

**A STUDY ON THE KNOWLEDGE OF ORAL CANCER AMONG THE DENTAL
PATIENTS IN A SELECTED DENTAL COLLEGE HOSPITAL IN SOUTHERN
KARNATAKA**

Mainaz¹, Gladys Colaco², Mohammed Guthigar^{3*}
Assistant professor¹ Associate Professor² Professor³
Department of social work
Yenepoya Deemed to be University

Corresponding Author*
Dr. Mohammed Guthigar
Professor
Department of social work
Yenepoya Deemed to be University

ABSTRACT

Background of the study: The incidence of oral cancer is rising in most countries, especially in developing countries. Lack of public awareness regarding oral health, older age, use of tobacco and its products, poor oral hygiene and low intake of fruits and vegetables are some of the implications for oral cancer. This study was done to assess the knowledge about oral cancer among dental patients who were taking treatment in a private Dental College Hospital. **Materials and Methods:** A descriptive study was conducted with a total of 190 dental patients through purposive sampling technique using self-administered questionnaire. **Results:** 73% of the participants were females with mean age of 36.5 years, 75.3% married, studied up to PUC (71.4%), majority of them homemakers with no income (67.9%) and 61% were Muslims. **Knowledge about the oral cancer:** 57.4% had average knowledge, 26.8% good and whereas 15.8% had poor knowledge. The participant's knowledge about oral cancer was not significantly associated with demographic variables except religion (0.010). **General information and opinion regarding oral cancer:** According to 39.5% of the participants women were mostly affected by oral cancer and most of them (81.6%) were not aware of which parts get affected by oral cancer. According to 48.4% participants' oral cancer is more prevalent in developed countries and 48.4% of them

consult medical doctor for the treatment if Oral Cancer is diagnosed. **Conclusion:** This study concludes that the dental patients had average knowledge about oral cancer.

Key words: oral, cancer, knowledge.

Introduction

It has been well-recognized that the cancers of the oral cavity and the pharynx are a public health problem and as a result, there are a great number of deaths and people suffering from illnesses or disability in many countries.¹ The incidence of oral cancer is rising in most countries, especially in developing countries.² Oral cancer, the 15th most common cancer globally, is one of the most life-threatening conditions worldwide.^{3,4} The major risk factors for oral cancer have been established by numerous studies, including smoking, alcohol consumption and betel quid chewing ⁵. Besides these habitual factors, other factors such as human papilloma virus (HPV) infection, low intake of fruits and vegetables ⁶ and genetic susceptibility have been shown to influence the pathogenesis of oral cancer⁷. Studies reported that a majority of patients have lack of knowledge to recognise the early signs and symptoms of oral cancer⁸. Some of the review of literature made the investigator to realise that oral cancer is one of the leading cancers. Hence the investigator decided to assess the knowledge among dental patient regarding oral cancer.

Materials and Methods

A descriptive study was conducted among 190 outpatients above 20 years of age visiting a private and DCI recognised dental college hospital in Mangalore, Southern Karnataka. Pre tested structured questionnaire was used for data collection. Out of 30 questions, 15 questions were on demographical details and 15 to assess the knowledge of oral cancer. Three-point

Likert scale was used with “Yes”, “No” and “Don’t Know” options for assessment of knowledge and each correct answer was given 5 points. Institutional ethical clearance was obtained before the data collection. Data was analysed using SPSS 20.0 version and Chi-Square test was used to find the association between the knowledge on oral cancer and with certain demographic variables($p < 0.01$).

Results

Table No.1: Distribution of Respondents by Socio-demographic characteristics

Socio-demographic factors	Number (%)
Sex	
Male	27%
Female	73%
Religion	
Muslim	61.1%
Hindu	32.6%
Christian	6.3%
Education	
Illiterate	8.4%
Primary	32.6%
Highschool	33.7%
PUC	8.4%
Degree	14.7%
Professional	2.1%
Occupation	
Housewife	47.9%
Coolie	15.8%
Government sector	9.5%
Private sector	4.2%
Self-employment	2.1%
Unemployment	20.5%
Marital status	
Married	24.7%
Unmarried	75.7%
Income	
No income	68.4%
Below 5000	10.5%
5000-10000	9.5%
10000-15000	4.7%
15000&above	6.8%

Out of 190 participants, majority of them were female (73%), unmarried (76%), mostly educated (92%), 32% were employed and their monthly income ranges between Rs <5000 to >15000.

