



Original Research Article

## **A Study To Assess The Effectiveness Of Structured Teaching Programme On Knowledge And Attitude Regarding Prevention Of Oral Cancer Among Drivers In Dhanalakshmi Srinivasan Group Of Institution At Perambalur**

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### **ABSTRACT**

Cancer is a group of more than 200 disease characterized by uncontrolled and unregulated growth of cells. Globally cancers account for 5.1% of total disease Burden and 12.5% of all deaths. In India Oral cancer tops in males especially drivers chewing the Betel and smoking cigarettes' throughout the Journey and while waiting for their next turn have been identified as main reasons for this vulnerability.

Their lifestyle leads to risk for Oral cancer, as over 50% of them smoked daily. 31.1 % consumed alcohol weekly or daily, 59.2% chewed Betel occasionally and 22.3% daily. Around 60% of Bus drivers and conductors are at list of getting oral cancer.

Hence the incidence of Oral cancer is increasing. It is mainly due to less awareness and knowledge regarding prevention and treatment of early detection of oral cancer among the drivers.

The conceptual frame work selected for the study was based on "General system Theory" An evaluator approach was adopted for the study. The research design used is "Quasi experimental design" (One group pre test and post test design). The study was conducted among drivers residing at Dhanalakshmi Srinivasan Group of Institutions, Perambalur. The Population of the study was 50 drivers and Structured Questionnaire schedule was used to collect data. Non probability, convenience sampling technique was used. The data was planned to analyze on the basis of objectives and hypothesis of the study. Descriptive and inferential statistics were used for data analysis. The research was concluded with improved knowledge and attitude regarding prevention of oral cancer among drivers of Dhanalakshmi Srinivasan Group of Institutions.

**Key words:-** Oral cancer, tobacco, betel chewing

### **INTRODUCTION**

Oral cancer/mouth cancer, a subtype of head and neck cancer, is any cancerous tissue growth located in the oral cavity. <sup>[1]</sup>

Oral cancer may occur on the lips or anywhere within the mouth (e.g. tongue, floor of the mouth, buccal mucosa, hard palate, soft palate). The incidence is nearly 11% in males and 5% in females. Surveys

have revealed that most of the drivers, rickshaw, pullers, vendors, construction workers will be chewing some form of tobacco and most of them are unwilling to give up the habits. <sup>[2]</sup>

A survey in 2012 conducted by the National cancer control programme in Sri Lanka has revealed that 80% of Bus drivers and conductors are vulnerable to oral cancer.

Factors that influence the development of oral cancer include tobacco use (gutka, tobacco, chewing, cigar, cigarette, pipe snuff) excessive alcohol intake and poor dental care. [2]

Individuals who smoke have 7-10 times higher risk of developing oral cancer than non smokers. India is the second largest consumer of tobacco in the world. The health ministry spokes person also highlighted the fact that among those with oral cancer. The highest number of cases has been recorded among Bus drivers and conductors. [2]

The reason is that when busses are parked until their turn arrives, the conductors and drivers either chew betel or smoke. The other factor is that these drivers and conductors are in the habit of keeping the chewed betel in their mouth for long periods of time. This is very dangerous, and increases the chances of getting cancer. Around 60% of bus drivers and conductors are at risk of getting oral cancer. According to Health ministry statistics around 2-3 people die daily due to oral cancer<sup>2</sup>, one of the main cancers that affect most of the population is oral cancer. [3]

Hence the significant factor of oral cancer is tobacco chewing and their lifestyle practices, it shows that there is a need for health education among drivers to create and to increase their level of awareness and knowledge regarding prevention of oral cancer, Such awareness and knowledge could lead to better understanding and acceptance of the importance of routine dental examinations for the early detection and treatment of oral cancer, and thereby reducing the risk of oral cancer among drivers.

#### **Objectives:**

- To assess the existing knowledge regarding prevention of oral cancer

among drivers of Dhanalakshmi Srinivasan Group Of Institutions.

- To determine the effectiveness of structured teaching programme on knowledge and attitude regarding prevention of oral cancer among drivers of Dhanalakshmi Srinivasan Group of Institutions.
- To correlation between pre test and post test knowledge and attitude regarding prevention of oral cancer among drivers of Dhanalakshmi Srinivasan Group Of Institutions
- To find the association of post test knowledge and attitude regarding prevention of oral cancer among drivers with their selected demographic variables.

