

# Effectiveness of Planned Teaching Programme on the Knowledge and Practices regarding Primary Prevention of Oral Cancer among Students of a Selected College in Mumbai

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**Abstract:** Introduction: Cancer refers to a general term involving abnormal cell growth in any part of the body with the potential to invade or spread to other parts of the body. After cardiovascular diseases, Cancer is the second leading cause of death globally. Among all types of cancer, Oral cancer is one of the ten most common cancers in the world which will remain a major health problem in India. Early detection of cases and adoption of primary prevention methods may delay many deaths and reduced the considerable costs associated with morbidity and management of oral cancer. Objectives: Objectives of the study are to assess the knowledge and practices regarding primary prevention of oral cancer among college students before and after planned teaching. Also to determine the relationship between knowledge and practices regarding primary prevention of oral cancer among students after planned teaching and to find the association of post test knowledge scores and practice scores regarding primary prevention of oral cancer with selected demographic variables after planned teaching. Design: A single group pretest and post test design was used to study the effectiveness of planned teaching on the knowledge and practices regarding primary prevention of oral cancer. The students included in the study were 60 students studying in first year of Bachelor's degree in commerce, selected by non-probability sampling technique from E.B. Madhavi senior college, Dombivli. Necessary administrative permission obtained from concern authority. Structured questionnaires were used to assess knowledge and inventory checklist was used to assess practices regarding primary prevention of oral cancer. Result: The study revealed that an improvement was seen in all the areas. The total increment in scores and percentage of pre test from 606(40.4%) to 814(54.26%) in post test knowledge scores and percentage regarding primary prevention of oral cancer. Also, the total increment in scores and percentage of pre test from 489(58.21%) to 534(63.57%) in post test practice scores and percentage regarding primary prevention of oral cancer. An overall increase of 208(13.86%) was seen in post test knowledge scores and 45(5.36%) was seen in post test practice scores of the students regarding primary prevention of oral cancer. The calculated "t" value were 42.83 for knowledge and 71.54 for practice and both values were found statistically significant at 0.05 level. Conclusion: The outcome of the study revealed that the planned teaching significantly improved knowledge and practices of the students regarding primary prevention of oral cancer. This was indicated by increment in the scores of knowledge and practices after planned teaching.

**Keywords:** Knowledge, Practice, Planned teaching, oral cancer, primary prevention

## 1. Introduction

Cancer refers to a general term involving abnormal cell growth in any part of the body with the potential to invade or spread to other parts of the body. The abnormal growth and division observed in cancer cells are caused by damage in DNA of cells. Benign tumors and malignant tumors are the two forms of tumors. Benign tumors do not grow and spread like malignant tumors so they are non-cancerous. Malignant tumors, on the other hand, grow and spread to other areas of the body. After cardiovascular diseases, Cancer is the second leading cause of death globally. The Global Burden of Disease study reported that 8.3% of the total deaths and 5.0% of the total DALYs (disability-adjusted life-years) in India in 2016 were due to cancer. In 2016, the incidence and prevalence of lip and oral cavity cancer was 1, 13,000 and 3, 97,000 respectively. According to World Health Organization, the number of cases of cancer will be double in developing countries by 2020. Early detection of cases and adoption of primary prevention methods may delay many deaths and reduced the considerable costs associated with morbidity and management of oral cancer.

## 2. Statement of problem

"A study to assess effect of planned teaching on the knowledge and practices regarding primary prevention of oral cancer among students of a selected college in Mumbai."

## 3. Objectives

- 1) To assess the knowledge regarding primary prevention of oral cancer among college students before and after planned teaching.
- 2) To identify the practices regarding primary prevention of oral cancer among college students before and after planned teaching
- 3) To determine the relationship between knowledge and practices regarding primary prevention of oral cancer among students after planned teaching.
- 4) To find the association of post test knowledge scores and practice scores regarding primary prevention of oral cancer with selected demographic variables after planned teaching.

**4. Hypothesis**

- 1) H<sub>1</sub> - There will be a significant difference between pre-test and post-test knowledge scores regarding primary prevention of oral cancer among the college students at 0.05 level of significance.
- 2) H<sub>2</sub> - There will be a significant difference between pre-test and post-test practice scores regarding primary prevention of oral cancer among the college students at 0.05 level of significance.
- 3) H<sub>3</sub> - There will be a significant association between post test knowledge and practice scores of students with selected demographic variables such as age, gender, type of family, monthly income, family habits, individual habits, information of oral cancer and source of oral cancer information at 0.05 level of significance.
- 4) H<sub>4</sub>- There will be significant relationship between knowledge and practice score regarding primary prevention of oral cancer after planned teaching among the college students at 0.05 level of significance.

**5. Materials and Methods**

The research approach adopted for this study is the quantitative descriptive approach. The research design used for this study is single group pre-test post-test design. The study was conducted at an E.B. Madhavi senior college, Dombivli, Mumbai. The sample size of this study comprised of 60 students studying in in first year of Bachelor's degree in commerce, who met inclusive criteria were selected through the non-probability sampling technique. Structured questionnaire with 25 questions divided in seven sections i.e. Concept of oral cancer, pathogenesis, etiology and risk factors, Clinical manifestations and Primary Preventions of

oral cancer was used for eliciting the level of knowledge and Inventory checklist with 12 questions used for reported practices of the college students regarding primary prevention of oral cancer. The reliability was done by Pearson's correlation method. It was found 0.99 for structured questionnaire and inventory checklist and tool was considered reliable for proceeding with main study.