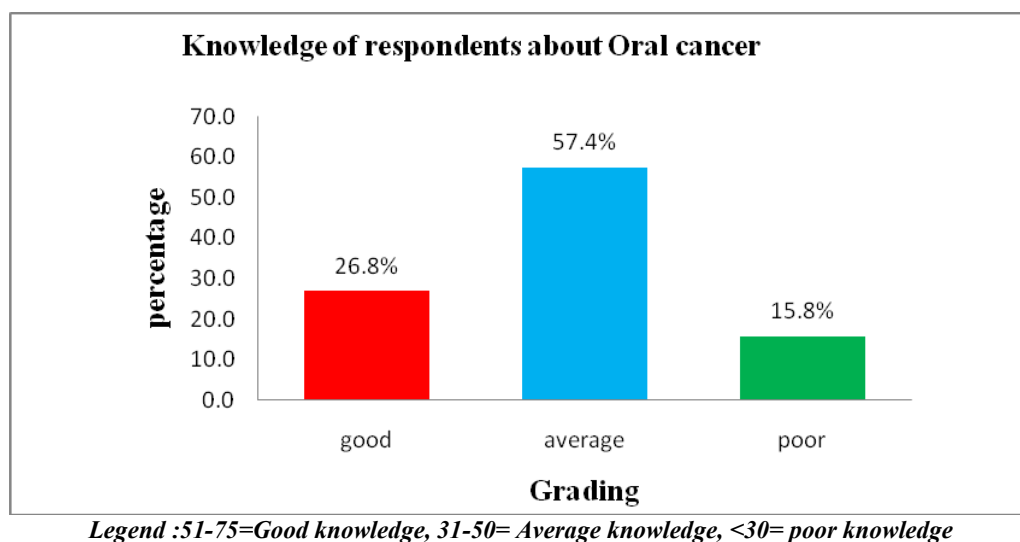


Figure 1: Distribution of participants by overall level of knowledge on oral cancer

The finding on participants overall level of knowledge on oral cancer shows that 57.4% had average, 26.8% good and 15.8% had poor knowledge.

Table No.2

**Association of participant's knowledge about oral cancer
with demographic variables**

SL.NO	Demographical variable	Chi square value	Interpretation	P value
1	Gender	0.363	Not Significant	0.834
2	Religion	13.244	Significant	0.010

3	Education	15.467	Not significant	0.116
4	Occupation	10.328	Not significant	0.421
5	Marital Status	0.511	Not Significant	0.774
6	Income	10.463	Not Significant	0.965

When the overall knowledge of participants regarding oral cancer compared with selected demographic variables except religion ($p=0.010$) none of the variables found statistically significant.

While comparing the religion of respondents to their knowledge and awareness about oral cancer it is found that majority 83.3% of respondents who belongs to Christian religion have average knowledge about oral cancer. 62.1% of Muslims and 43.5% of Hindu respondents have average knowledge about oral cancer.

While comparing the knowledge and awareness about the oral cancer to the education of the respondents it reveals that majority of the respondents have average knowledge about oral cancer who studied up to PUC and it is also noted that illiterate respondents also have average knowledge (68.8%). 25.0% of the respondents have poor knowledge about oral cancer that is illiterate.

While comparing the knowledge about oral cancer to the occupation of the respondents it is revealed that an equal percentage i.e.75% of the respondents have average knowledge about the oral cancer who is working in private sector and are self-employed. Among the unemployed 33.3% are having good knowledge about oral cancer.

While comparing the knowledge and awareness about the oral cancer to marital status 61.7% of the unmarried respondents' and 55.9% of married respondents have average knowledge

about oral cancer. A good percentage i.e. 28% of married respondents and 23.4% of unmarried respondents has good knowledge about oral cancer.

While comparing the knowledge about oral cancer to the personal income of the respondents it reveals that majority 84.6% of the respondents are having average knowledge and awareness on oral cancer and their incomes is above Rs. 15000. 77.8% of the respondents who are having an income of Rs. 10000-15000 also having average knowledge about oral cancer. The respondents who are having income less than Rs.5000 have poor knowledge about oral cancer i.e.28.6%.

Discussion:

According GLOBOCON 2012 report, oral cancer is the third most frequent cancer after the breast cancer and cervix with an estimated 5-year prevalence rate of 6.6%⁹. The present study results show that majority of the participants seemed to be aware regarding oral cancer and its symptoms. 57.4% of the participants have average knowledge about oral cancer, 26.8% good knowledge and 15.8% poor knowledge. The study finding were supported by the study conducted by Sadeq ali.al-maweri, bassel Tarakji,et.al.in 2015 to assess the knowledge about signs and risk factors of oral cancer. The result shows that only 53.6% of the participants had heard of oral cancer⁽¹⁰⁾ and another similar study done by Atessa Pakfetrat, Farnaz Falaki et. al. to evaluate the knowledge of oral cancer, its risk factors and to estimate the prevalence of risk factors in a high-risk semi-urban population in India and the results shows that 86% had heard about oral cancer and 32% knew someone with oral cancer.¹¹

