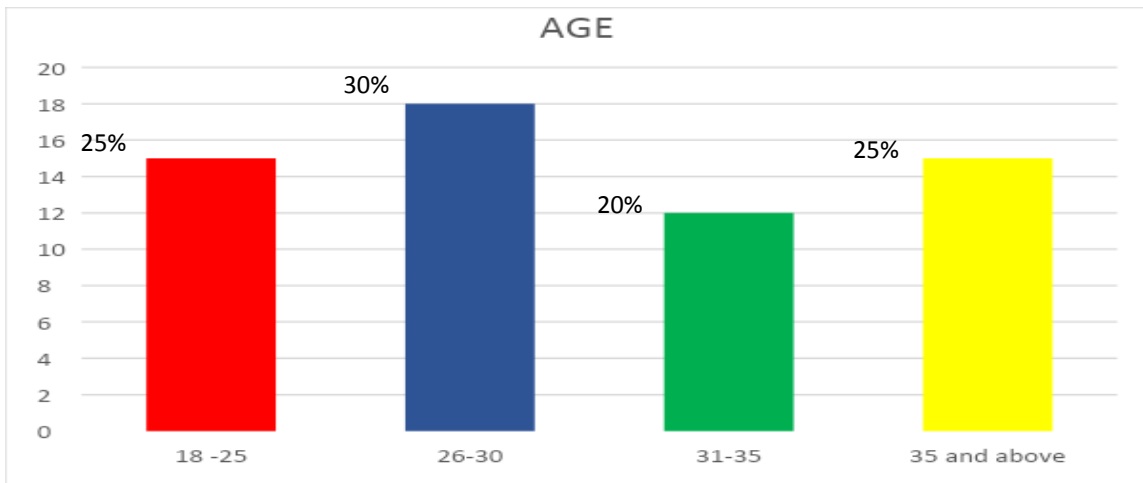
## SECTION-I

**Distribution of frequency and percentages according to Socio-Demographic Variables among construction site workers.**

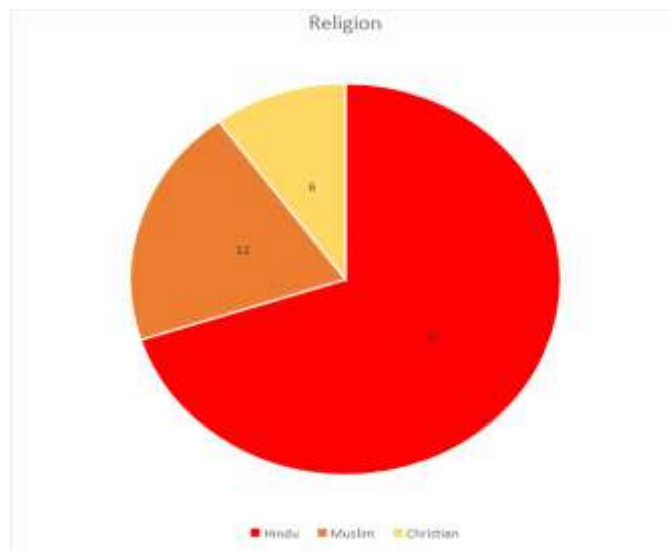
*Table 3-Frequency and percentage wise distribution of construction site workers according to their age.*

(N=60)

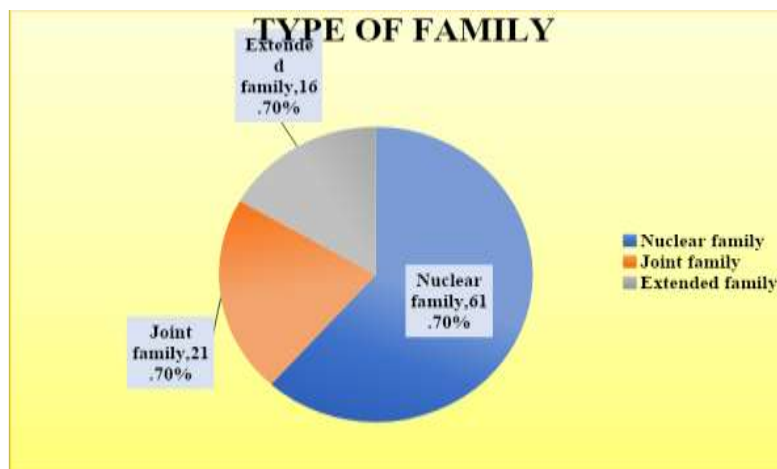
Age	Frequency	Percentage (%)
1. 18-25	15	25%
2. 26-30	18	30%
3. 31-35	12	20%
4. 35 and above	15	25%



