ORIGINAL RESEARCH

Awareness of Oral Cancer among Patients Attending a Cancer Trust Hospital in East Godavari District, Andhra Pradesh.

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Abstract

Introduction: Oral cancer (OC) is associated with various risk factors and high mortality rates, and contributes significantly to the worldwide cancer burden.

Objectives: To assess and evaluate patients' current knowledge, awareness, and behavior regarding OC risk in a cancer trust hospital.

Materials and Methods: The study involved 600 patients who attended cancer trust hospital, East Godavari district, from September 2021 to October 2021. A self- administered questionnaire of 20-questions was given to each patient that included socio-demographic and disease-specific information and their answers evaluated.

Results: The data was examined using descriptive statistics, and the connection between the variables, education, family income, and other factors was assessed using a chi-square test (with a 5% significance threshold). The results were analysed with reference to their implications for interventions aimed at patient's awareness for oral cancer symptoms.

Conclusion: According to the findings of this study, people lacked information and awareness about identified risk factors for oral cancer. Knowledge of maintaining a healthy lifestyle that eliminates the consumption of established oral cancer risk factors was low. At the community and individual levels, health education linked to primary prevention of oral cancer must be improved.

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Introduction

Cancer is the second biggest cause of mortality in the world, and it is a major public health issue.[1] According to the World Health Organization (WHO), the number of new cancer cases and cancer-related deaths worldwide is expected to reach 26 million and 17 million, respectively by 2030. In 2018, there were an estimated 354,864 new cases of oral cancer worldwide.[2] Oral cancer has a 50 percent or lower 5-year survival rate.[3] From 2010 to 2016, the 5-year relative survival rate for all malignancies diagnosed was 67 percent overall, 68 percent in White people, and 63 percent in Black people.[1] The prognosis is determined by the stage of the disease when it is diagnosed.

Early detection of oral cancer includes both the patient's impression of the disease and the professional diagnosis, resulting in a considerable improvement in disease treatment and the patient's quality of life.[4] The coronavirus disease 2019 (COVID-19) epidemic impeded cancer detection and therapy in 2020. Reduced access to care as a result of health-care facility closures, for example, resulted in delays in diagnosis and treatment, which could result in a short-term decline in cancer incidence due to lack of data during this period followed by an increase in advanced-stage disease and, eventually, increased mortality.

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However, due to the lag in the transmission of population-based monitoring data, this pandemic's secondary effect will take several years to quantify.[1] As a result, patients should be informed of oral cancer, its indications and symptoms, as well as harmful lifestyle habits that may contribute to the disease's development.[4] Thus, the goal of this study was to

ORAL CANCER AWARENESS QUESTIONNAIRE

Name: Age: Sex: Place:

1. What is the highest degree or the level of school you have completed?
   - No schooling completed ☐
   - Primary school/High school ☐
   - Degree ☐
   - Post graduate ☐
2. Do you currently smoke tobacco products such as cigarettes, beedis, chutta?
   - Yes ☐
   - No ☐
3. Have you used or do you currently use smokeless tobacco products such as snuff or chewing tobacco?
   - Yes ☐
   - No ☐
4. Since how long have you been smoking tobacco or smokeless tobacco?
   - Past 1-5 years ☐
   - Past 5-10 years ☐
   - Past 10-20 years ☐
5. If you currently smoke tobacco or smokeless, please list the number of tobacco products that you smoke daily, weekly or monthly in one of the rows below:

	Cigarette	Beedi	Chutta	Snuff or chewing
Per day				

Or

Per week				

Or

Per month				

6. Have you smoked tobacco in the past?
   - Yes ☐
   - No ☐
7. During the past 12 months, have you tried to stop using the tobacco products?
   - Yes ☐
   - No ☐
   - Not applicable ☐
8. How often does someone smoke inside your home?
   - Daily ☐
   - Weekly ☐
   - Monthly ☐
   - Never ☐
9. Do you know that smoking tobacco/ drinking alcohol may cause oral cancer?
   - Yes ☐
   - No ☐
10. Do you drink alcohol?
    - Yes ☐
    - No ☐
11. How often do you have a drink containing alcohol?
    - Never ☐
    - Less than one time a week ☐
    - 1-2 times a week ☐
    - 3-4 times a week ☐
    - 5-6 times a week ☐
    - Daily ☐
12. Have you heard about oral cancer disease?
    - Yes ☐
    - No ☐
13. Does any of your family members are affected by oral cancer?
    - Yes ☐
    - No ☐
14. Which of the following may be the sign of oral cancer?

	Yes	No	I don't know
Difficulty in chewing or swallowing			
Mouth sore that does not heal			
Abnormal mass/lump in mouth			
White/ red patch			
Slow change in voice quality			

15. Do you know, what are the causes of oral cancer?
    - Yes ☐
    - No ☐
16. If yes, indicate the causes of oral cancer?
    - Smoking ☐
    - Alcohol ☐
    - Pan chewing ☐
    - Poor oral health ☐
    - All the above ☐
17. Is oral cancer a curable disease?
    - Yes ☐
    - No ☐
18. Do you know any treatment options for oral cancer?
    - Yes ☐
    - No ☐
19. Does oral cancer and tobacco prevention ads in movie theatres has got any impact on chewing and smoking habits and on prevention of oral cancer?
    - Yes ☐
    - No ☐
20. Does government of India have to do still more ads for the prevention of oral cancer?
    - Yes ☐
    - No ☐

Signature/Thumb impression of the Patient

assess oral cancer awareness among patients in the cancer trust hospital, East Godavari district, Andhra Pradesh.

