

Original Research

Assessment of awareness about oral cancer among Bangalore population

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ABSTRACT:

Background: The present study was conducted to assess awareness about oral cancer in Bangalore population. **Materials & Methods:** 1460 subjects of Bangalore city were provided with a questionnaire and were asked to respond accordingly. It comprised of the risk factors, signs and symptoms of oral cancer, and the importance of detecting the disease in its early stages.

Results: Education was primary in 470, high in 560 and graduate in 430. Occupation was student in 280, housewife in 540, service in 135 and agriculture in 505. Place was urban in 535 and rural in 925. The mean score for awareness of oral cancer was 2.6% seen in 94%, preventable (2.9) seen in 74.2%, treatable (2.8) seen in 65.7%, contagious (1.9) by 71%, risk increases with age (2.0) seen in 32% and appears as non healing wound (2.5) seen in 65.4%, less mouth opening (2.8) in 68%, growth of abnormal tissue (2.6) in 42.6%, undue falling of teeth (2.5) in 25% and painful jaw (2.1) in 41.2%. Cause found to be smoking (2.6) in 72%, alcohol (2.3) in 34.5%, family history (1.4) in 86.2% and sedentary life style (1.2) in 9.4%. **Conclusion:** The knowledge about oral cancer in population of Bangalore was not sufficient,

Key words: Awareness, Knowledge, Oral cancer.

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INTRODUCTION

Oral cancer (OC) which includes cancers of the lip, tongue and rest of the oral cavity, but not cancers of the major salivary glands, is responsible for sizeable morbidity and mortality rates worldwide especially in developing countries, while it is estimated that cancer incidence 14 million new cases, oral cancer alone claims about 300,000 deaths (2.1%) annually with 1.8% mortality worldwide.¹

Oral cancers, with its widely variable rate of occurrence, has one of the highest incidences in India constituting around 12% of all cancers in men and 8% of all cancers among women. It has been estimated that 83,000 new oral cancer cases occur here each year.² Moreover, in India, the extremely popular use of the

smokeless tobacco product called gutkha, renders its population and especially its youth to a greater risk of developing oral submucous fibrosis, a premalignant disease resulting in increased incidence of oral cancer in younger patients.³

Lifestyle behavior risk factors associated with oral cancer and other determinants of the disease, are interrelated with public knowledge of this disease. Alarming high statistics and delayed presentation of patients at time of primary diagnosis underscores the need for an extensive awareness campaign on the issues related to oral cancer.⁴ Such campaigns represent potential opportunities to educate people and also help in implementation of effective education strategies targeting the areas where the public knowledge is found

lacking.⁵ Early detection, which comprises screening of asymptomatic populations and increasing awareness of public regarding early signs and symptoms, increases the probability of cure. Little is known about the awareness regarding oral cancer in Indian population.⁶ The present study was conducted to assess awareness about oral cancer in Bangalore population.

MATERIALS & METHODS

The present study was conducted among 1460 subjects of Bangalore city of both genders. All were made aware of the study and their written consent was obtained.

Socio-demographic information such as age, sex, marital status, occupation, address and educational level was also recorded. They were provided with a questionnaire and were asked to respond accordingly. It comprised of the risk factors, signs and symptoms of oral cancer, and the importance of detecting the disease in its early stages. Response categories for each of the questions were ‘no’, ‘don’t know’ and ‘yes’ and the respondents were expected to tick mark only the most appropriate one. Results thus obtained were subjected to statistics. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of subjects

Total- 1460		
Gender	Males	Females
Number	850	610

Table I shows that out of 1460 subjects, males were 850 and females were 610.

Graph I Distribution of subjects

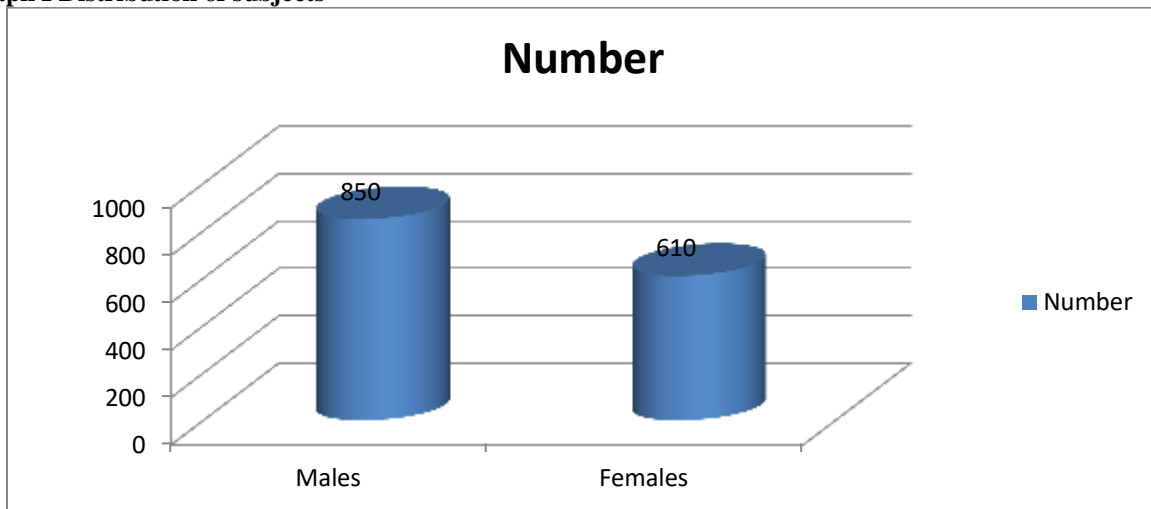


Table II Demographic profile

Variables	Number	P value
Education		
Primary	470	0.12
High	560	
Graduate	430	
Occupation		
Student	280	0.02
Housewife	540	
Service	135	
Agriculture	505	
Place		
Urban	535	0.01
Rural	925	

Table II shows that education was primary in 470, high in 560 and graduate in 430. Occupation was student in 280, housewife in 540, service in 135 and agriculture in 505. Place was urban in 535 and rural in 925. The difference was significant ($P < 0.05$).