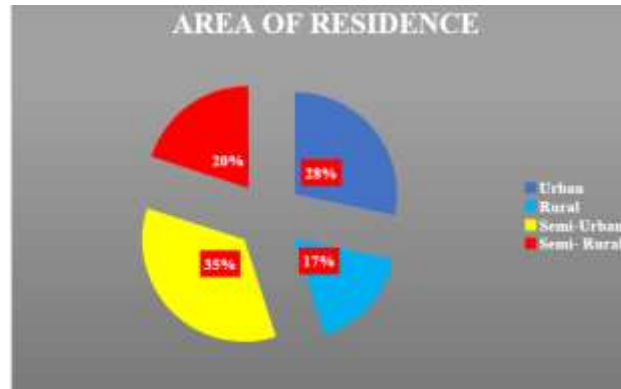
*-Frequency and percentage wise distribution of construction site workers according to their religion.*



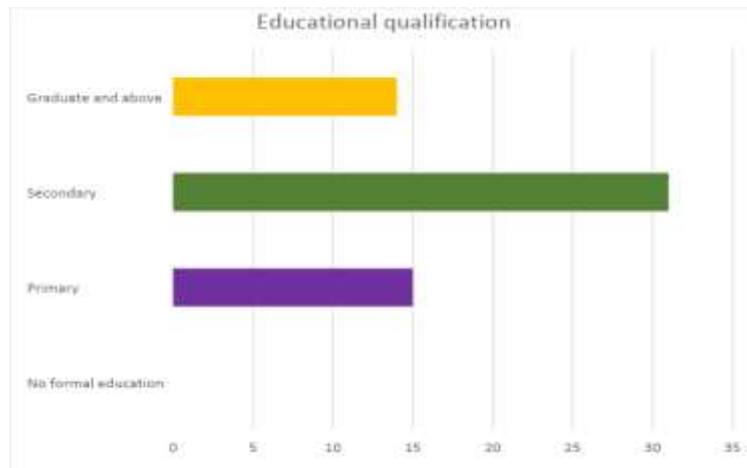
*Frequency and percentage wise distribution of construction site workers according to their type of family.*



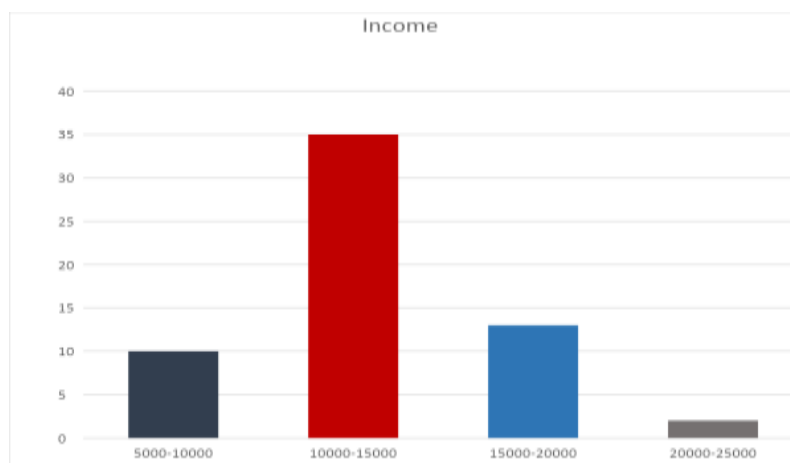
*Frequency and percentage wise distribution of construction site workers according to their area of residence.*



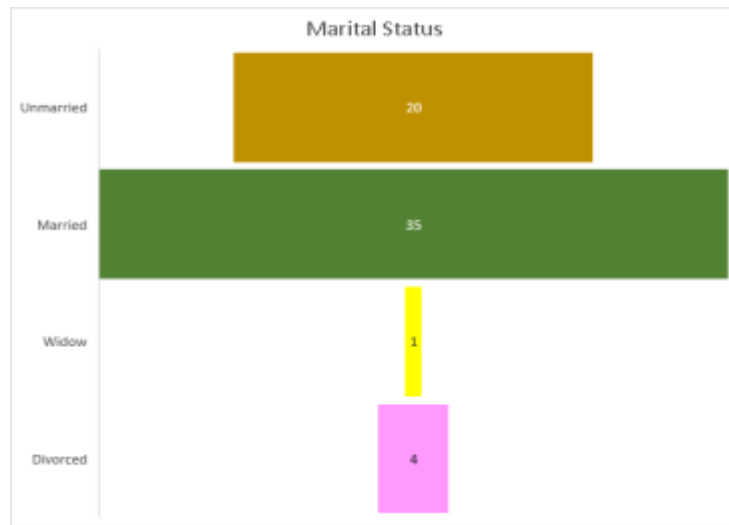
*Frequency and percentage wise distribution of construction site workers according to their educational qualification*



