



## AWARENESS OF ORAL CANCER AMONG NON MEDICAL STUDENTS: A SURVEY

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### ARTICLE INFO

#### Article History:

Received 8<sup>th</sup> December, 2016

Received in revised form 16<sup>th</sup> January, 2017

Accepted 14<sup>th</sup> February, 2017

Published online 28<sup>th</sup> March, 2017

### ABSTRACT

**Objective:** To know the awareness of oral cancer and their attitude and habits of tobacco use among non-medical students.

**Methods:** The present survey was carried out from 1st December to 30 December, 2016 in non medical universities of chennai. The study population included students ranging from 19 to 25 years of age who had no background knowledge of medicine and were not related to any branch of the medical sciences. A total of 100 students were randomly selected in this study. The information was gathered by asking questions using a well structured questionnaire covering aspects regarding knowledge about oral cancer, causative factors of oral cancer, dental attitude of the patients. The questionnaire was explained to the students completely prior to handing it out to them. Study protocol and the use of data for research was fully explained to the students to get fully informed and understood content. The data collected was analysed by using Microsoft Excel 2007.

**Results:** In this study 60% students were males and 40% were females. 84% of students were familiar with the word oral cancer, 42% of students were aware that cigarette can cause oral cancer while 33% stated snuff dipping as cause of oral cancer. 45% students thought lump is the sign of oral cancer. With regards to frequency of visiting a dentist 55% said that they will visit a dentist in trouble.

**Conclusion:** Educated population of this region are unaware mainly about risk factors. 22% students had misconception that dental fillings cause oral cancer. 43% of students think that oral cancer is communicable. This affects the cancer patient psychologically. 55% of students visit the dentist only when they are in pain.

So it is important that routine visits of people is necessary as prevention is better than cure. This study showed that the educated population of this region is unaware of basic knowledge about oral cancer especially about its signs and symptoms.

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### INTRODUCTION

Oral cancer is the 6 most commonly reported malignancy worldwide.(1) Although many types of cancer occur in oral cavity, about 90% of these are squamous cell carcinomas.(2) Out of the many factors associated with oral cancer, tobacco usage has been identified as the strongest.(3) Oral cancer is becoming a major health concern because of the recent rise in its incidence especially in underdeveloped countries. According to worldwide statistics an estimated 263900 new cases were found with 128000 deaths annually worldwide.(4) About 58% cases of oral cancer occur in south and south east Asia.(5) Likewise the condition in India is far worse, according to statistics by WHO(GLOBOCAN 2008) overall oral cancer is second most commonest disease in India with deaths occurring annually. In spite of the increased mortality and morbidity oral cancer remains may have a better prognosis if it's detected at an early stage.

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Thus awareness from signs of oral cancer and knowledge about its causative factors is very important as majority of the public still remains unaware of basic knowledge about oral cancer.(6)

### MATERIALS AND METHODS

The present survey was carried out from 1st December to 30 December, 2016 in non medical universities of chennai. The study population included students ranging from 19 to 25 years of age who had no background knowledge of medicine and were not related to any branch of the medical sciences. A total of 100 students were randomly selected in this study. The information was gathered by asking questions using a well structured questionnaire (fig 1) covering aspects regarding knowledge about oral cancer, causative factors of oral cancer, dental attitude of the patients. The questionnaire was explained to the students completely prior to handing it out to them. Study protocol and the use of data for research was fully explained to the students to get fully informed and understood content. The data collected was analyzed by using Microsoft Excel 2007.

**Awareness of oral cancer among non medical students: A survey**

1. What is the type of cancer most commonly heard?  
a.) Lung cancer b.) Skin cancer c.) Cervical cancer d.) oral cancer
2. Are you familiar with word oral cancer.  
a.) Yes b.) No
3. What are the risk factors for oral cancer  
a.) cigarette smoking b.) snuff dipping c.) Dental fillings d.) Pollution  
e.) Drinking
4. What is the source of awareness of risk factors  
a.) Television & Cinema b.) Newspaper c.) Books & Magazines
5. What are the signs of oral cancer  
a.) Lump b.) colour change in oral mucosa c.) Ulceration
6. Do you think oral cancer is communicable  
a.) Yes b.) No
7. Do you think there is state before oral cancer where it alarms the risk of oral cancer  
a.) Yes b.) No
8. Do you think oral cancer is curable  
a.) Yes b.) No
9. Do you think oral cancer can occur at an young age  
a.) Yes b.) No
10. Do you think the below conditions if ignored can lead to cancer  
a.) Chronic irritation from a sharp tooth b.) Dentures
11. What do you think that compels you to visit a dentist  
a.) pain b.) changes in oral mucosa c.) Difficulty while eating d.) Malocclusion  
e.) Missing teeth