A letter requesting permission was sent to the concerned authority of the E.B. Madhavi senior college, Dombivli, Mumbai, during month of June, 2018 and permission was granted for the same. The data was collected in the month of September, 2018 from 60 participants using non-probability convenient sampling. The purpose of questionnaire was explained to the participants with self-introduction. Written consent was obtained from participants for participation in the study before administration of pretest. The questionnaire was distributed to the participants and they took 15 minutes to fill up the answers for the demographic data with structured questionnaire in the pretest. After conducting pre-test, the planned teaching including aspects like meaning, causes and risk factors, signs and symptoms, investigation, treatment and primary prevention of oral cancer was given to students on same day. It was a 45 minutes session. A same group of 60 students was approached on seventh day of their planned teaching and the post test was administered to them.

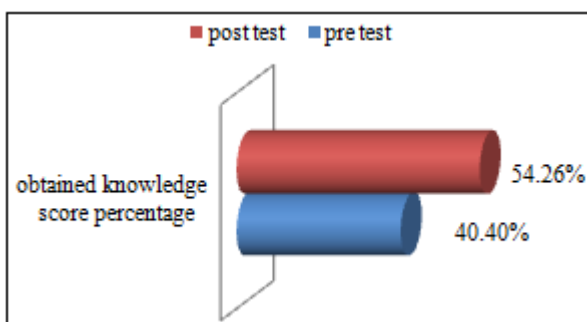
**6. Findings of the study**

- 1) To assess the knowledge regarding primary prevention of oral cancer among college students before and after planned teaching.
- 2) To identify the practices regarding primary prevention of oral cancer among college students before and after planned teaching

**Table 1**

Structured questionnaire Section	Maximum attainable knowledge score	Obtained knowledge score		Knowledge score percent		Percentage difference
		Pretest	Posttest	Pretest	Posttest	
Total	1500	606	814	40.4	54.26	13.86

Table no. 1 denotes that, The total increment in scores and percentage of pre test scores from 606(40.4%) to 814(54.26%) in post test. An overall increase of 208(13.86%) was seen in post test knowledge scores and percentage of the students regarding primary prevention of oral cancer.

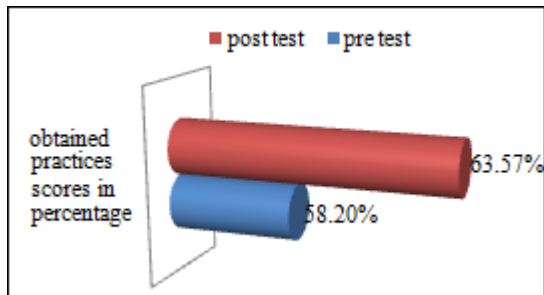


**Figure 1:** Distribution of students with regard to obtained knowledge percent before and after planned teaching

Table 2

Structured questionnaire Section	Maximum attainable knowledge score	Obtained knowledge score		Knowledge score percent		Percentage difference
		Pretest	Posttest	Pretest	Posttest	
Total	840	489	534	58.2	63.57	5.36

Table no. 2 denotes that, The total increment in scores and percentage of pre test scores from 489(58.2%) to 534(63.57%) in post test. An overall increase of 45(5.36%) was seen in post test practices scores and percentage of the students regarding primary prevention of oral cancer.



**Figure 2:** Distribution of students with regard to overall obtained practices percent before and after planned teaching

- To determine the relationship between knowledge and practices regarding primary prevention of oral cancer among students after planned teaching. The study shows that there was moderate positive correlation between knowledge and practices as calculated value of  $r$  was 0.464 after planned teaching.
- To find the association of post test knowledge scores and scores regarding primary prevention of oral cancer with selected demographic variables after planned teaching.

The study revealed that there was no significant association in knowledge scores and practice scores when compared to age, gender, type of family, income of family, habits of family, habits of individual, information of oral cancer, and source of information.

## 7. Conclusion

The outcome of the study revealed that the planned teaching significantly improved knowledge and practices of the students regarding primary prevention of oral cancer. This was indicated by increment in the scores of knowledge and practices after planned teaching. The result also revealed that there was no significant association of knowledge and practices scores with specific demographic variables. In this study, there was a moderate positive correlation seen in the knowledge and practices of the students regarding primary prevention of after planned teaching. Thus it can be concluded that knowledge and practices both are independent on each other and leads to overall improvement. Hence, it can be concluded that planned teaching is an effective method to improve learning outcome.

## 8. Recommendations for the Study

- A comparative study can be done between two different academic years to assess their knowledge and practices of primary prevention of oral cancer.

- Descriptive study can be done to assess the effect of planned teaching with other types of cancer.
- A study can be carried out to compare the effectiveness of a booklet versus planned teaching.
- A comparative study can be done to find out knowledge and practices among different groups like teachers, parents and nurses etc.
- It can be conducted as a longitudinal study.

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