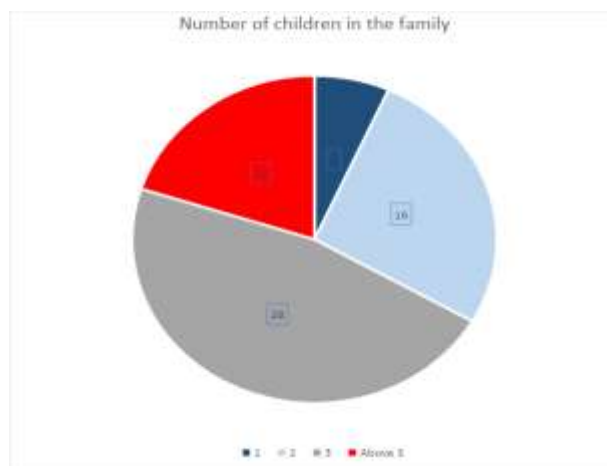
*Frequency and percentage wise distribution of construction site workers according to their family income.*



*-Frequency and percentage wise distribution of construction site workers according to their marital status.*



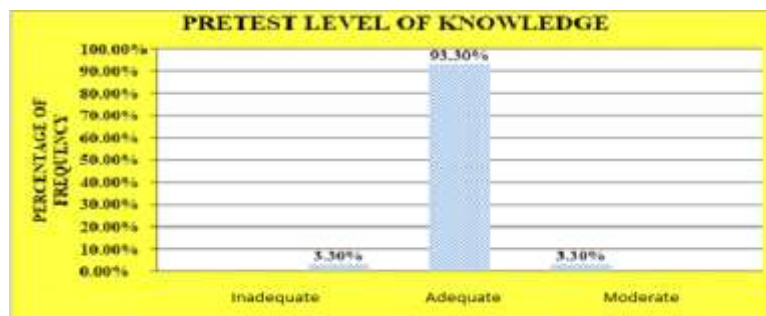
*-Frequency and percentage wise distribution of construction site workers according to their number of children in family.*



## SECTION- II

**Assessment of pre-test level of knowledge and attitude regarding oral cancer among construction site workers.**

*Frequency and distribution of pre-test level of knowledge score on oral cancer among construction site workers*

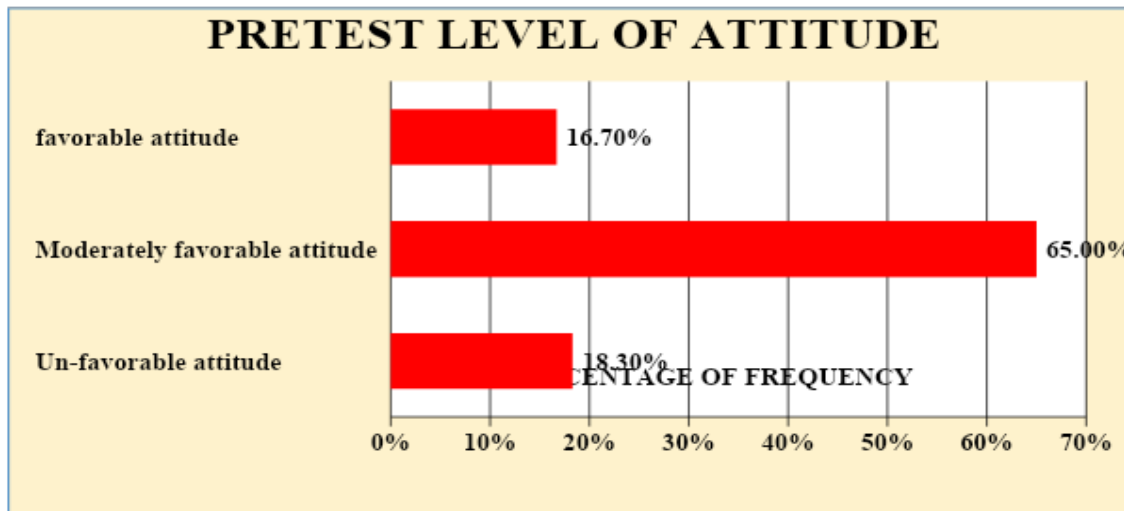


*Frequency and distribution of pre-test knowledge score on different aspects of oral cancer and treatment among construction site workers.*

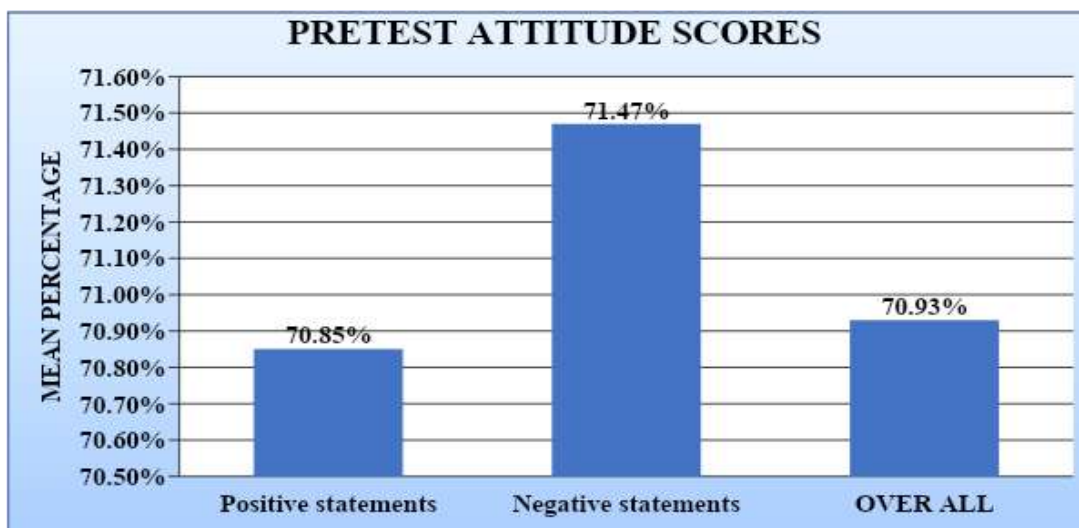
*Frequency and distribution of pre-test overall knowledge score on the oral cancer and its treatment among construction site workers.*