Materials and Methods

From September 2021 to October 2021, a study was conducted at cancer trust hospital in East Godavari district. Informed consent was obtained from the patients. A non-probabilistic sample included male and female patients who were attending the hospital. Patients were approached in clinic waiting rooms, and informed consent was obtained from each person. The inclusion criteria included patients and their attendants who were with them in the hospital. In order to avoid bias, patients diagnosed with oral cancer or referred for evaluation of oral lesions suggestive of malignancy were excluded from the study.

A self-administered questionnaire with 20 multiple-choice questions was used for each participant. This questionnaire included sociodemographic questions (age, gender, city of residence, locality, marital status, and income) as well as questions on cancer specific data (knowledge about oral cancer, its clinical characteristics, risk factors, smoking and alcohol consumption, and oral hygiene). In addition, questions about the participants› attitudes, knowledge, and perceptions about oral cancer were included.

The relative and absolute distribution of the answers in each of the questions in the questionnaire were gathered and analyzed with descriptive statistics using the Statistical Package for Social Sciences (SPSS) version 20. "Yes," "no," or "don't know" were the possible answers to questions about oral cancer risk factors and clinical signs. Using the chi-square test, the variables "education" and "family income" were then associated with the other variables. A statistically significant p-value of lower than 0.05 was considered.

Results

A total of 600 patients aged 18-80 years were included in this study, of which 288 were women with a mean age of 45.13 years and 312 men with a mean age of 46.11 years. With regard to education level, 87(14.5%) of the participants had no schooling, 336 (56%) completed primary school/high school, 170 (28.3%) had a college degree and 7 (1.16%) were postgraduates. Most patients were non-smokers 481 (80.16%) and 446 (74.3) were not alcohol users.

In this study, 301 (50.2%) participants were aware of oral cancer, and 501 (83.5%) affirmed to know the signs of oral cancer for the disease. However, when the signs of oral cancer were listed, out of 600 participants, 306 (61.07%) had a difficulty in chewing or swallowing, 96 (19.16%) mouth sore that does not heal, 54 (10.77%) abnormal mass/lump in mouth, 27 (5.38%) white/ red patch, and 18 (3.59%) slow change in voice quality as the signs of oral cancer, respectively as recorded in the Table 1. Ninety-nine (16.5%) patients were unaware that these were the signs of oral cancer.

Out of 600 individuals who attended the survey 424 (70.7%) were aware of oral cancer and had seen cancer prevention advertisements in movie theatres, the impact of tobacco chewing and smoking habits on oral health and the prevention of oral cancer and 176 (29.3%) were unaware (Table 2). Patients with smoking habits identified tobacco as a cause of oral cancer (47.9%) more frequently than the non-smokers (39.08%) (P = 0.042). Regarding the awareness of the treatment options available for oral cancer, only 124 (20.7%) individuals were aware and 476 (79.3%) were unaware of any treatments available.

Finally, when subjects were asked if they agree that "the government of India has to advertise still more for the prevention of oral cancer" 470 (78.3%) said yes, 130 (28.7%) disagreed with the affirmation (Table 2). Positive responses were closely connected to younger age with p lower than 0.001 and higher education level with p lower than 0.001.

Discussion

Oral cancer screening and awareness among the patients can usually lead to discovery of premalignant abnormalities and early stage of oral cancers, which have far better survival rates than late-stage malignancies.[5,6] This is the first time an oral cancer awareness survey of this nature has been done in the East Godavari district to our knowledge. The lack of knowledge, understanding and awareness regarding oral cancer among patients who presented at the regional cancer trust hospital motivated this study. Since oral and pharyngeal cancer rates in East Godavari are higher than the state's average, it's critical to learn more about people's awareness, their understanding of risk factors and presenting symptoms, and what they would do if they had a chronic and painful oral ulcer. The study