Fig. 1

**RESULTS**

Out of 100 students questioned 60% were males and 40% were females. In response to type of cancer most commonly heard of, 37% of college students were familiar with lung cancer, 32% skin cancer and 15% cervical cancer while only 16% knew the word oral cancer. (fig 2)

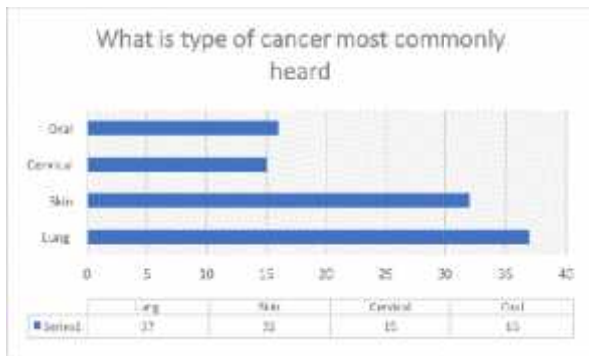


Fig.2

About 84% students are familiar with term oral cancer where as 16% were not. (Fig 3)

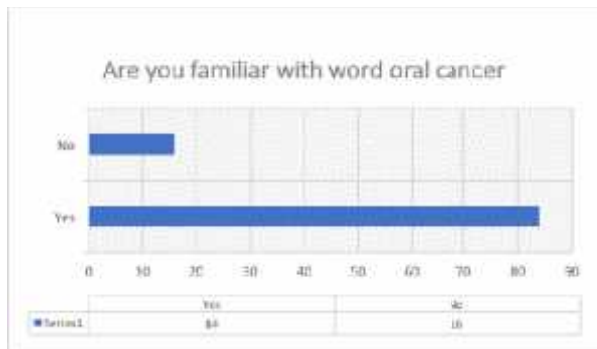


Fig. 3

Regarding risk factors for oral cancer 41% students answered cigarette smoking, 30% snuff dipping, 22% dental fillings, 3% pollution, while 4% identified drinking to be linked with oral cancer. (fig 4)

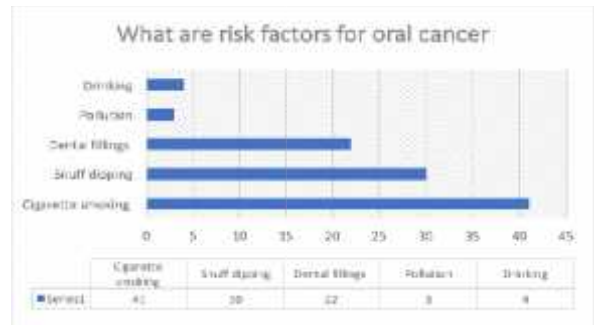


Fig. 4

About source of awareness of risk factors for oral cancer 74% students answer books & magazines, while 16% news paper. (fig 5)

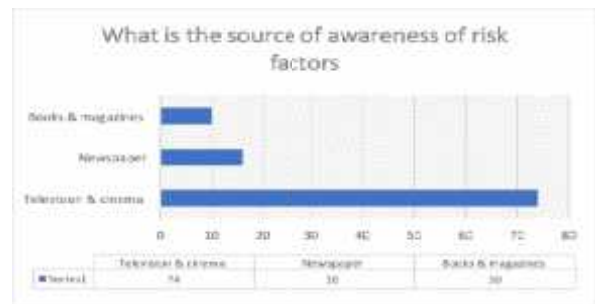


Fig. 5

About 45% thought lump, 31% color change in oral mucosa while 24% said an ulcer could be the early sign of oral cancer. (fig 6)

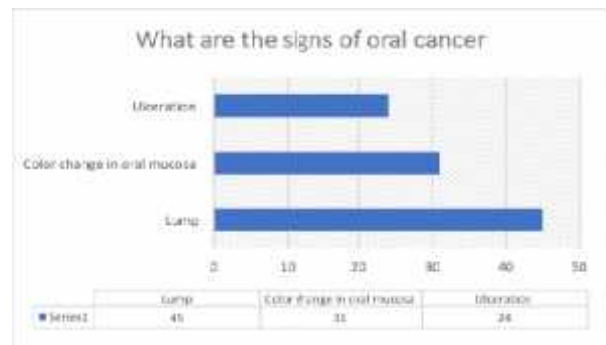


Fig. 6

About 43% students thought oral cancer is communicable where as 57% students thought it wasn't.(fig 7)