Questions	No. of questions	Mean	Mean %	SD
Overall pre-test knowledge	30	19.05	63.50%	1.68

*Frequency and percentage wise distribution pre-test level of attitude among workers regarding oral cancer among construction site workers.*



*Frequency and percentage wise distribution regarding pre-test attitude score on different aspects of oral cancer among construction site workers.*

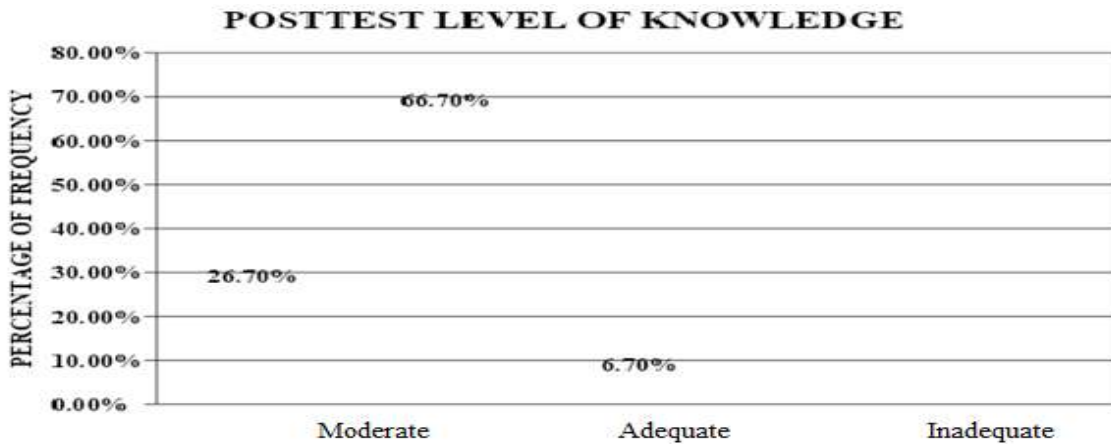


### SECTION – III

**Assessment of Post-test level of knowledge and attitude regarding oral cancer among construction site workers.**

*Frequency and percentage wise distribution of post test level of knowledge scores regarding oral cancer among construction site workers.*



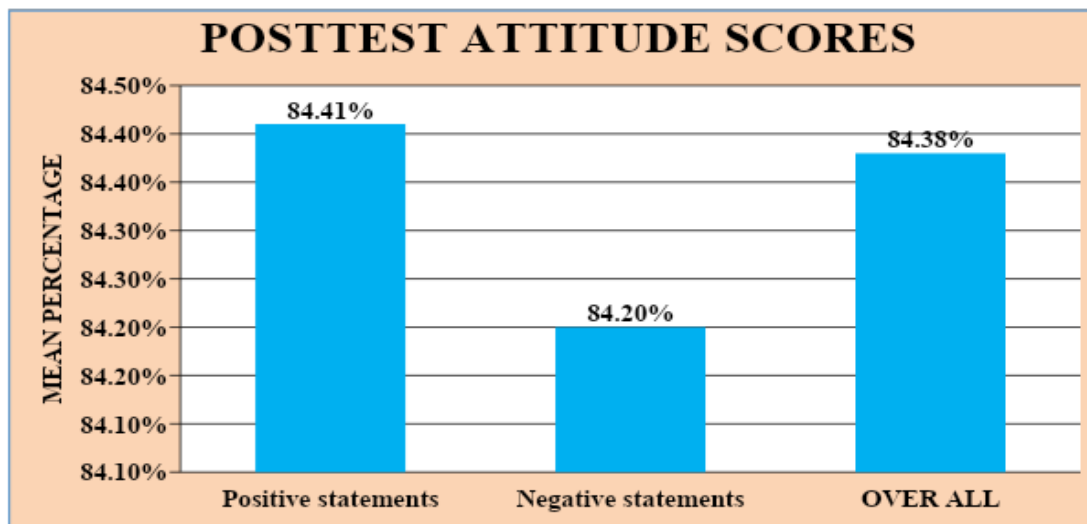


*Frequency and percentage wise distribution of pre test knowledge score on different aspects of oral cancer among construction site workers.*

