



Research Article

AWARENESS AND KNOWLEDGE ABOUT ORAL CANCER AMONG DENTAL PATIENTS IN A RURAL AREA OF KERALA: A CROSS SECTIONAL STUDY

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ABSTRACT

Oral Squamous cell carcinoma (OSCC) are common health hazard and ranks sixth globally among all cancer. In India, incidence of oral cancer is first among men and third among women. Its occurrence is mostly due to pernicious habits and lifestyle. There is an upsurge in screening methods for detection of oral cancer but the prognosis of oral cancer is still relatively poor. This can be mainly attributed to delay in the diagnosis and this directly reflects to the late presentation of the patient as majority of the population are unable to identify the early signs and symptoms of the disease primarily due to lack of knowledge and awareness. Early detection, diagnosis and treatment of OSCC will promptly increase the survival rates and prognosis. Thus our study is an attempt to assess the knowledge and awareness of people in rural areas of our native place.

Aim

To assess the awareness of oral cancer and its preventable risk factors among dental patients for prevention, early detection and treatment

Objective

- To assess awareness about oral cancer among dental patients
- Evaluate their attitudes towards oral cancer screening

Materials and Method: We obtained institutional ethical clearance and conducted this survey. It was cross sectional questionnaire based survey conducted on 300 patients visiting the dental college for various treatments over a period of 2 months. Well structured, validated closed ended questionnaire comprising of total of 38 questions were framed. It was divided into 2 parts of which the first part comprised of total 8 questions regarding the personal details of patients and the remaining 30 were questions to assess the awareness and knowledge of the signs, symptoms and risk factors of oral cancer. The answers comprised of yes, no and don't know which was eventually scored as 1, 2 and 3 respectively. The data obtained was numerically converted and entered into excel sheets and subjected for cumulative percentage.

Result: there was no significant association between education level and oral cancer knowledge ($p > 0.005$) about 70% of the participants showed positive attitude towards oral cancer screening.

Conclusion: Results indicated that more than half of the study group did not have proper knowledge about oral cancer though all the participants heard of it. A multifaceted approach that integrates health education, tobacco and alcohol control, early detection and early treatment is needed to reduce the burden of this preventable cancer.

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INTRODUCTION

Oral Squamous cell carcinoma (OSCC) are common health hazard and ranks sixth globally among all cancer.¹ In India, incidence of oral cancer is first among men and third among women.^{2,3} Its occurrence is mostly due to pernicious habits and lifestyle. The etiology of OSCC comprises of tobacco, alcohol HPV infections, nutritional deficiencies etc.^{4,5} In India the most common etiological agent is use of tobacco as it is a frequent habit among Indians.^{6,7} There is an upsurge in screening methods for detection of oral cancer but the prognosis of oral cancer is still relatively poor.⁸ This can be mainly attributed to delay in the diagnosis and this directly

reflects to the late presentation of the patient as majority of the population are unable to identify the early signs and symptoms of the disease primarily due to lack of knowledge and awareness. Early detection, diagnosis and treatment of OSCC will promptly increase the survival rates and prognosis.⁹ Thus our study is an attempt to assess the knowledge and awareness of people in rural areas of our native place.

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MATERIALS AND METHODS

We obtained institutional ethical clearance before conducting this survey. It was cross sectional questionnaire based survey conducted on 300 patients visiting the dental college for various treatments over a period of 2 months. Well structured, validated closed ended questionnaire comprising of total of 38 questions were framed. It was divided into 2 parts of which the first part comprised of total 8 questions regarding the personal details of patients and the remaining 30 were questions to assess the awareness and knowledge of the signs, symptoms and risk factors of oral cancer. The answers comprised of yes, no and don't know which was eventually scored as 1, 2 and 3 respectively. The questionnaires were given and collected by the researcher to the participants and necessary clarification was given when asked. The data obtained was numerically converted and entered into excel sheets on SPSS 19 and cumulative percentage was calculated.

Results

Most of the patients in our study group comprised of males 68% and females 32%. Majority of the participants were above the age of 30 with 48% of them in 20-30yrs age group with only 5% in the age group of 60-70 yrs. Though all the participants were educated in this study group majority 68% were less educated (below graduation) and 32% were well educated (graduates and post graduates). Of which 70% were employed, 29% unemployed and only 1% were retired.