#### **Hypothesis:-**

H1: There will be a significant difference between the pre test and post test knowledge scores of drivers.

H2: There will be a significant difference between the pre test and post test attitude scores of drivers.

H3: There will be a significant level of knowledge between the pre test and post test knowledge scores of drivers.

H4: There will be a significant level of attitude between the pre test and post test attitude scores of drivers.

H5: There will be a significant association between the post test knowledge scores with their selected demographical variables.

#### **Assumption:-**

The driver may have adequate knowledge and most favourable attitude about oral cancer.

Structured teaching programme is an effective way to improve the knowledge and attitude of drivers to prevent oral cancer.

#### **Research Design:-**

Quasi experimental (one group pre test and post test design).

#### **Sampling Technique:-**

Non probability convenience sampling.

**Sample Size:-** 50 samples

**Population Of The Study:-**

Drivers residing at dhanalakshmi srinivasan groups of institution.

**Description Of The Tool:-**

The instrument used for the study is structured knowledge questionnaire, which were designed by the investigator. It consist of 3 parts.

Section A:- demographic variables

Section A consist of the demographic data of subjects which includes age, educational status, family income, incidence of oral cancer in the family members, sources of information and family history of cancer of oral.

Section B:-

Section B consists of structured questionnaire to assess knowledge on prevention of oral cancer among drivers.

Section C:-

5 point Likert scale to assess attitude on prevention of oral cancer among drivers.

## RESULT

**Major Finding Of The Study:-**

Section A: Distribution Of Demographic Variables With Respect To Drivers.

TABLE-1: Frequency and percentage distribution of demographic variables among drivers.

Demographic variables		Drivers	
		Frequency	Percentage
Age	21-30 years	0	0
	31-40 years	22	44
	41-50 years	11	22
	>51 years	17	34
Educational status	No Formal Education	3	6
	Primary Education	20	40
	Secondary Education	18	36
	Graduated	9	18
Family monthly income	2001-3000Rs	2	4
	3001-4000Rs	6	12
	4001-5000Rs	27	54
	>5000Rs	15	30
Previous knowledge regarding oral cancer	Yes	14	28
	No	36	72
Personal habit	Tobacco	7	14
	Smoking	26	52
	Alcohol	17	34

Section B: Assessment of Existing Knowledge And Attitude On Prevention Of Oral Cancer With Respect To Drivers.

TABLE 2(a) Frequency and percentage distribution of pre test knowledge on prevention of oral cancer among drivers.

Level of knowledge	Drivers	
	Frequency	Percentage %
Inadequate knowledge	35	70
Moderate knowledge	15	30
Adequate knowledge	0	0
	50	100

TABLE 2(b) Frequency and percentage distribution of existing attitude on prevention of oral cancer among drivers.

Level of attitude	Drivers	
	Frequency	Percentage %
Unfavourable attitude	9	18
Favourable attitude	38	76
Most Favourable attitude	3	6
	50	100

Section C:- Determine The Effectiveness Of Structured Teaching Programme On Knowledge And Attitude Regarding Prevention Of Oral Cancer With Respect To Drivers.

Test	knowledge		Paired 't' test	Test	attitude		Paired 't' test
	Mean	Standard deviation			Mean	Standard deviation	
Pre test	6.12	1.91	T=21.35 P=1.645 Significant	Pre test	46.48	12.82	T=15.69 P=1.645 Significant
Post test	16.42	1.37		Post test	82.32	57.06	

**Section D:- Correlation Between Pretest And Post Test Knowledge And Attitude On Prevention Of Oral Cancer With Respect To Drivers.**

Test	Knowledge		Correlation	Test	Attitude		Paired 't' test
	Mean	Standard deviation			Mean	Standard deviation	
Pre test	6.12	1.91	R =1.30 Significant	Pre test	46.48	12.82	R =0.45 Non significant
Post test	16.42	1.37		Post test	82.32	57.06	

**Section E:- Association Of Level Of Knowledge And Attitude On Prevention Of Oral Cancer Among Driver With Their Demographic Variables.**

**Knowledge Of Drivers=** There is a significant association between the knowledge and the demographic variables of education. There is no association with other demographic variables.

**Attitude Of Drivers=** There is significant association between the attitude and the demographic variables of age, education, income, previous knowledge of oral cancer, personal habits. There is no association with other demographic variables.