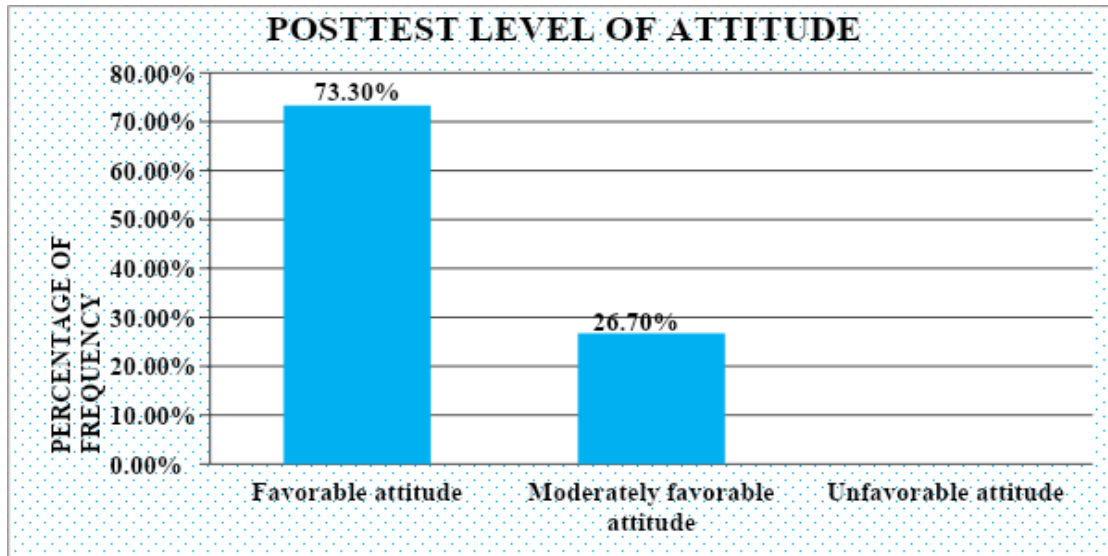
*Table-18: Frequency and percentage wise distribution of post test overall knowledge score among construction site workers.*

Questions	No. of Questions	Mean	Mean %	SD
Overall post-test Knowledge	30	24.17	80.57%	1.8

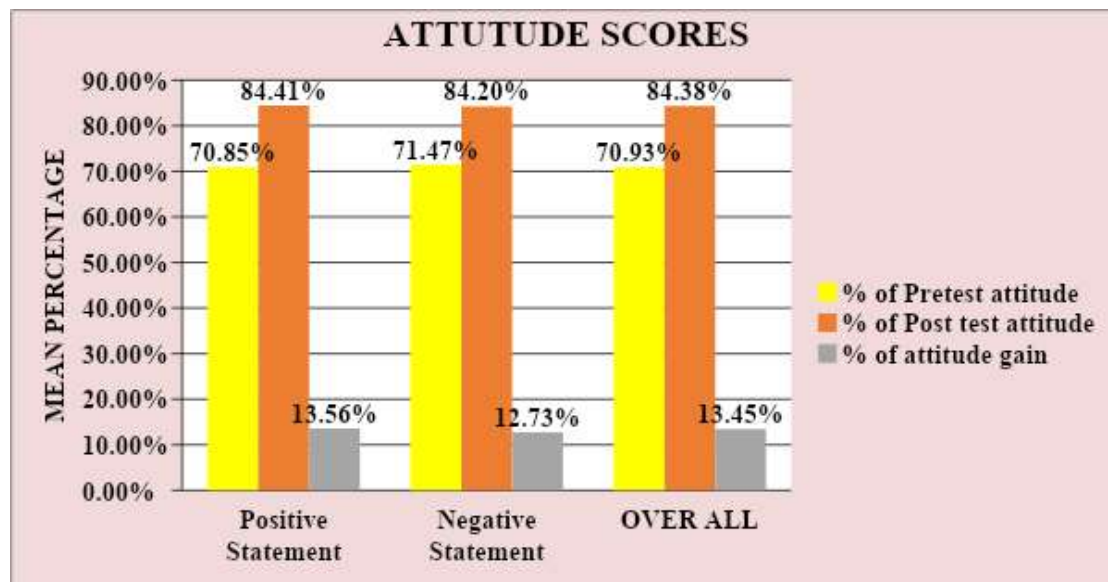
*Frequency and percentage wise distribution of pre-test attitude score on different aspects of oral cancer among construction site workers.*



*Frequency and percentage wise distribution of post test level of attitude score on the effects of oral cancer among construction site workers.*



*Frequency and percentage wise distribution of attitude gain after the awareness programme.*



*Frequency and percentage wise distribution of overall mean knowledge score before and after awareness programme.*

