

EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON PREVENTION OF ORAL CANCERS AMONG THE ADULTS OF MYLAI BALAJI NAGAR, PALLIKARANAI, CHENNAI***K. Mageswari Mohanram**

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ABSTRACT

Oral cancer is the major health problem in India. Squamous cell carcinoma of the oral cavity has the highest incidence in India. Most of the public is not aware of health hazards due to tobacco use, excessive alcohol intake and poor oral hygiene. This study aims to assess the level of knowledge of adults on prevention of oral cancer after giving the structured teaching programme. Quantitative Pre-experimental one group pretest-posttest design was selected. The study was conducted at Mylai Balaji Nagar, Pallikaranai, Chennai. The investigator selected 50 adults with non-probability convenient sampling technique. Pretest was collected by using Self Structured Questionnaire, followed by Structured teaching were given on prevention of oral cancer for 45 minutes on the same day itself. Then posttest was done after 7 days. The study revealed that there is a highly significant difference in the level of knowledge of adults with pretest and posttest after the structured teaching programme ($P < 0.01$). The study concluded that structured teaching programme was very effective in improving the knowledge of adults on prevention of oral cancers.

KEYWORDS: Cancer, Squamous cell carcinoma Structured teaching programme, Pre-experimental, Tobacco, Alcohol.

INTRODUCTION

Oral cancers are dreadful, deadly and merciless disease, if left leads to death. Oral cancers can appear as a growth or sore in anywhere of the mouth that does not cure. It includes any malignant neoplasm which is found on the lip, floor of the mouth, cheek lining, gingiva, palate or in the tongue. Around world one third of oral cancer cases are present in India. Oral cancers are one among the top three types of cancers in India. It is one of the major public health problem in India. 90 – 95% of oral cancer patients are affected with Squamous cell carcinoma. Everyday 5 people in India die due to oral cancer everyhour.^[1] The International agency for research on cancer has predicted that India's incidence of cancer will increase over 1.7 million in 2035. Men age over 50 has the highest risk of developing oral cancer than women.^[2] According to Indian council of Medical and research stated that in India males are most commonly affected with lip and oral cavity cancers, and it also reported that the number of fresh cancer cases and deaths have been rising since 2012. According to the India fact sheet of GLOBOCAN 2018, cancer of the lip and oral cavity showed a huge increase of 114.2% with 56,000 cases in 2012 that increased to 119,992 in 2018.^[3] The people who smoke cigarettes, cigars or pipe smokers are having

six times highest risk for oral cancers than non-smokers. Hence smoking is the highest risk factor for oral cancer. Tobacco usage in the form of dip, snuff, or chew leads to the development of cancers of cheek, gums, and lining of the lips. Excessive alcohol drinkers have 6 times higher risk than non drinkers. Human Papilloma virus infection are also the etiologic risk factors for Oropharyngeal Squamous Cell Carcinoma (OSCC). Family history of cancer and excessive sun exposure, especially at a young age, poor dental care and poor diet are also the risk factors for oral cancer.² 90% of oral cavity cancers are related with tobacco use and excessive alcohol consumption and its incidence gets increased when both consumed together. Oropharyngeal cancers are very common in developing countries than developed countries.^[4]

In the early stages of oral cancer there are no signs and symptoms present. The affected persons may develop the patches inside mouth or on the lips like leukoplakia (white patches), or erythroplakia (red patches) or erythroleukoplakia (mixed red and white patches). White patches are more common. Rogers et al. conducted a case study and found that non-healing ulcer is the hallmark sign of Oral Cancer, and only one in three individuals could correctly identify it.^[5] Patients may also develop the

other symptoms like bleeding, pain, or numbness in the mouth, a lump or thickening of the gums or lining of the mouth, swelling in the jaw, sore throat, a hoarse voice, difficulty chewing or swallowing, difficulty moving the tongue or jaw.^[6] Early diagnosis of oral cancers leads to better survival of 84%. Early identification of asymptomatic patients helps in preventing devastating consequences. Oral cancer screening helps in identifying the lesion at the earliest stage.^[7] This fact emphasizes the importance of teaching programmes on oral cancer, its risk factors, clinical management, diagnostic studies and prevention. This current article attempts to estimate the pretest and posttest level of knowledge on prevention of oral cancer among adults. The early detection of oral cancer not only improves the cure rate and also reduces the cost of treatment and morbidity. The hypothesis of the present study is that there may be differences between the pretest and posttest level of knowledge on oral cancer after a structure teaching programme.

Statement of the problem

Effectiveness of structured teaching programme on prevention of oral cancers among the adults of Mylai balaji nagar, Pallikaranai, Chennai.