**DISCUSSION**

The present study was done to assess the effectiveness of structured teaching programme on knowledge and attitude regarding prevention of oral cancer among drivers. In order to achieve the objectives of the study, quasi experimental design (one group pre test and post test design) was adopted. Non-probability convenient sampling technique was used to select the samples. Pre test knowledge and attitude was conducted prior to the implementation of structured teaching programme and post test knowledge and attitude was conducted after seven days. Effectiveness was assessed by using structured questionnaire method for

pre test and post test knowledge score regarding prevention of oral cancer among drivers, 5 point Likert scale was used to assess the pre test and post test attitude on prevention of oral cancer among drivers.

The analysis of data is organized and presented under the following section:-

Section A:- demographic variables

Section A consist of the demographic data of subjects which includes age, educational status, family income, incidence of oral cancer in the family members, sources of information and family history of cancer of oral.

Section B:-

Section B consists of structured questionnaire to assess knowledge on prevention of oral cancer among drivers.

Section C:-

5 point Likert scale to assess attitude on prevention of oral cancer among drivers

Section D:-

Correlation between pre test and post test knowledge and attitude on prevention of oral cancer with respect to drivers.

Section E:-

Association of post test level of knowledge and attitude on prevention of oral cancer among driver with their demographic variables.

The first objective of this study was to assess the existing knowledge regarding

prevention of oral cancer among drivers of Dhanalakshmi Srinivasan Groups.

The finding reveals that out of 50 samples 35(70%) had inadequate knowledge;15 (30%) of them had moderate knowledge;0(0%) none of them had adequate knowledge and 9(18%) of them had unfavourable attitude;38(76%)of them had favourable attitude;3(6%) of them had most favourable attitude.

The second objective of this study was to determine the effectiveness of structured teaching programme on knowledge and attitude regarding prevention of oral cancer among drivers of Dhanalakshmi Srinivasan Groups.

The finding reveals that out of 50 samples with respect to pre test knowledge, the mean value was 6.12 with SD 1.91 and the post test knowledge among drivers, the mean value was 16.42 with SD 1.37. The paired 't' value was 21.35, The results indicated that the post test mean score was higher than the pre test mean score. The difference between pre test and post test mean score statistically significant at  $p=1.645$  level. The analysis reveals that with respect to attitude among drivers and the pre test mean value of 46.48 with SD 12.82 and the post test mean value of 82.32 with SD 57.06. . The paired 't' value was15.69, The results indicated that the post test mean score was higher than the pre test mean score. The difference between pre test and post test mean score statistically significant at  $p=1.645$  level.

The third objective of the study was to correlation between pre test and post test knowledge and attitude regarding prevention of oral cancer among drivers of Dhanalakshmi Srinivasan Groups.

This represents that there is a mild correlation with the knowledge among drivers ( $r =1.30$ ) and no correlation among drivers attitude ( $r =0.45$ ).

The fourth objective of the study was to find the association of post test knowledge and attitude scores regarding prevention of oral cancer among drivers with their selected demographic variables.

Chi square test was computed to determine the association between post test knowledge and attitude scores regarding prevention of oral cancer among drivers with their selected demographic variables. The finding reveals that there is significant association between the knowledge and the demographic variables of education. There is no association with other demographic variables. The finding reveals that there is significant association between the attitude and the demographic variables of age, education, family monthly income, personal habit. There is no association with other demographic variables.

The overall mean and standard deviation of post test knowledge and attitude score was higher than the pre test mean and standard deviation scores of knowledge and attitude of drivers among Dhanalakshmi Srinivasan Group, which represents significant gain of knowledge and most favourable attitude of drivers regarding prevention of oral cancer through the structured teaching programme. This shows that the structured teaching programme is effective.

## CONCLUSION

The following conclusions were drawn on the basis of the finding of the study. The finding of the pre test knowledge showed that none of the subjects had adequate knowledge on prevention of oral cancer, the finding of the pre test attitude showed that most of the drivers have unfavourable attitude on prevention of oral cancer. After STP they had gained knowledge especially in the areas of causes, sign and symptoms, risk factors, treatment and prevention of oral cancer, and also they

have gained favourable attitude after the STP.

The paired 't' test which was computed between pre test and post test knowledge and attitude scores indicates a true gain in the knowledge and attitude regarding prevention of oral cancer among drivers.

Hence it was concluded that STP was an effective method to improve the knowledge and attitude regarding prevention of oral cancer among drivers.

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