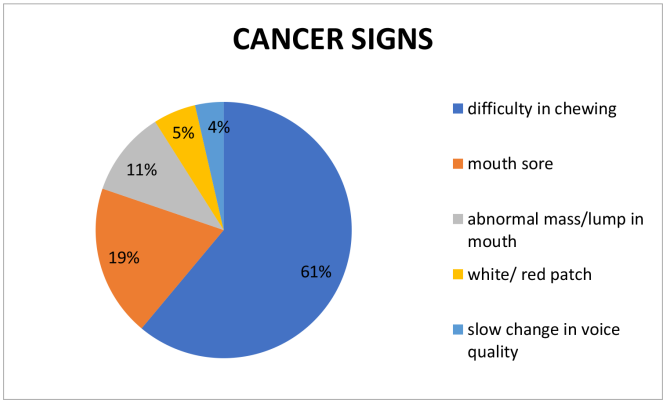

Table 1: Cancer signs awareness

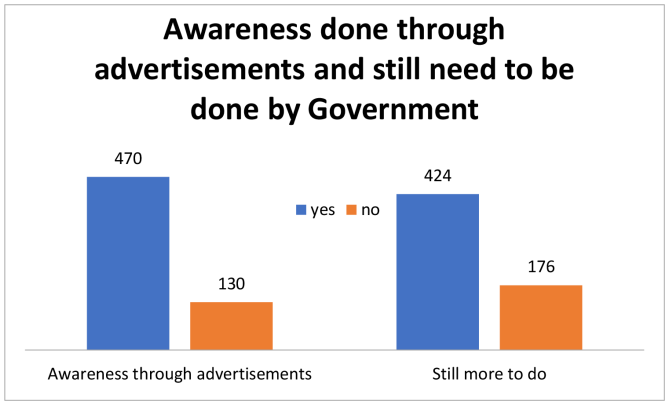

Table 2: Awareness through advertisement and still more to be done.

design allowed participants to respond and provide a proper assessment of their degree of awareness and how they saw mouth or oral cancer in comparison to other malignancies.[7]

According to the findings of this survey, a high majority of this community was aware of oral cancer to varying levels. Many people are aware of risk factors associated with the cancer, such as tobacco, alcohol use and betel quid chewing. In our study's sample, socio-demographic parameters such as gender, age, and level of education were revealed to be important factors linked with oral cancer awareness.[8] Age, gender and education levels had statistically significant differences in awareness of early indications in the current study, but there was no statistically significant difference in education levels in the Peker and Alkurt study.[9] Females were more likely than males to recognise ulcers and changes in colour, particularly white/red patches, as signs and symptoms of oral cancer. This could be due to the fact that females are more aware of their well-being, and thus are more aware and concerned about any physical changes occurring to their body similar to the Babiker study.[10]

In addition to recognising the signs of oral cancer, more than 61% of the population recognized difficulty in chewing or swallowing, 19% of the population discovered mouth sores that do not heal, 11% identified abnormal mass/lump in mouth, 5% discovered white/red patch, 4% noticed slow change in voice quality (Table 1), In the study by Ghanni et al, unhealed ulcers and red or white lesions in the mouth were discovered to be early indicators of oral cancer by approximately half of the population.[8] In this study, more than 50% of the patients and their attendants were aware of oral cancer and almost 84% affirmed to know the signs of oral cancer for the disease but in regards to treatment options available more than 79% were unaware in comparison to Omdurman and Sudan, where oral cancer is seen as communicable, curable, and/or preventive, according to nearly half of the participants.[10] Positive responses regarding government role in the prevention of oral cancer associated with the younger age p (0.001) and higher education level p (0.001) were similar to the study by Pakfetrat A et al, the amount of education and knowledge score had a significant relationship (P0.001).[11] Lack of awareness in 50% of study respondents was comparable to studies conducted in different countries by Warnakulasuriya et al; Patton et al; Tomar and Logan; Pakfetrat et al; Peker and Alkurt.[9,11,12,13]

The majority of the participants in this study got their knowledge from the media (Table 2). This emphasises the role of the media in educating the public and raising awareness about oral cancer signs, symptoms, and risk factors, resulting in improved early detection, diagnosis, and survival rates.[15] The findings support earlier research findings that the media is a widespread and effective source of information about oral cancer.[16,17]

This study demonstrates participants' positive attitudes regarding oral cancer screening, but it also suggests that they are unaware of the disease's existence, as shown in prior studies.[18,19] Despite the fact that visual inspection has been shown to be beneficial in early diagnosis and hence reduces the mortality rate of oral cancer as a screening programme, only a small percentage of the participants had ever been examined for oral cancer. This is consistent with what has been documented in researches from around the world. Some shortcomings are acknowledged in our study. The questionnaire development evaluation was confined to face and content validity because it was centred on a quantitative assessment of patients' knowledge, awareness, and lifestyle habits in relation to OC.[20]

Our capacity to validate findings is limited because the information provided by the patients was self-reported. Furthermore, the data was gathered from a single, albeit major health-care centre and may not be universally applicable to other population-based environments beyond the current circumstances. This raises the possibility of selection bias within the current study's target population. The rejection rate for participation was not documented by workers providing the survey to patients passing through their departments, so a denominator that could be used to calculate the response rate could not be determined. Furthermore, the study did not assess the oral health literacy or general health literacy of the participants. Because the questionnaire was anonymous and voluntary, there was a chance that someone might not have included relevant data.

Conclusion

In general, this community lacked a thorough understanding of oral cancer regarding high-risk pernicious habits and behaviour, indications and symptoms, and early identification and prevention. Oral health education programmes need to be implemented as a whole population strategy using the media or as a targeted risk approach aimed at specific target groups, such as teenagers in schools, college students, and adults to raise awareness. The government needs to take a more active role in the promotion of advertisements for the prevention of oral cancer.

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