

Awareness of Oral Cancer among a Hospital based Out-Patient Population- A Questionnaire Based Study

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Abstract:

Aim: To estimate the awareness of oral cancer among a hospital based out-patient population.

Objective: The objective of the study was to evaluate the awareness of the incidence, prevalence, etiology, treatment, prognosis and clinical manifestations of oral cancer among a hospital based out-patient population.

Background: Oral cancer is one of the most life threatening conditions, early diagnosis of which greatly increases the probability of cure and survival rates, researchers in oral cancer is believed that in an addition to minimising impairment and deformity, lack of public awareness has also been considered to be a potent barrier for early detection of cancer.

Materials And Method: A questionnaire with 25 structured questions were prepared and distributed to 100 patients to obtain the information. The questions were designed to determine the level of knowledge about the incidence, prevalence, etiology, treatment, prognosis and clinical manifestations of oral cancer.

Reason: To assess the awareness about oral cancer in an aid to early detection of oral cancer. This knowledge is essential to implement an effective health education program to reduce the incidence and mortality from oral cancer.

Key Words: oral cancer, smokeless tobacco, smoking, public awareness, patient education.

INTRODUCTION:

Oral cancer is the most common cancer in India, as 4 in 10 of all cancers are oral cancers, Oral cancer accounts for approximately 200,000 deaths annually worldwide and 46,000 deaths occurring particularly in India (Jemal et al., 2010). There is evidence that this cancer is more common in the developing countries in contrast to the developed ones, with the highest oral cavity cancer rates being found in Melanesia, South-Central Asia, and Central and Eastern Europe and the lowest in Africa, Central America, and Eastern Asia for both males and females (Ferlay et al., 2010). 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. (1)

It has been estimated that 83,000 new oral cancer cases occur here each year. 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. Risk factors for oral cancers include smoking, alcohol use, smokeless tobacco products, and HPV (human papillomavirus) infections, with smoking and alcohol having synergistic effects. (2) The contribution of each of these risk factors to the oral cancer burden varies across regions. Smokeless tobacco products and betel quid with or without tobacco are the major risk factors for oral cavity cancer in India and other neighboring countries (Jemal et al., 2011). Majority of oral cancers have been observed to arise from long-standing premalignant lesions especially in high incidence areas (Lumerman et al., 1995). (3) Mouth cancer is largely preventable by avoiding known risk factors and national and international

guidelines stress the importance of early detection (Llewellyn et al., 2004). Delayed presentation of oral cancer is mainly due to lack of awareness of the public about oral cancer and its associated risk factors which also results in increased treatment morbidity and reduced survival rates. (Warnakalasuriya et al., 1999). (4) India is the second largest producer of tobacco and most of the tobacco produced is consumed within the country only, with approximately 274.9 million tobacco users according to recent data (Global Adult Tobacco Survey-GATS, 2010). As per this report more than one third (35%) of adults in India use tobacco in some form or the other, 163.7 million are users of only smokeless tobacco, 68.9 million only smokers, and 42.3 million users of both smoking and smokeless tobacco (5).

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. 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. (6) Early detection, which comprises screening of asymptomatic populations and increasing awareness of public regarding early signs and symptoms, increases the probability of cure (Petersen, 2009). (7)

The objective of the present study was to determine the level of awareness of the incidence, prevalence, etiology, treatment, prognosis and clinical manifestations of oral cancer among a hospital based out-patient population. The results obtained from this survey will assist to implement an effective health education program thereby helping to reduce the incidence rates of oral cancer.

MATERIALS AND METHOD:

A questionnaire with 20 structured questions were prepared, distributed to 100 patients to obtain the information and informed consent was obtained from those patients before distributing the questionnaire. The questions were designed to determine the level of knowledge about incidence, prevalence, etiology, treatment, prognosis and clinical manifestations of oral cancer. 100 filled questionnaires were returned giving a response rate of 100%. The data was analyzed using SPSS 16 program for descriptive statistics.

