

Awareness and Knowledge of Oral Cancer and Potentially Malignant Lesions in Rural Population of Nalgonda.

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Abstract:

INTRODUCTION: Oral cancer is one of the major public health problems globally. It is most commonly seen in South and South East Asian countries such as India, Bangladesh, Taiwan, and Sri Lanka (World Health Organization, 1984). About 90% of oral cancers are squamous cell carcinomas. The prognosis of oral cancer is poor with lowest survival rates of <50%, within a 5-year period. Most of the oral cancers are preventable if people know which risk factors they must control or eliminate. Therefore, this study was aimed at obtaining initial baseline information on the level of oral cancer awareness among Nalgonda district rural population.

AIMS AND OBJECTIVES: To assess the level of awareness and knowledge of OC and OPMDs and their associated risk factors in rural population of Nalgonda.

MATERIALS AND METHODS: A self administered Questionnaire was designed and comprised of relevant questions to determine information on the demographic characteristics, habits, along with the extent of knowledge about the risk factors and signs of oral cancer oral premalignant diseases of the surveyed subjects was collected using a close end questionnaire formatted both in English and the local Telugu language.

RESULTS: The study population was consisted of 300 patients, of which 251 were males and 49 females. All the participants responded well to the self administered questionnaire. When asked about whether they know any diseases that are caused by tobacco, 66% and 43% of male and female participants responded positively respectively. Of the study subjects, 66% males and 43% females were aware that tobacco causes cancer. 54% males and 33% females were had a knowledge of ill effect of passive smoking on general health.

CONCLUSION

Early detection of oral cancer is the most effective means to improve survival and to reduce morbidity, disfigurement, treatment duration and associated costs.

Key words: Oral Cancer, Tobacco, Malignant

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I. Introduction

In India, due to varied cultural, ethnic, and geographic factors and the popularity of addictive habits, the frequency of Oral cancer (OC) is very high. It positions number one in terms of incidence among men and third among women. Oral cancer accounts for 30 to 40% of all the malignant tumors in India. Risk factors for OC include tobacco, alcohol, areca nut, dietary factors, mucosal diseases like oral epithelial dysplasia, oral lichen planus, oral submucous fibrosis, oral candida, HPV (human papillomavirus) infections, and rarely genetic disorders like dyskeratosis congenita and Fanconi's anemia¹. Oral cancer is one of the major public health

problems globally. Oral cancer is ranked as the sixth most common cancer (GLOBOCAN). It is most commonly seen in South and South East Asian countries such as India, Bangladesh, Taiwan, and Sri Lanka (World Health Organization, 1984). About 90% of oral cancers are squamous cell carcinomas².

Oral cancer is mostly preventable. As the mouth is easily accessible for self or clinical examination early diagnosis of the malignancy is possible, and it greatly increases survival rates. The prognosis of oral cancer is poor with lowest survival rates of <50%, within a 5-year period. In spite of advances in the diagnosis and treatment of oral cancer, the proportion of oral cancer cases diagnosed at an early and localized stage is still <50%³.

One of the main reasons in our rural population in India may be a lack of information about the causes and knowledge of the signs and symptoms of oral cancer. Moreover, most of the oral cancers are preventable if people know which risk factors they must control or eliminate. Therefore, this study was aimed at obtaining initial baseline information on the level of oral cancer awareness among Nalgonda district rural population.

II. Aims And Objectives:

- To assess the level of awareness and knowledge of OC and OPMDs and their associated risk factors in rural population of Nalgonda.
- To correlate the knowledge levels regarding OC and OPMDs according to gender.
- To alert the study population regarding risk factors, thereby facilitating early prevention of OC.

III. Materials And Methods:

The present study was conducted as a cross sectional study in the rural population of Nalgonda. Patients with a habit history and who was willing to participate were randomly selected. A self administered Questionnaire was designed and comprised of relevant questions to determine information on the demographic characteristics, habits, along with the extent of knowledge about the risk factors and signs of oral cancer oral premalignant diseases of the surveyed subjects was collected using a close end questionnaire formatted both in English and the local Telugu language. The questions that consisted of queries related to demographic factors gender, habits, awareness of oral cancer, knowledge of the risk factors, signs and symptoms of oral Cancer and oral premalignant diseases. Duration of this study was 6 months. Responses to questions were assessed as correct or incorrect, and knowledge scores were calculated for each respondent.

A total of 300 patients of which 251 were males and 49 females above 15 years were randomly chosen and a self-administered questionnaire was given to the respondents. For illiterate patients, an interviewer transferred the answers into the questionnaire.

Inclusion criteria:

- ✓ Patients of age group above 15 years
- ✓ Patients with any kind of habit history(Smoking tobacco, Smokeless tobacco, Alcohol)
- ✓ Patients belonging to the nativity of Nalgonda district.