OBJECTIVES

- To assess the level of knowledge regarding prevention of oral cancers before and after the structured teaching programme.
- To evaluate the effectiveness of structured teaching programme on prevention of oral cancers.
- To associate between the pretest and posttest level of knowledge on prevention of oral cancers among adults with their demographic variables.

Hypothesis

H1: There will be significant difference in the level of knowledge regarding prevention of oral cancer among adults before and after the structured teaching programme.

H2: There will be significant association between pretest and posttest level of knowledge on prevention of oral cancer with demographic variables.

METHODS AND MATERIALS

The present study was conducted to assess the effectiveness of structured teaching programme on

Scoring Procedure

SCORE	PERCENTAGE	INTERPRETATION
0-17	Inadequate knowledge	0-33%
18-34	Moderate Knowledge	34-66%
35-50	Adequate Knowledge	67-100%

In pretest the study participants were given 30 minutes to complete the self structured questionnaire followed by

prevention of oral cancers among the adults. A Quantitative Pre-experimental design was used to assess the level of knowledge on prevention of oral cancers among adults. One group pretest – posttest method was used. 50 adults were selected by using Non- Probability Convenience sampling method from Mylai Balaji Nagar, Chennai, Southern India. Adults of the age group between 31 – 60 years and who were willing to participate in the study were included. Oral consent from the study participants were obtained.

Before the study, permission were received from local authorities of the community. A pilot study were carried out with a sample of 10 adults, similar to those included in the final study. Content validity analysis of the tool was performed by the experts and proved reliable and valid. Before the study a brief introduction about study was given by the investigator to the study participants. The research tool consists of two sections. The first section collects the socio-demographic variables which includes personal characteristics of respondents, such as age, sex, marital status, educational status, family monthly income, religion, family history of oral cancer, type of family, duration of smoking and tobacco chewing habits, family history of smoking, tobacco chewing and alcohol drinking. The second section consists of Self Structured Questionnaire. The questionnaire was divided into three major parts for ease of administration. The first part consists of the questions related to risk factors and signs and symptoms of oral cancers, second part consists of questions related to prevention of oral cancers, the third part consists of the questions related to oral self examination. The questionnaire has 50 items with four responses of each question. The correct answer carries 1 mark and the wrong answer carries 0 marks.

The questionnaires were delivered to the adults to assess the pretest level of knowledge on prevention of oral cancer. The data collected would not be used for anything except the research aim. Confidentiality of responses was assured. Respondent's oral consent was taken into account while filling the questionnaire.

Structured Teaching Programme was intervened for 45 minutes by PDF presentation on prevention of oral

cancer on the same day itself. After one week posttest were assessed with the same self structured questionnaire. A complete cooperation was received from the participants throughout the study.

Collected data were tabulated and analyzed by using descriptive and inferential statistics. By using descriptive statistics frequency and percentage distribution were used to analyse the demographic variables and the level of knowledge. Mean and Standard deviation were used to analyse the difference in pretest and posttest knowledge on prevention of oral cancer. By using Inferential Statistics Student's paired 't' test was used to analyse the effectiveness of structured teaching programme on prevention of oral cancer. Chi-Square test was used to analyze the association between pretest and posttest level

of knowledge on prevention of oral cancer and the demographic variables.

RESULTS

The study participants demographic variables were analysed by using frequency and percentage distribution. Majority 38% were between 41-50 years, 44% of samples were males and 56% were females. Majority 84% were married and had upto school education. Majority 68% were working as coolie. Majority 26% were having the habit of smoking for more than 2 years and 18% were having the habit of chewing tobacco for more than 2 years. 16% of samples were having the family history of cigarette smoking, 10% of samples were having the family history of tobacco chewing and 18% of samples were having the family history of alcohol drinking.

Table 1: Frequency And Percentage Distribution Of Pretest Level Of Knowledge On Prevention Of Oral Cancers Among Adults In Mylai Balaji Nagar, Pallikaranai, Chennai.

Level of knowledge	Frequency	Percentage
Inadequate Knowledge	14	28%
Moderate Knowledge	35	70%
Adequate Knowledge	1	2%

Table 1 focussed on pretest level of knowledge on prevention of oral cancer. Among 50 adults 14 (28%) had inadequate knowledge, 35 (70%) belongs to moderate knowledge, and 1 (2%) had adequate

knowledge. This result inferred that most of the adults had inadequate to moderate level of knowledge and they must in need of education.