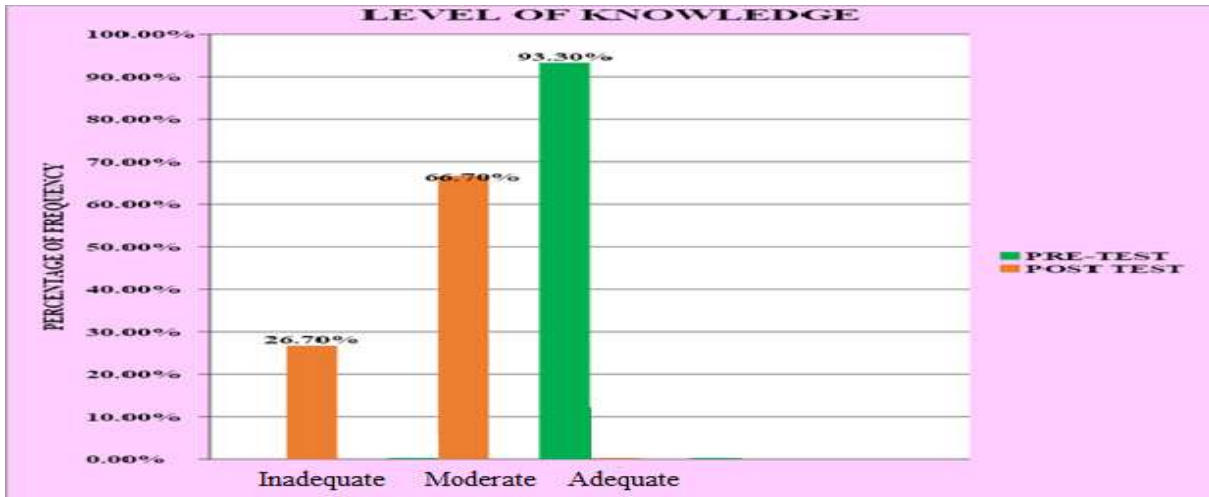
(N=60)

Max. Score	Pre-test	Post test	Paired	
	Mean± SD	Mean± SD	t-test	
Overall Knowledge Score	30	19.05± 1.68	24.17± 5.37	19.56 df=59 p <0.05

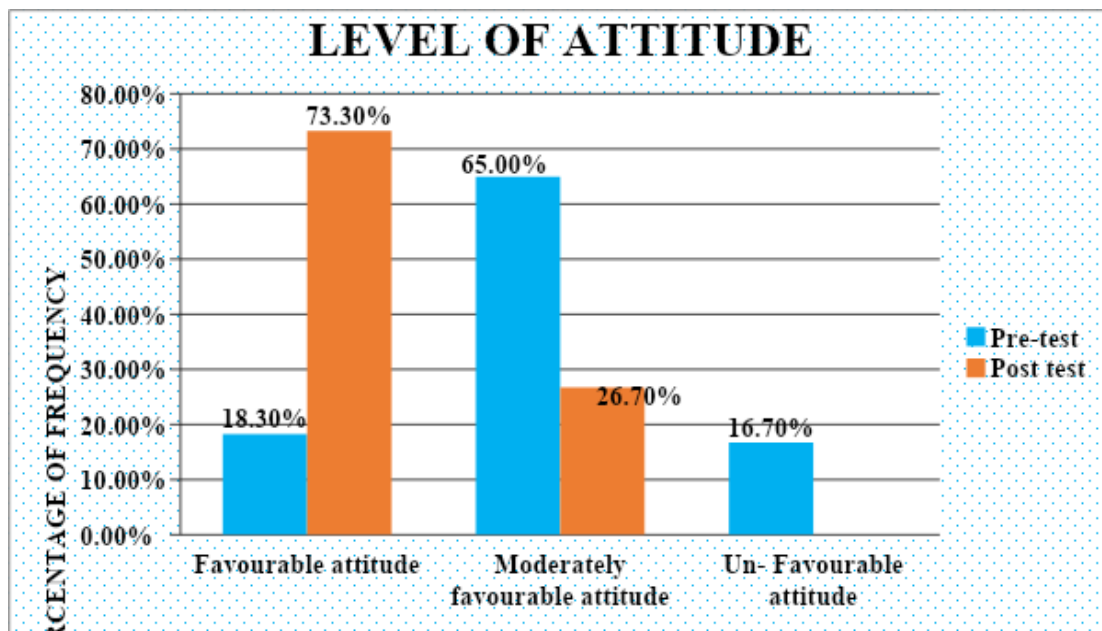
**SECTION-IV**

**Comparison of pre-test and post-test knowledge and attitude scores with respect to construction site workers regarding oral cancer.**