All the participants of our study had unanimously (100%) heard about oral cancer of which the mass media (TV and Radio) was the main source of information. However 91% of participants did not have a family member, relative or friend suffering from OSCC.

From our study group 53% of participants felt thought that OSCC is preventable and 50% of the participants were sure that it is non-contagious. 47% were not aware that early detection increases survival rates. Majority of the participants 74% believed that OSCC can be treated. 98% of the participants had personally never undergone oral cancer screening but 69% of them agreed that oral screening should be mandatory.

The most commonly identified risk factor for OSCC was noted to be smokeless tobacco 90% and smoking 84% whereas viruses and sunburns were identified as the least common risk factor 12%. More than ½ the population (57%) of our study felt that alcohol was also an etiological agent of OSCC. However 65% of the participants felt that family history may not be a contributing factor for OSCC.

The clinical presentation of OSCC was thought to be abnormal swelling (55%), non healing ulcer (51%). Interestingly they did not relate with clinical presentations like undue falling of teeth (79%), continuous pain (82%), white or red patch (57%), lump in the neck (76%), change in the color of the lesion (64%) and loss of taste (100%). Regarding the signs and symptoms majority presumed that OSCC would not be associated with dry mouth (83%), bleeding gums (65%), burning sensation in the mouth (76%), numbness of tongue (69%), and difficulty in swallowing (71%).

DISCUSSION

OSCC over the years has emerged out to as the prominent malignancy of oral cavity in 95% of cases.² Despite the fact that there is a tremendous growth of recent advances for patient management, OSCC still continues to be fairly destructive malignancy mostly because of the delay in the diagnosis- a general result due to the late presentation of the patients.⁸ Early diagnosis of OSCC is the key to prompt treatment assuring increased chances of survival along with reduced morbidity. OSCC detected in late stages offers a survival rate of < 50%.^{10,11} The previous survey work conducted have been beneficial in educating the general population however have been limited, it is even more scarce in the state of Kerala where consumption of tobacco both smokeless and smoke forms are prevalent especially among the low socio economic strata.¹² Hence our study was an effort to assess the knowledge and awareness of OSCC among rural population.

The results of our study pointed that the awareness of OSCC was higher among young individuals (30yrs) often females and was noted to be more among well educated. This finding of ours is consistent with the previous findings of Agarwal *et al* and Kassim *et al*. We agree with our previous literatures that greater access and exposure to media by the younger individuals may be the reasons for higher awareness.^{8,13} Our study population were well aware that smokeless tobacco, smoking and alcohol were the main etiological factors but were unaware of role of family history, sunlight and viruses hence they needed to be enlightened about their role in OSCC.

Majority of the participants of this study were well aware that OSCC was non-contagious, preventable and successfully treated. These findings of our study are consistent with studies of Mamta *et al*. However they were unaware that early detection of OSCC increases the chances of survival. It was disheartening to know the unawareness of the study population about signs and symptoms of OSCC. This findings was consistent with previous studies of Vishma BK *et al* and Gopal KS *et al*. Nevertheless there are contradictory findings of better awareness which is highly attributed to the difference between urban and rural strata. General symptoms have to be emphasized to the population as it will reinforce early detection and thereby treatment with increased survival rates and comparatively less financial burden.^{14,15}

Swelling and non healing ulcer were identified positively as the forms of presentation of OSCC. Whereas white or red patches, lump in the neck, difficulty in swallowing, unexplained loss of teeth or bleeding gums were not considered as other forms of presentation of OSCC. This is similar to the findings of Monterio LS *et al*.^{1,16}

This is an alarming finding hence the potential complication of such usually over viewed findings must be highlighted.

CONCLUSION

Our current survey highlights the keys areas of lack of awareness and knowledge among the rural population. The positive findings should be further strengthened by proper knowledge in order to rule out guess work and presumption and transparent knowledge highlighting the key areas of lack of awareness. Though all information are available as literatures but we would like to suggest use of simpler aids like

images, charts, models may be better explanatory. In order to reduce morbidity and to have greater chance of cure, early diagnosis and prompt treatment is the key. So, any kind of delay in presentation or referral will adversely affect the prognosis.

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