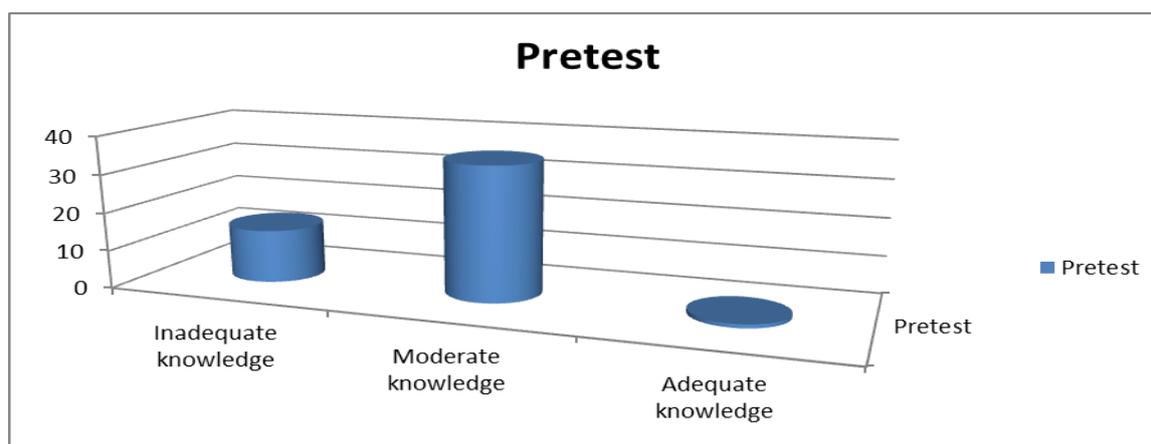


Fig. 1: Frequency and Percentage distribution of Pretest level of knowledge on prevention of oral cancer among adults in Mylai Balaji Nagar, Pallikaranai, Chennai.

Table 2: Frequency and Percentage distribution of Posttest level of knowledge on prevention of oral cancers among adults in Mylai Balaji Nagar, Pallikaranai, Chennai.

Level of knowledge	Frequency	Percentage
Inadequate Knowledge	4	8%
Moderate Knowledge	18	36%
Adequate Knowledge	28	56%

Table 2 focussed on posttest level of knowledge on prevention of oral cancer after giving the structured teaching programme. Among 50 adults 04 (08%) had inadequate knowledge, 18 (36%) belongs to moderate

knowledge, and 28 (56%) had adequate knowledge. This result inferred that most of the adults had adequate level of knowledge after giving the structured teaching programme.

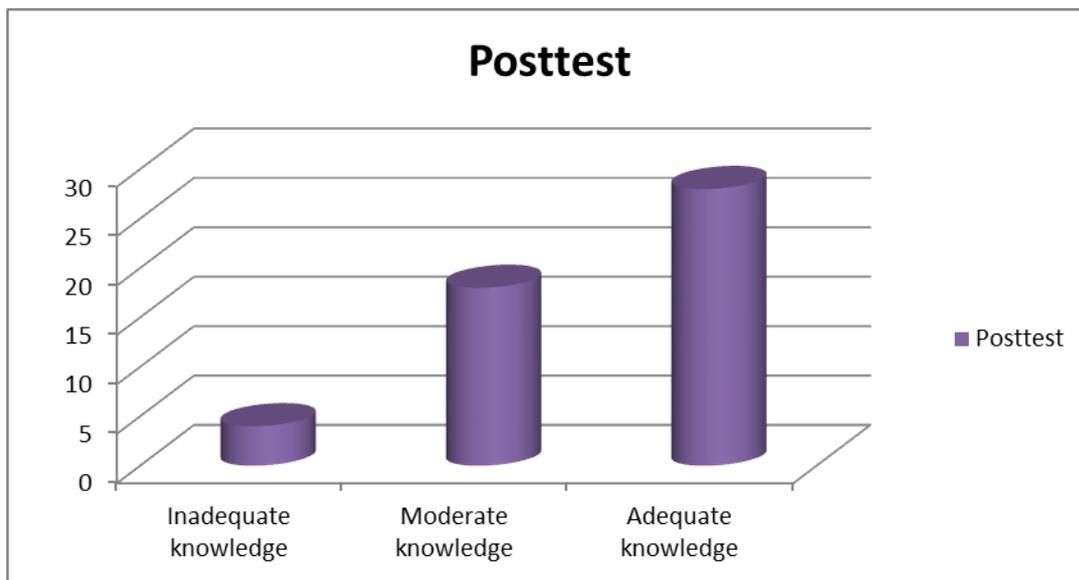


Fig. 2: Frequency and Percentage distribution of Posttest level of knowledge on prevention of oral cancer among adults in Mylai Balaji Nagar, Pallikaranai, Chennai.

Table 3: Comparison of Pretest And Posttest Level Of Knowledge on Prevention of Oral Cancers.

Level of knowledge	Pretest	Posttest
Inadequate Knowledge	14	04
Moderate Knowledge	35	18
Adequate Knowledge	01	28

Table 3 focussed on comparing the pretest and posttest level of knowledge on prevention of oral cancers after giving the structured teaching programme. This

comparison proved that in posttest the level of knowledge of adults on prevention of oral cancer got improved than in pretest.