Table III Awareness score among subjects

Variables	Mean	Percentage
Are you aware of oral cancer	2.6	94%
Is it preventable	2.9	74.2%
Is it treatable	2.8	65.7%
Is it contagious	1.9	71%
Its risk increases with age	2.0	32%
Appears as non healing wound	2.5	65.4%
Less mouth opening	2.8	68%
Growth of abnormal tissue	2.6	42.6%
Undue falling of teeth	2.5	25%
Painful jaw	2.1	41.2%
Caused by		
Smoking	2.6	72%
Alcohol	2.3	34.5%
Family history	1.4	86.2%
Sedentary life style	1.2	9.4%

Table III shows that mean score for awareness of oral cancer was 2.6% seen in 94%, preventable (2.9) seen in 74.2%, treatable (2.8) seen in 65.7%, contagious (1.9) by 71%, risk increases with age (2.0) seen in 32% and appears as non healing wound (2.5) seen in 65.4%, less mouth opening (2.8) in 68%, growth of abnormal tissue (2.6) in 42.6%, undue falling of teeth (2.5) in 25% and painful jaw (2.1) in 41.2%. Cause found to be smoking (2.6) in 72%, alcohol (2.3) in 34.5%, family history (1.4) in 86.2% and sedentary life style (1.2) in 9.4%.

DISCUSSION

The oral cavity is easily accessible for self or clinical examination to detect lesions that are potentially malignant which can make early detection and diagnosis of the oral cancer achievable. Subsequently, this can significantly reduce the diagnostic delays of oral cancer which estimated to be 50% of cases.⁷ Screening for oral cancer by visual and palpation assessment is still controversial as there is no evidence of the effectiveness of such assessment in reducing mortality from oral cancer. However, it is still recommended that dentists should “remain vigilant for signs of potentially malignant disorders (PMD) and oral cancer while performing routine oral examinations in practice”.⁸

Typical signs and symptoms of oral cancer includes, white and red patches on the lining of the oral mucosa, unhealed oral ulcers, swellings of the mouth, loosening of one or more teeth without obvious reason, jaw pain and stiffness, difficulty or pain in swallowing, speech difficulties, reduced mobility of the tongue, numbness

of the tongue or teeth or lips, bleeding of unknown origin, neck swelling, fetor oris, altered dental occlusion, sore throat, painful tongue, hoarse voice and persistent neck pain.⁹ The present study was conducted to assess awareness about oral cancer in Bangalore population.

We found that out of 1460 subjects, males were 850 and females were 610. Agrawal et al¹⁰ conducted a questionnaire-based household survey over a period of one month in different parts of Gorakhpur district, a region where tobacco use is apparently very high. A total of 2,093 persons participated in the survey. The collected data were analyzed using software to assess and associate oral cancer awareness with the prevalence, and abstract risk factors, as well as other confounding variables. The general awareness, knowledge of signs and risk factors of oral cancer were found to be proportionate to the literacy level with the highest rate of awareness being among high school and graduates and lowest among illiterates. It was also observed that on most of these dimensions the younger age groups.

We found that education was primary in 470, high in 560 and graduate in 430. Occupation was student in 280, housewife in 540, service in 135 and agriculture in 505. Place was urban in 535 and rural in 925. We found that mean score for awareness of oral cancer was 2.6% seen in 94%, preventable (2.9) seen in 74.2%, treatable (2.8) seen in 65.7%, contagious (1.9) by 71%, risk increases with age (2.0) seen in 32% and appears as non healing wound (2.5) seen in 65.4%, less mouth opening (2.8) in 68%. Babiker et al¹¹ conducted a cross-sectional study, interviewer-administered questionnaire amongst

500 adult patients. A total of 57.7% (286) of the individuals demonstrated good knowledge of signs and symptoms, whereas 49% (139) expressed good knowledge of risk factors of oral cancer. For the majority of the individuals 66.1% (290), the most common source of information about oral cancer was from the media, while 33.9% individuals (149), obtained knowledge from direct contact of health workers. The overwhelming majority, 93.2% (466) never screened for oral cancer despite their positive attitude towards it 66.4% (332). Knowledge of risk factors associated significantly with those reported positive attitude towards oral cancer screening and those reported direct contact with health workers as a source of information, ($p \leq 0.001$). Moreover, females and those living in urban districts scores higher than their counterpart in knowledge of risk factor of oral cancer. In addition, those employed 58.6% (280) and 62.8% (164) with correct believes about oral cancer showed significant association with positive knowledge of signs and symptoms.

We found that mean score for growth of abnormal tissue (2.6) in 42.6%, undue falling of teeth (2.5) in 25% and painful jaw (2.1) in 41.2%. Cause found to be smoking (2.6) in 72%, alcohol (2.3) in 34.5%, family history (1.4) in 86.2% and sedentary life style (1.2) in 9.4%. Oral cancer is a preventable disease along with increased knowledge of oral cancer risk factors, signs and symptoms and this in turn is directly related to the prognosis of the cases identified.¹²

CONCLUSION

Authors found that the knowledge about oral cancer in population of Bangalore was not sufficient, hence there is need to educate people about signs, symptoms and preventive measures.

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