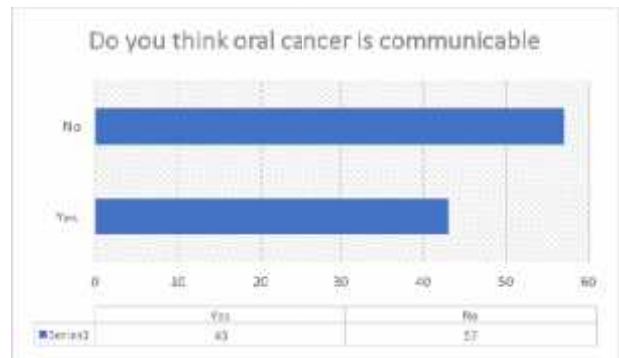


Fig 7

About 71% students thought there is state before oral cancer where it alarms the risk while 29% didn't think so.(fig 8)

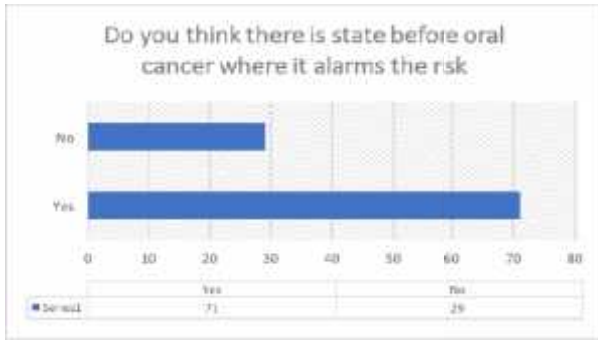


Fig 8

About 59% students thought that oral cancer is curable while 41% thought it is not curable. (fig 9)

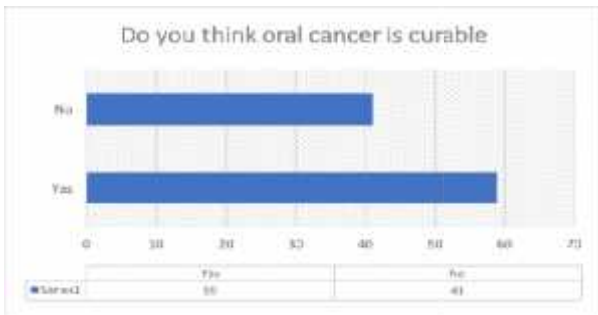


Fig 9

About 69% students thought oral cancer can occur at young age while 32% didn't think so. (fig 10)

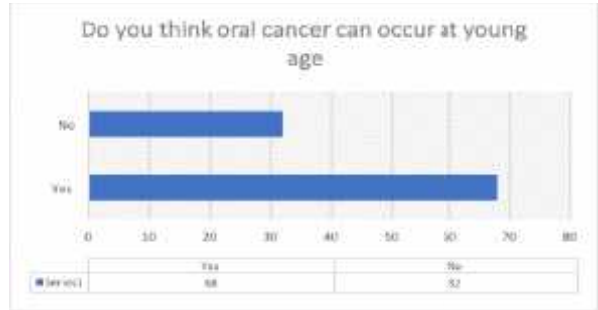


Fig 10

About 67% students answered chronic irritation from sharp tooth if ignored can lead to cancer while 33%students thought denture. (fig 11)

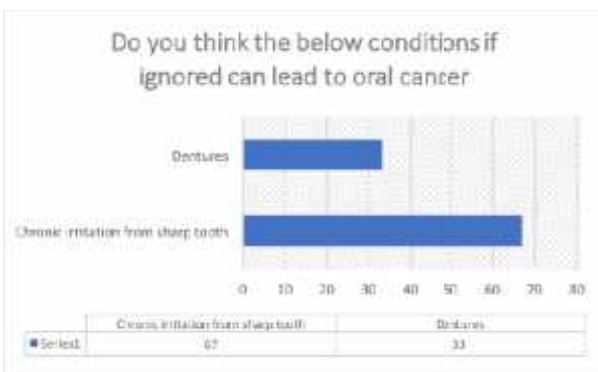


Fig 11

Regarding dental attitude and attendance 55% of students would visit a dentist only when in trouble & stated pain as the main reason for dental visit, 23% because of changes in

oral mucosa, 13% for difficulty in eating, 4% because of malocclusion, 5% b cause of missing tooth.(fig 12)

