

# A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge regarding the Prevention of Oral Cancer among Adults Residing at Rural Area Bharatpur

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**Abstract:** *Today many people needlessly affected with oral cancer because they cannot obtain timely preventive, educational or treatment services. India has one of the highest incidences of oral cancer in the world. The highest incidence of oral cancer and precancerous lesions in India has long been linked with the habit of betel quid chewing incorporating tobacco. In India it is estimated that 63.5% of population is under the age group of 15-64 years. One group pre-test, post-test design, which belongs to pre- experimental design, was selected to assess the knowledge. Structured questionnaire is used to assess the knowledge of subjects regarding oral cancer. The reliability was established by using Karl Pearson product moment correlation formula. Coefficient of correlation of knowledge test was found to  $r=0.99$  and attitude scale was found to be 0.914 which proved that the tool was highly reliable. The findings of the study revealed that appropriate method of awareness will improve knowledge of the adults. The result indicate that 53 (88.3%) had inadequate knowledge in pre test, 7 (117%) had moderate knowledge and no one had adequate knowledge on oral cancer among adults in pretest. In post test 51 (85%) had adequate knowledge, 9 (15%) had moderate knowledge and no one had inadequate knowledge regarding oral cancer among adults. Association between demographic variables such as Age, gender, Religion, educational status, occupation, income, Marital status, family history of oral cancer, family history of tobacco use, source of information and knowledge level of posttest among adults regarding oral cancer among adults are not significant.*

**Keywords:** structured teaching programme, knowledge, prevention of oral cancer, Adults

## 1. Introduction

The human face is a precious window to the world that emanates radiance, excitement, self confidence and happiness. Sadly due to oral problems, there are frowns and tears in their face where bright smiles and laughter should be. Today many people needlessly affected with oral cancer because they cannot obtain timely preventive, educational or treatment services. The burden of disease restricts activities in work, home and often diminishes the quality of life. The most common site for oral cancer in the older age group was the buccal mucosa (37%), Followed by tongue (21%) and gingival (20%)<sup>2</sup>. It is among the most common cancers seen in both Indian men and women as can be gauged from the records of the National Cancer Registry Programme Tobacco use is associated with about 75 percent of oral cancer cases, caused by irritation of the mucous membranes of the mouth from smoke and heat of cigarettes, cigars, and pipes. Tobacco contains over 60 known carcinogens, and the combustion of it, and by products from this process, is the primary mode of involvement. Use of chewing tobacco or snuff causes irritation from direct contact with the mucous membranes.

India has one of the highest incidences of oral cancer in the world. The highest incidence of oral cancer and precancerous lesions in India has long been linked with the habit of betel

quid chewing incorporating tobacco. In India it is estimated that 63.5% of population is under the age group of 15-64 years. Males are found 349,785,804 and females 326,289,402. India account 86% of world's oral cancer cases says study conducted by the National institute of Public Health in Feb2011.

Rajasthan has the highest (incidence) number of cab drivers, among them habit of chewing tobacco among them is very high and are high risk for oral cancer. Oral cancer ranks number one among man and number three among women in India. Oral cancer constitutes 12% of all cancers among men and 8% of all cancers among women. In India it is estimates that among 400 million individuals aged 15 years and over 47% use tobacco in one form or the other. Annual incidence rate is estimated to be 64,640.

## 2. Need for the Study

Tobacco use is one of the chief preventable causes of death in the world. WHO attribute some 4 million deaths due to tobacco, a figure which is expected to rise to 8.4 million deaths a year by 2020. By that time 10% of these deaths will be occurring in the developing countries. The Governments most recent National sample survey indicates that there are 1,194 million consumers in India with tobacco with tobacco

Volume 9 Issue 10, October 2020

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use differing greatly from the rest of the world. Some 96 million people use smokeless tobacco and while 20 % consumed cigarettes, nearly 40% smoke bedi which deliver more nicotine than cigarettes. The remaining 40% chew tobacco and tobacco containing products such as snuff, betal, quid, zarda, pan masala, gutkha, kaman. According to WHO by 2020 tobacco will be solely responsible for 13.3% of death in India. An adult is a human being or living organism that is of relatively age, typically associated with sexual maturity and the attainment of reproductive age. A high incidence of oral cancer among young. WHO as estimated that 91 per cent of oral cancer in south-east Asia are directly attributed to the use of tobacco and this is the leading cause of oral cavity and lung cancer in India. The World Health Organization considers adult to be the periods between 20-65 years. In India 15 to 65 years 53.5% male 349, 785,804; female 326,289,402. Increases steadily until age 65 years, when the rate levels off. For the 22 years, there have been slight decreases in incidence and mortality rates. Reports have noted a substantial increase in the incidence of oral cancer (particularly of the tongue) among adults younger than 40 years. Oral cancer has been found to be more prevalent among men compared to women the associated sex ratio was 2.5:1.

### 3. Review of Literature

In this study, the review of literature is presented under the following headings.

- Studies Related to knowledge regarding oral cancer.
- Studies Related to Attitude regarding oral cancer.
- Studies Related to structured teaching Programme regarding Oral cancer.