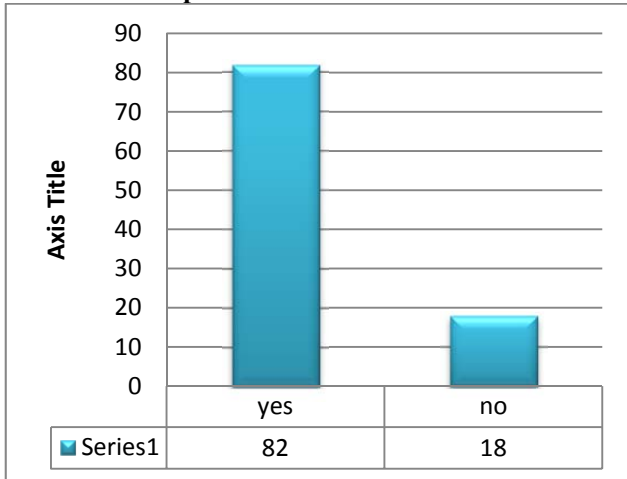
QUESTIONNAIRE:

- 1) Have you heard about mouth cancer?
A) yes B)no
- 2) Do you know anyone who had mouth cancer?
A)yes B)no
- 3) If yes, what are the lifestyle changes observed by those patient?
A)cutting down alcohol consumption
B)giving up tobacco
C)quitting smoking
D)following proper diet
E)others, please indicate _____
- 4) Oral cancer is prevalent among which gender?
A)males
B)females
- 5) Oral cancer is prevalent among which age groups?
A)40-60years
B)20-40years
C)10-20years
D)any age
- 6) Do you know what are the causes of oral cancer?
A)yes
B)no
- 7) If yes, indicate the causes of oral cancer?
A)smoking
B)Alcohol
C)Pan chewing
D)Poor oral health
E)All the above
- 8) Do you know how oral cancer comes about?
A)yes
B) no
- 9) Do you have any abnormality in your oral cavity?
A)yes
B)no
- 10) If yes, indicate below
A)White or red patch in mouth
B)Raised white and red patches in mouth
C)Ulcers in mouth
- 11) Do you have any of the habits below?
A)Smoking habit
B)Betel nut chewing habit
C)Alcohol (drinking Habit)
D)None of the above
- 12) If yes, are you willing to quit the/those habits?
A)yes
B)no
- 13) Is oral cancer a curable disease?
A)yes
B)no
- 14) Do you know about any diagnostic/screening tests which is done for oral cancer?
A)yes
B)no
- 15) If yes, what are the diagnostic tests which is done for oral cancer?
A)clinical examination
B)Velscope
C)Dental x-Ray
D)Biopsy
E)CT
F)MRI
- 16) Do you know any treatment options for oral cancer?
A)yes
B)no
- 17) If yes, what are the treatment options available for oral cancer?
A)Surgery
B)Radiotherapy
C)Chemotherapy
D)Immunotherapy
E)Targeted therapy
F)Combination therapy
G)Others please indicate _____
- 18) Is oral cancer a contagious disease?
A)yes
B)no
- 19) What is the incidence rate of oral cancer?
A)1 in 100
B)1 in 1000
C)1 in 10,000
- 20) How long will the patient survive after being diagnosed and treated for oral cancer?
A)some weeks
B)some months
C)some years
D)many years

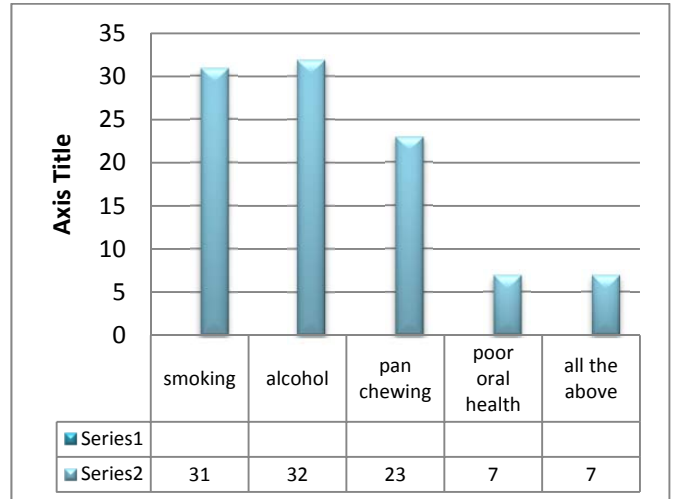
RESULTS:

In this study 82% of patients were aware of the term mouth cancer. 65% of patients were aware that oral cancer is prevalent among males. 29% of patients opted for the option that oral cancer is common in 20-40 yr age groups. 65% of patients aware of causes of oral cancer. 32% of patients opted smoking and alcohol as major cause of oral cancer. 63% of patient aware how oral cancer comes about. 56% opted that they have abnormality in the oral cavity in which 37% opted for ulcers in their mouth. 58% patients marked oral cancer as curable disease. 60% of patients were aware of diagnostic tests for oral cancer in which 50% of population marked clinical examination as the diagnostic test done for oral cancer. 66% patients aware of treatment options for oral cancer in which 27% patients opted for chemotherapy as treatment option for oral cancer. 47% patients marked 1 in 100 as incidence rate of oral cancer. 33% of patients opted for some weeks and some months for the survival rate of patients after being diagnosed and treated for oral cancer.