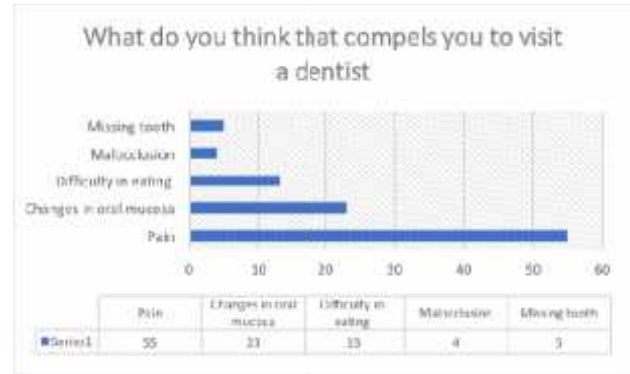


Fig 12

## DISCUSSION

In the present study it was found only 16% of students were familiar with oral cancer, while 15 % were familiar with cervical cancer. This is in agreement with studies done by Warnakulasuriya (7)and Rogers (8) where less number of people were aware with the term oral cancer & cervical cancer. However in another survey done in Britain in 2006 during oral cancer awareness week there was an improvement in peoples knowledge about oral cancer, may be due to increased media attention given to oral cancer during awareness week.(9) The low familiarity among the present population indicates the lack of Oral cancer awareness among the youngsters.

With regards to knowledge about risk factors of oral cancer, 71% of students identified smoking and snuff dipping to be associated with oral cancer there were also 22% who thought dental fillings caused oral cancer. This is in accordance with a study done in USA where 67% of adults could identify tobacco use to be linked with oral cancer.(10) Similarly in a study done in UK 90% of respondents thought smoking caused oral cancer.(11) Also in a study carried out in Germany more than half of responders could identify link between oral cancer and tobacco.(12) This may be due to the fact that this study was carried out among educated population and as such most of them were aware of tobacco as to be a cause for oral cancer.22% students had misconception that dental fillings cause oral cancer. Results of the present study are in contrast to the studies done in Iran (13) and Srilanka (14) where less number of people were aware of risk factors for oral cancer. This may be due to the fact that these studies were carried among patients in hospital settings as compared to the student population in the present study.

Students were not aware of the key signs of oral cancer. In regards to the signs of oral cancer 24% thought a long standing non healing ulcer could be indicative of malignancy. These results are in accordance with study done in Florida where one half of adult population did not think red patches or bleeding could indicate oral cancer.(15) However the results are contradictory to studies carried out in North Carolina (16) and Turkey (17) where majority of population were unaware of oral cancer signs.(18) Reason may be due to the fact that organizational efforts and policies on government level

are active in the west due to which an increased level of awareness especially regarding signs is seen. This is an important observation since lack of self detection by the patient particularly in early stages of disease leads to delay in diagnosis thus increasing the mortality and morbidity rate.(19) Still many people are ignorant of other signs of oral cancer like erythroplakia or swelling or any other precancerous state.

When students were asked about the frequency of visit to the dentist, 45% of students answered that they would visit dentist only when in trouble. Furthermore 55% of students stated pain as the main reason for dental visit while only 23% would go to a dentist when they have an ulcer. This is in accordance to a study in Saudi Arabia where pain was stated as main reason for dental visits.(20) This may be due to the fact that knowledge regarding proper oral health and the need for oral examination is lacking in their population. This is a significant observation since it shows that even in the educated population of this region is unaware of the importance of regular dental examination .This point was also highlighted in a study done in USA where it was found that less than one third of the adult population had a proper cancer examination in the past.(21)

## CONCLUSION

Educated population of this region are unaware mainly about risk factors. 22% students had misconception that dental fillings cause oral cancer. 43% of students think that oral cancer is communicable. This affects the cancer patient psychologically. 55% of students visit the dentist only when they are in pain.

So it is important that routine visits of people is necessary as prevention is better than cure.

This study showed that the educated population of this region is unaware of basic knowledge about oral cancer especially about its signs and symptoms.

## Acknowledgement

The authors are thankful to the participants of the study, who co operated in the completion of the work.

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