In our study the Christians had good knowledge about oral cancer comparing to other religion. The participants who were educated PUC and above were having good knowledge about oral cancer comparing to the lower educated participants. This finding was supported

by the study conducted in Dhrawad, Karnataka in 2010 with the aim to assess the associated knowledge of oral cancer. Respondents who were younger, those who had >12yrs of education were more likely to be more knowledgeable of risk factors for oral cancer.¹²

In the present study while comparing the knowledge of oral cancer among male and female, male participants have good knowledge. Where as in a study it was pointed that males have less knowledge about oral cancer (Hassona Y¹, Scully C, et al.¹³

From the discussion it is clear that the participants who were taking treatment in a private dental college hospital had average knowledge about oral cancer. The respondent's knowledge about oral cancer is positively associated with the demographic variable religion.

Conclusion:

In the present study respondent's knowledge and awareness about oral cancer is average. India constitutes more than 80% of the population from the villages and is not only socially and economically deprived but also do not get medical facilities compared to small towns and cities. The ultimate goal of all programs is to decrease the incidence of disease and improve the effectiveness of treatment. They should be educated and positively encouraged to participate in educational programs like oral cancer prevention with the hope of minimizing the incidence of this dreadful disease. Community health workers, dental surgeons and allied medical professionals should take the responsibility to organize low-cost educational programmes that are designed and launched to reach less privileged groups in our society.

REFERENCE:

1. Natarajan E, Eisenberg E. Contemporary concepts in the diagnosis of oral cancer and precancer. *Dent Clin North Am*. 2011;55:63–88.
2. Abdullah Jaber M. Dental practitioner's knowledge, opinions and methods of management of oral premalignancy and malignancy. *Saudi Dent J*. 2011;23:29–36.
3. Torre LA, Bray F, Siegel RL, Ferlay J, Lortet-Tieulent J, Jemal A. Global cancer statistics, 2012. *CA: A Cancer Journal for Clinicians*. 2015;65.
4. 87–108. <https://doi.org/10.3322/caac.21262> 2. Siegel RL, Miller KD, Jemal A. Cancer statistics, 2016. *CA: A Cancer Journal for Clinicians*. 2016;66(1):7–30.
5. Yen TT, Lin WD, Wang CP, Wang CC, Liu SA. The association of smoking, alcoholic consumption, betel quid chewing and oral cavity cancer: A cohort study. *European Archives of Otorhinolaryngology*. 2008;265(11):1403–1407.
6. De Stefani E, Boffetta P, Ronco AL, Correa P, Oreggia F, Deneo-Pellegrini, et al. Dietary patterns and risk of cancer of the oral cavity and pharynx in Uruguay. *Nutrition and Cancer*. 2005;51(2):132–139.
7. Drummond SN, Gomez RS, Noronha JCM, Pordeus IA, Barbosa AA, De Marco L. Association between GSTT-1 gene deletion and the susceptibility to oral squamous cell carcinoma in cigarette-smoking subjects. *Oral Oncology*. 2005;41(5):515–519.
8. West R, Alkhatib MN, McNeill A, Bedi R. Awareness of mouth cancer in Great Britain. *British Dental Journal*. 2006;200(3):167–169.

9. Global status report on non- communicable diseases 2010. Description of the global burden of NCDs, their risk factors and determinants. Available online from [http:// www.who.int/nmh/ publications/ncd_report2010/en/](http://www.who.int/nmh/publications/ncd_report2010/en/)
10. Al-Maweri SA, Tarakji B, Alsalhani AB, Al-Shamiri HM, Alaizari NA, Altamimi MA, Darwish S. Oral cancer awareness of the general public in Saudi Arabia. *Asian Pac J Cancer Prev.* 2015;16(8):3377.
11. AtessaPakfetrat, FarnazFalaki, HabibOllahEsmaily PHD2,Samira Shabestari DDS . Oral Cancer Knowledge among Patients Referred to Mashhad Dental School, Iran Archives of Iranian Medicine.2010;13(6):547.
12. Devadiga A, Prasad KVV. Knowledge about Oral Cancers in Adults Attending a Dental Hospital in India .*Asian Pacific J Cancer Prev.*2010;11:1609-1613.
13. Hassona Y, Scully C, Abu Ghosh M, Khoury Z, Jarrar S, Sawair F. Mouth cancer awareness and beliefs among dental patients. *Int Dent J.* 2015 Feb;65(1):15-21.