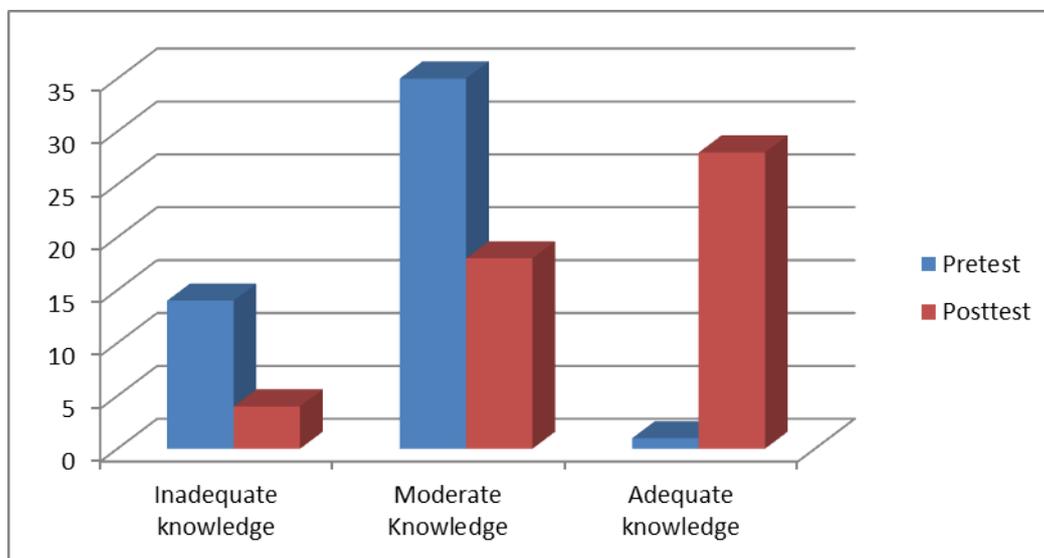


Fig. 3 Comparison Of Pretest And Posttest Level Of Knowledge On Prevention Of Oral Cancer.

Table 4: Effectiveness of Structured Teaching Programme.

Group	Difference in mean	Difference in standard deviation	Student paired 't' test value	Table value
Difference In Pretest And Posttest Knowledge Score	10.3	6.09	11.9	P<0.01 **

Table 4 proved that the Structured teaching programme was very effective in improving the level of knowledge of adults on prevention of oral cancer ($p < 0.01$).

Chi Square test was used to find out the association between demographic variables and the pretest and posttest levels of knowledge on prevention of oral cancer.

There is a significant association between the level of knowledge on prevention of oral cancers and the selected demographic variables such as duration of smoking habits and the duration of tobacco chewing habits in pretest and with educational status in posttest.

DISCUSSION

Since the oral cancers considered as deadly disease, many of the adults in our society have lack of knowledge on this. Understanding the knowledge level of the adults is vital for early detection and to reduce the mortality and morbidity of oral cancers. Many studies suggested that smoking and alcoholism are the major risk factors of oral cancers. Arishka Devadiga, et al., found that 70% of adults are aware that tobacco is the risk factor for oral cancers. Awareness about oral cancers depends on the individual level of education. Gutkha and Beedi are the cheapest tobacco products that is commonly sold in India. The incidence of oral cancers are getting increased year by year and young adults becomes the victim due to lack of knowledge and less awareness programmes.^[7] Bhagya Seela S and ShanmugaRaju assessed the effectiveness of structured teaching programme on knowledge regarding preventive measures of oral cancer among late adolescents in selected Junior College, Karminagar, Telangana, India. This study results showed that late adolescents have low knowledge regarding preventive measures of oral cancer and structured teaching programme was very effective in improving the knowledge and attitude regarding prevention of oral cancers among late adolescents.⁹ Educational interventions helps the adult population in modifying their behavior in healthiest way. This present study mainly focused on creating awareness of adults by giving structured teaching programme.

Major findings of the study

- The findings of the study was revealed that 28% of the adults have inadequate knowledge, 70% of adults have moderate knowledge and only 2% of adults have adequate knowledge in pretest and 8% of adults have inadequate knowledge 36% of adults

have moderate knowledge and 56% of adults have adequate knowledge in posttest.

- There is a significant association between level of knowledge of adults and the selected demographic variables such as duration of smoking and tobacco chewing habits in pretest and with educational status in posttest.

CONCLUSION

The study concluded that the level of knowledge on prevention of oral cancers had significant difference among adult population in pretest and posttest. This showed the structured teaching programme was very effective ($P < 0.01$) in improving the knowledge of the adult population regarding the prevention of oral cancers. This proved that creating awareness and widespread educational interventions helps to reduce the increasing incidence of oral cancers in India.

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