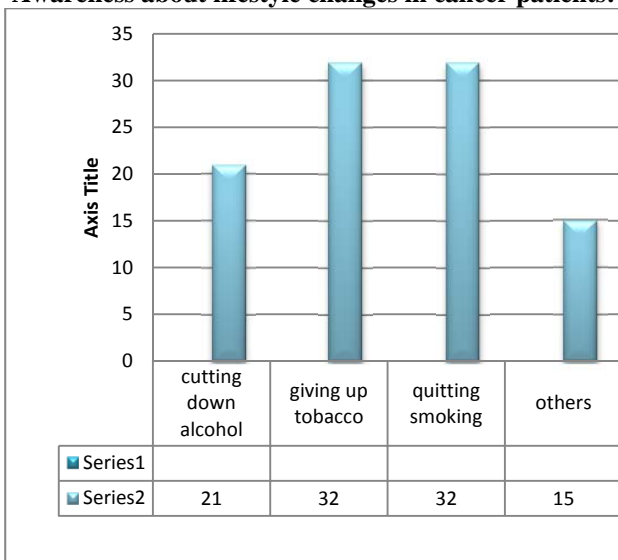
No of patients aware of oral cancer:



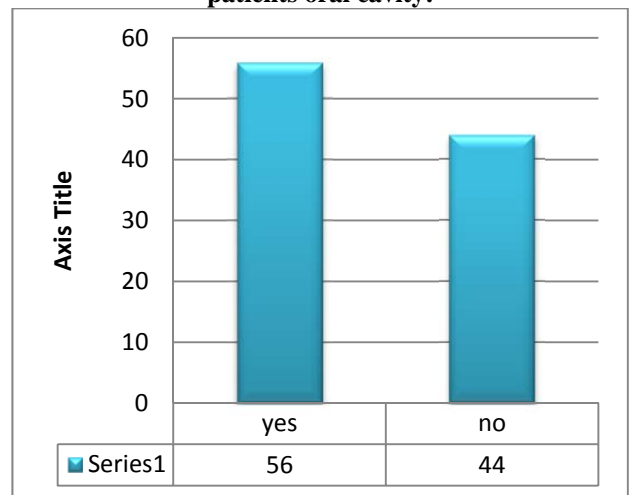
Awareness about causes of oral cancer:



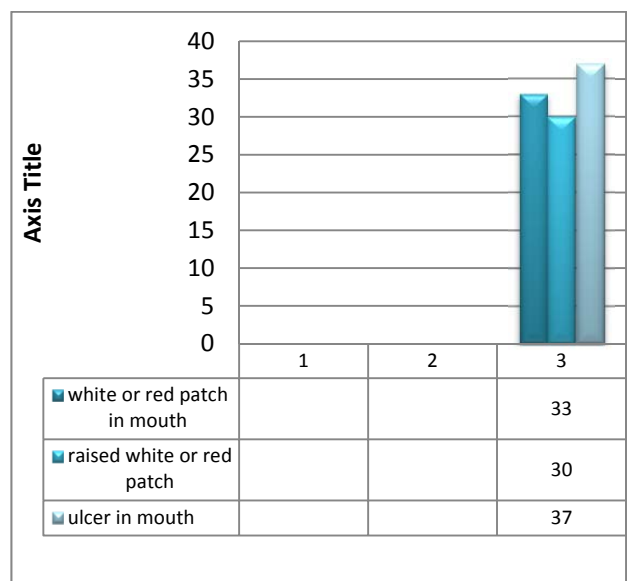
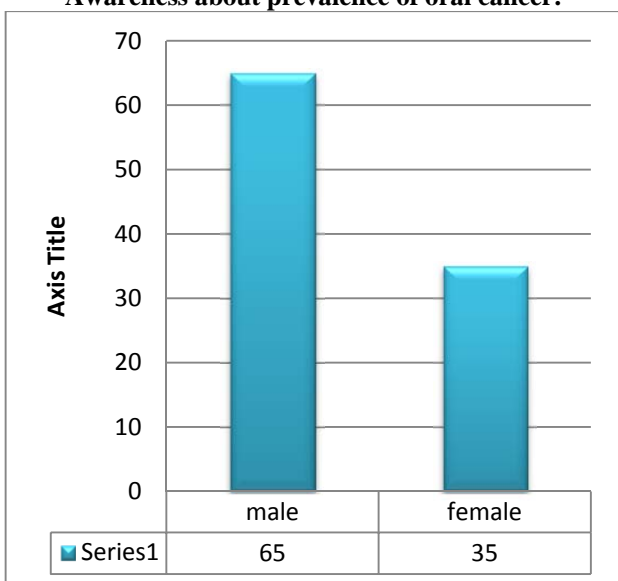
Awareness about lifestyle changes in cancer patients:



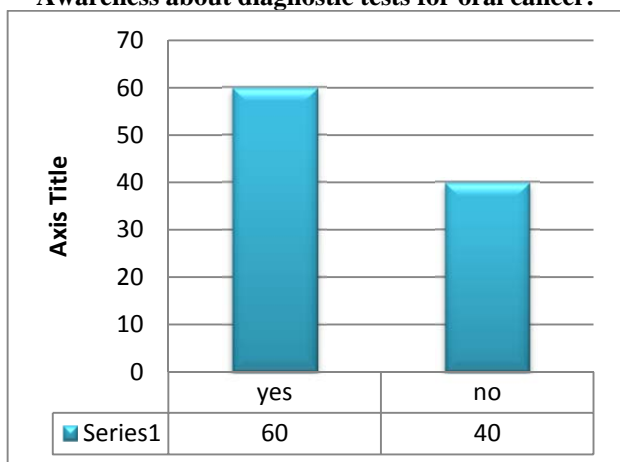
Awareness about the presence of abnormality in patients oral cavity:



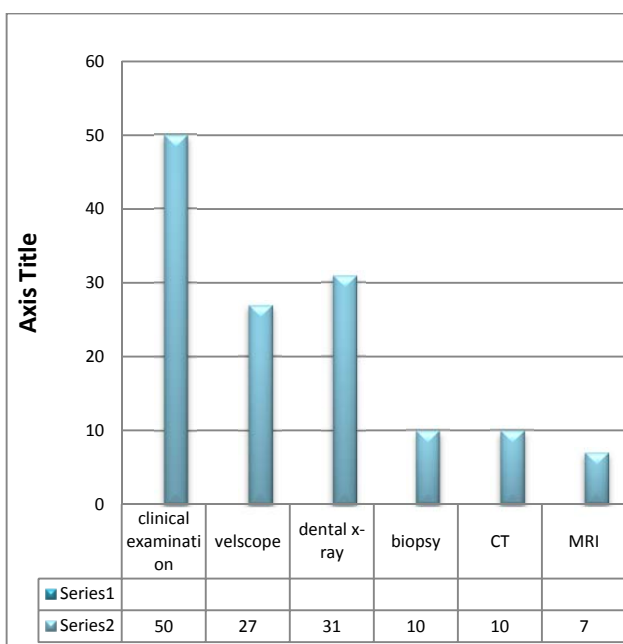
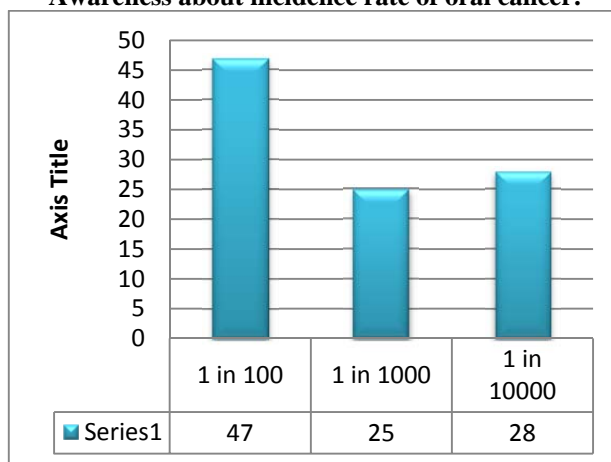
Awareness about prevalence of oral cancer:



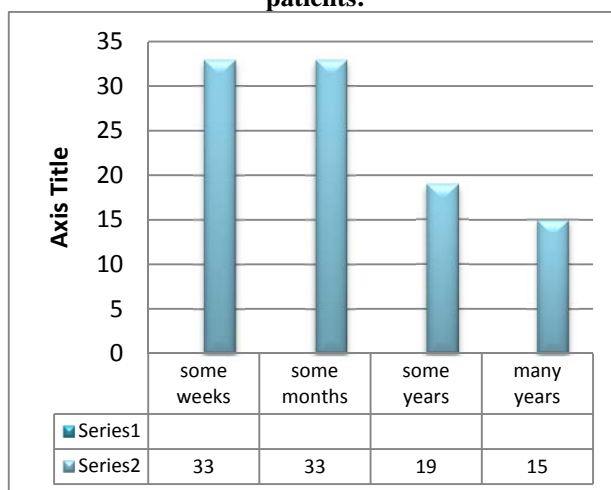
Awareness about diagnostic tests for oral cancer:



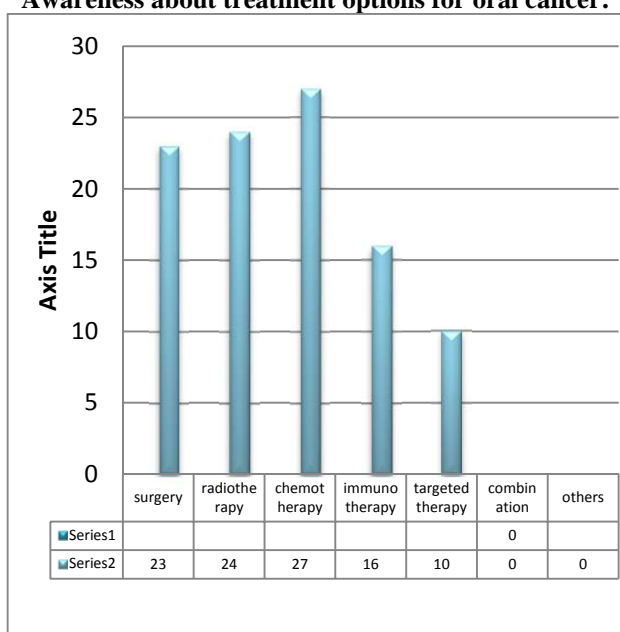
Awareness about incidence rate of oral cancer:



Awareness about the survival rate of oral cancer patients:



Awareness about treatment options for oral cancer:



DISCUSSION:

In this study most of patients were aware of the term oral cancer, it is important to note that most of the patients were aware that smoking is the major cause of oral cancer, majority of the patients opted clinical examination as diagnostic test for oral cancer which shows that they are not aware of recent diagnostic techniques like velscope, CT and MRI. most of the patients opted for chemotherapy as treatment available for treatment of oral cancer which concludes that they are not aware of other treatment options like radiotherapy, targeted therapy and combination therapy. 85% of head and neck cancers are readily visible. oral cancer screenings are an inexpensive, safe and non-invasive method of detection. Oral cancer screenings also may provide an excellent opportunity for raising public awareness and providing patient education and counselling regarding behavioural risk factors and how to reduce them(8). Since people older than 40 years of age who use alcohol and tobacco are at the highest risk of developing oral cancers, in which screening this high-risk cohort is of more important. Sensible drinking, cessation of tobacco and inclusion of fresh fruits and vegetables in the diet are the cornerstones of cancer prevention.(9) The prime causative factors associated with oral cancers in India are

tobacco and alcohol, which are consumed in several of forms. Dentists are in a strong position to motivate their clients on tobacco cessation and alcohol moderation(10). Cancer fatalism often plays a pivotal role in people either not accepting professional advice on avenues for prevention or arriving too late for therapy. Cancer fatalism needs prompt identification and there is a duty of healthcare providers to offer information on how early therapy saves lives. Education of the public, most importantly youth population, may help to bring out change in the common attitude that cancer affliction is a matter of chance. There is now sufficient scientific evidence to conclude that cancer of the mouth and pharynx is largely related to lifestyle. The earlier detection of oral cancer by opportunistic screening should afford patients with greater survival rate and more certainly less radical treatment.(11)The role of mass media, particularly television, newspaper and radio should be stressed as it was found to play a key role in imparting health education and belief changes. Younger generation could be approached through social networking sites.

CONCLUSION:

This study has highlighted that the dental patients still had a general lack of awareness regarding the risk habits, early signs and symptoms and the benefits of detecting this disease at an early stage. Patients should also be made aware of the oral cancer and its complications and the role of habits in the development of oral cancer. The study also revealed several aspects of public uncertainty and ignorance with regard to the causation of oral cancer which need to be emphasised in future public education programmes, particularly using mass media.

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