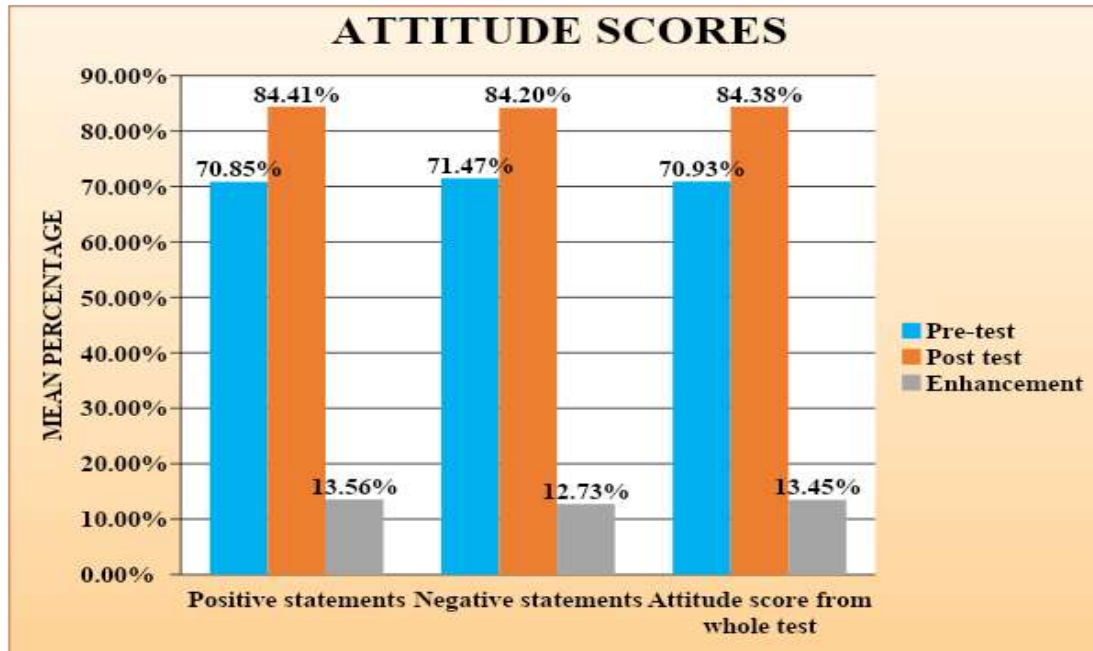
*Frequency and percentage wise distribution comparison between pre-test and post-test levels of knowledge among construction site workers regarding oral cancer.*



*Frequency and percentage wise distribution of pre and post- test knowledge scores of construction site workers regarding oral cancer.*



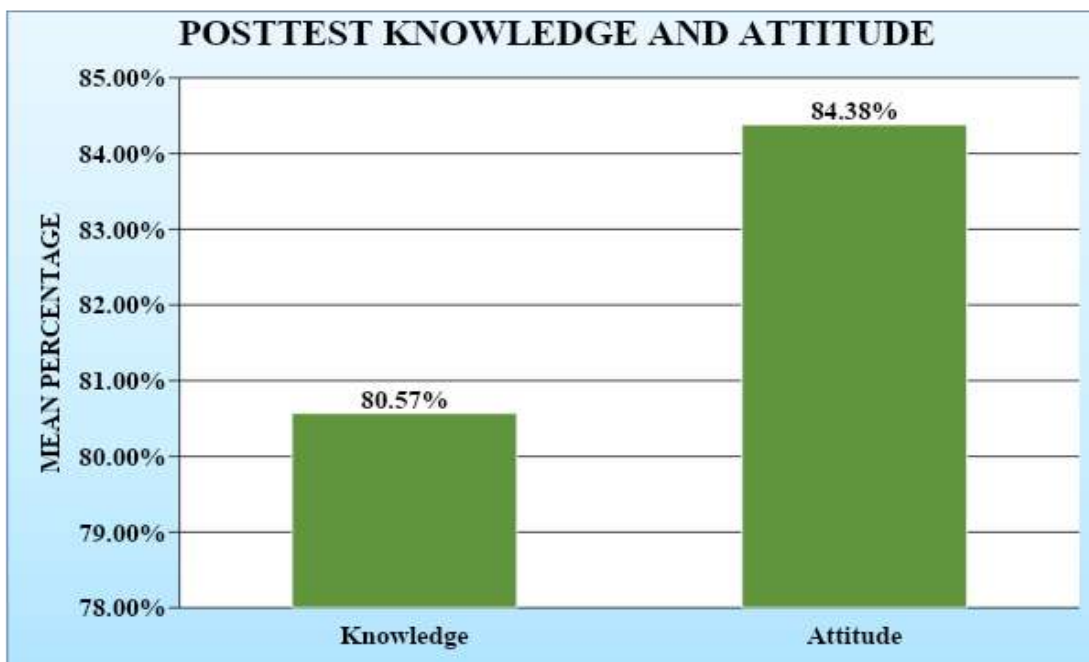
*Frequency and percentage wise distribution of pre and post test attitude scores of construction site workers towards the oral cancer.*



**SECTION-V**

**Relationship of post-test knowledge and attitude scores with respect to construction site workers regarding oral cancer.**

*Frequency and percentage wise distribution of Co-relation between Post- Test, Knowledge and Attitude.*



**SECTION-VI**

**Association between the pre -test knowledge scores with respect to construction site workers regarding oral cancer with their selected socio- demographic variables.**