#### Objectives of the study

- To assess the knowledge regarding oral cancer before and after Structured teaching program among adults using tobacco.
- To assess the attitude towards prevention of oral cancer among adults using tobacco before and after structured teaching program.
- To assess the effectiveness of Structured teaching program on prevention of oral cancer.
- To determine the association between knowledge of adults with selected demographic variables.

#### Operational definition:

- Effectiveness:** It refers to the usefulness of Structured teaching Program in improving knowledge and developing positive attitude on oral cancer among adults.
- Structured teaching Program:** It refers to the group health education with appropriate audio visual aids to the adults regarding tobacco use, forms of tobacco, their side effects, prevention of oral cancer.
- Knowledge:** It refers to the level of understanding of adults regarding oral cancer as expressed by their responses to the items of the knowledge questionnaire.
- Adult:** It refers to both males and females having habit of tobacco use aged 20-40 years.

- RURAL:** It refers to Bharatpur, villages or block PHC, Rajasthan.

#### Hypothesis:

**H1:** There is a significant increase in the level of knowledge on oral cancer among adults using tobacco after structured teaching program than before.

**H2:** There is a significant association between knowledge of adults using tobacco and their selected variables.

### 4. Methodology

#### Research approach

Evaluative approach is used in research

#### Research design

One group pre-test, post-test design, which belongs to pre-experimental design, was selected to assess the knowledge and attitude of adults using tobacco regarding oral cancer.

#### Variables

##### Independent variable:

In the present study the independent variable is the Structured teaching Program on Oral cancer.

##### Dependent variable:

In the present study, the dependent variable is the Knowledge and attitude of adults.

##### Demographic variables:

Such as age, religion, gender, marital status, education, occupation, income, habit of tobacco use, form of tobacco use, duration of use, amount, any family history of oral cancer, source of information regarding oral cancer among adults.

Setting of the study:-Sewar PHC Bharatpur

#### Sample:-

The sample consist of 60 adults both males and females aged between 20-40 years, residing in rural area coming under the Bharatpur, PHC, Rajasthan who fulfills the inclusion criteria.

#### Sample Size

The sample size for the present study is 60 adults using tobacco.

#### Sampling technique

The samples were selected by using purposive sampling technique.

#### Sampling criteria

**Inclusion criteria:** adults who

Is having the habit of tobacco use.

Are in the age group of 20-40 years.

Are both males and females present at the time of study.

**Exclusion criteria:** Adults  
Who are having oral cancer?  
Who are not willing to participate?

## 5. Results

**Table 1:** Aspect wise pre test Mean, Mean percentage and standard deviation on knowledge scores of adults regarding oral cancer

S. no	Knowledge aspects	Statements	Max. score	Respondents knowledge		
				Mean	Mean %	S.D
1	General information, meaning	4	4	1.39	34.8	0.714
2	Etiology and Manifestation	6	6	1.933	32.2	1.006
3	Diagnosis, management and prevention	10	10	3.6	36	1.265

**Table 2:** Pre test and post test knowledge scores regarding oral cancer, N=60

S. no	Knowledge level	Category	Pre-test		Post-test	
			n	%	N	%
1	Inadequate	<50% score	53	88.3	0	0
2	Moderately adequate	51-75% score	7	11.7	9	15
3	Adequate	>75% score	0	0	51	85
	Total		60	100	60	100

**Table 3:** Over all pre test and post test mean, mean percentage and standard deviation of knowledge scores of adults regarding oral cancer, N=60

S. No	Knowledge score	respondents knowledge			Paired "t" test
		mean	Mean %	SD	
1	Pre-test	6.91	34.5	1.835	33.2*
2	Post-test	16.20	81	1.364	

\* significant at 5% level,  $t(0.05, 59df)=2.00$

**Table 4:** Aspect wise pretest and post test knowledge scores and enhancement regarding oral cancer among adults  
\* significant at 5% level,  $t(0.05, 59df)=2.00$

S. no	Knowledge aspects	Respondents knowledge (%)				Paired “t” test
		Pre test		Post test		
		mean	SD	Mean	SD	
1	General information and meaning	34.8	0.714	94.71	0.427	22.132*
2	Etiology and clinical manifestations	32.2	1.006	80.55	0.587	19.266*
3	Diagnosis, treatment and prevention	36	1.265	76	0.978	19.377*
	Combined	34.5	1.835	81	1.582	29.733*

## 6. Conclusion

The findings of the study revealed that appropriate method of awareness will improve knowledge of the adults. So it could be concluded that the structured teaching programme was effective in improving the knowledge of the adults on oral cancer. The chi square was computed for pre test and post test knowledge score and selected demographic

variables showed no significant association. Hence it could be concluded that the knowledge of the adults regarding oral cancer were independent of selected demographic variables. The result indicate that 53 (88.3%) had inadequate knowledge in pre test, 7 (11.7%) had moderate knowledge and no one had adequate knowledge on oral cancer among adults in pretest. In post test 51 (85%) had adequate knowledge, 9 (15%) had moderate knowledge and no one had inadequate knowledge regarding oral cancer among adults.

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