*Frequency and percentage wise distribution of association between pre-test knowledge regarding oral cancer among construction site workers with their selected socio demographic variables.*

(N=60)

Sr.no	Socio demographic variables	Categories	pre test level of knowledge			calculated $\chi^2$ value	Df
			Adequate	moderate	adequate		
1	AGE	18-25	4	9	2	4.642 (NS)	6
		26-30	3	13	2		
		31-35	4	8	0		
		35 and above	5	10	0		
2.	Religion	Hindu	14	14	28	9.501 (S)	4
		Muslim	0	0	8		
		Christian	2	2	4		
		Others	0	0	0		
3	Family Income	5000-10000	2	7	1	.637 (NS)	4
		10000-15000	11	26	2		
		15000–20000					
		Above 20000	3	7	1		
4	Type of family	Nuclear family	8	26	3	2.094 (NS)	4
		Joint family	4	8	1		
		Extended	4	6	0		

		family					
		Urban	4	11	2		
5	<b>Area of Residents</b>	Rural	5	5	0	4.780	6
		Semi-Urban	4	16	1	(NS)	
		Semi-Rural	3	8	1		

(NS)= NOT SIGNIFICANT

**SECTION-VII**

**Association between the pre-test Attitude scores with respect to construction site workers regarding oral cancer with their selected socio demographic variables**

*Frequency and percentage wise distribution of association between pre-test attitude scores regarding oral cancer among construction site workers with their selected socio demographic variable. (N=60)*

SL. NO	SOCIO DEMOGRAPHIC VARIABLES	CATEGORIES	PRE TEST LEVEL OF ATTITUDE SCORES		CALCULATED $\chi^2$ VALUE	Df
			Moderately favourable attitude	favourable attitude		
1.	<b>Age</b>	18-25 Year	3	12		
		26-30 Year	4	14	1.903	3
		31-35 Year	3	9	(NS)	
		35to above	6	9		
2.	<b>Religion</b>	Hindu	12	30		
		Muslim	3	9	0.402	2
		Christian	1	5	(NS)	
		Others	0	0		
3.	<b>Family Income</b>	5000-10000	3	7	0.843	
		10000- 15000	9	30	(NS)	

	15000-20000	4	7		
	20000-25000	0	0		
<b>4. Type of family</b>	Nuclear family	8	29		
	Joint family	5	8	1.463	<b>2</b>
	Extended family	3	7	(NS)	
<b>5. Area of Residents</b>	Urban	2	15		
	Rural	4	6	4.308	<b>3</b>
	Semi-Urban	5	16	(NS)	
	Semi-Rural	5	7		

**(S)= SIGNIFICANT AT 0.05 LEVEL**

**(NS)= NOT SIGNIFICANT**

### **NURSING IMPLICATIONS**

The findings of the study have implications related to Nursing Administration, Nursing practice, Nursing research and Nursing Education regarding the increase in the Knowledge among construction site workers regarding oral cancer as well as creating awareness regarding oral cancer.

### **NURSING PRACTICE**

Taking into consideration the various health oral cancer, financial and medical implications, use of tobacco should be discouraged to the maximum extent through awareness programme of the public. As there is more chance of initiation of tobacco use in school ages, imparting awareness to participants regarding of tobacco use, in schools is very important so that oral cancer can be prevented.

### **NURSING EDUCATION**

The findings suggest that there is an increased need for health awareness programme and periodic health checkup on identification of various health problems in school students. It is essential that nursing students understand the importance the initiation of oral hygiene.

### **CONCLUSION**

The study was conducted to assess the effectiveness of awareness programme on knowledge and attitude regarding oral cancer among construction site workers. The study found that in pre-test 56(93.3%) had adequate knowledge, 2(3.3%) had moderate knowledge and 2(3.3%) had inadequate knowledge. Awareness program in pre-test 40(66.7%) had adequate knowledge, 16(26.7%) had moderate knowledge and 4(6.7%) had inadequate knowledge and none of the participant had average and inadequate knowledge.

Paired “t” test showed significant increase in the knowledge scores. The mean pre-test knowledge scores of participants (24.17) was significantly higher than their mean pre-test scores (19.05). The calculated

“t” value ( $t=19.56$ ) was greater than the table value at 0.001 level of significant. Similarly, the mean pre-test attitude scores of positive statement was (71.75) and for negative statement it was (12.63) was significantly higher than their mean pre-test scores positive statement was (60.22) and for negative statement it was (10.72). The calculated ‘t’ value (13.45) was greater than the table value at 0.005 level of significant. Hence, research hypothesis  $H_1$  was accepted and it was concluded that there was highly significant gain in knowledge and attitude regarding oral cancer.

Similarly, there was significant association between Family history consumption of tobacco and pre-test attitude scores ( $p<0.05$ ). Therefore, There was no significant association between age, religion, Family Income, type of family, Area of Residents, and pre-test attitude scores ( $P<0.05$ ).

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