Exclusion criteria:

- ✓ Patients below 15 years
- ✓ Patients without any habit history.

IV. Results

The study population was consisted of 300 patients, of which 251 were males and 49 females. 70% male participants had a habit of smoking, 21% male had chewing alone and only 9% male participant had both chewing and smoking. The entire female participant had a habit of chewing tobacco but only few participants had smoking habit less than 4%. [Table 1]

All the participants responded well to the self administered questionnaire. When asked about whether they know any diseases that are caused by tobacco, 66% and 43% of male and female participants responded positively respectively. Of the study subjects, 66% males and 43% females were aware that tobacco causes cancer. 54% males and 33% females were had a knowledge of ill effect of passive smoking on general health.

When asked about awareness of any other complications of habits, only 37% of male participants were aware of complications which lead to reduced mouth opening and finally oral cancer. On the other hand 92% of female participants were lacking other complications of tobacco.

When asked about awareness of any clinical features of oral cancer, 33% of males and 20% of females were aware that ulcer is a sign of oral cancer whereas 22% of the males and 23% females were aware that swelling is a sign of oral cancer. 53% of males and 39% females were aware that smoking and drinking increases the chances of cancer.

About 37% males and 22% females believe that oral cancer is hereditary, which is transferred from one generation to other generation. 37% males and 13% females think that oral cancer is curable. When they were

asked for willingness for the screening and treatment of oral cancer, 56% of the males and 30% of the females with habit history wants to get screened for oral cancer. 19% male and 10% female participants have already tried to quit the habits. Proper motivation and counselling is required for such participants to break such habits. [Graph 1]

V. Discussion

The term “Oral Potentially Malignant disorders” (OPMD) was adopted by the World Health Organization (WHO) in 2005 to describe oral lesions and conditions associated with a risk of malignant transformation. Leukoplakia, erythroplakia, and lichenoid lesions are the most important OPMDs but several other oral lesions and conditions may also be associated with an increased risk of oral SCC. The risk of malignant transformation varies greatly depending on the exact type of OPMD, site within the mouth and the populations studied⁴. Early detection and identification of patients at risk and early treatment remains the most important approach for reducing the risk of malignant transformation associated with OPMDs. Public education and awareness regarding the etiology, signs and symptoms of OPMDs and oral cancer and their complications will reduce OC burden in the society.

The present study highlights that less than 50% of the study subjects were not aware of OPMDs but more than 50% of the study subjects were aware that tobacco causes oral cancer. Comparatively Ariyawardana and Vitanaarachchi (2005)⁵ reported in their hospital based study that over 90% were aware of oral cancer and the figure for PMODs was 45%.

When we checked about the awareness about the risk factors of oral cancer 55% of males and 33% of female subjects of the study were aware that passive smoking causes oral cancer. 37% of males and 8% of females of study population were aware that habits causes oral cancer. Comparatively park et al⁶ in their study showed 45% and 5% of patients in their hospital based study could tell tobacco and alcohol causes oral cancer respectively.

Oral cancer is asymptomatic at the early stages, patients should be aware of clinical signs and symptoms so questions regarding the same were asked to the study subjects of the present study, 33% of males and 20% of females were knowing that oral cancer can present as ulcer. 22% of males and 23% of females were aware that oral cancer can present as swelling. 39% of males and 5% of females were having knowledge that oral premalignant lesions can cause oral cancer. Further we asked about whether the study subjects were willing to quit the habit we found 19% of the males and 10% of the females tried to quit the habit but were not successful in their attempt. 56% of the males and 30% females were willing for treatment for any mucosal lesions (PMODs). We further questioned whether oral cancer is curable, 37% of males and 13% females were aware that cancer is curable.

At early stages of the disease oral cancer is asymptomatic and hence the affected individuals do not seek treatment. Therefore, knowledge on the signs of oral cancer is of paramount importance. Self-examination of the oral mucosa has been considered an effective method of detecting asymptomatic early disease⁷.

In summary, we tried to check awareness on oral cancer and PMODs in Nalgonda population to the best of our knowledge. Although we have public health promotion, education initiatives and awareness campaigns on a local and national scale, our study revealed an alarming lack of awareness towards oral cancer and PMODs which requires to be readily addressed.

VI. Conclusion

Early detection of oral cancer is the most effective means to improve survival and to reduce morbidity, disfigurement, treatment duration and associated costs. Delay in diagnosis has been considered in the recent past as a significant factor which compromises the survival and worsening the treatment outcome High level of public awareness on oral cancer and PMODs is of utmost importance for the individuals to present early to health care facilities.

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GRAPHS AND TABLES

Graph 1: Response to Questionnaire

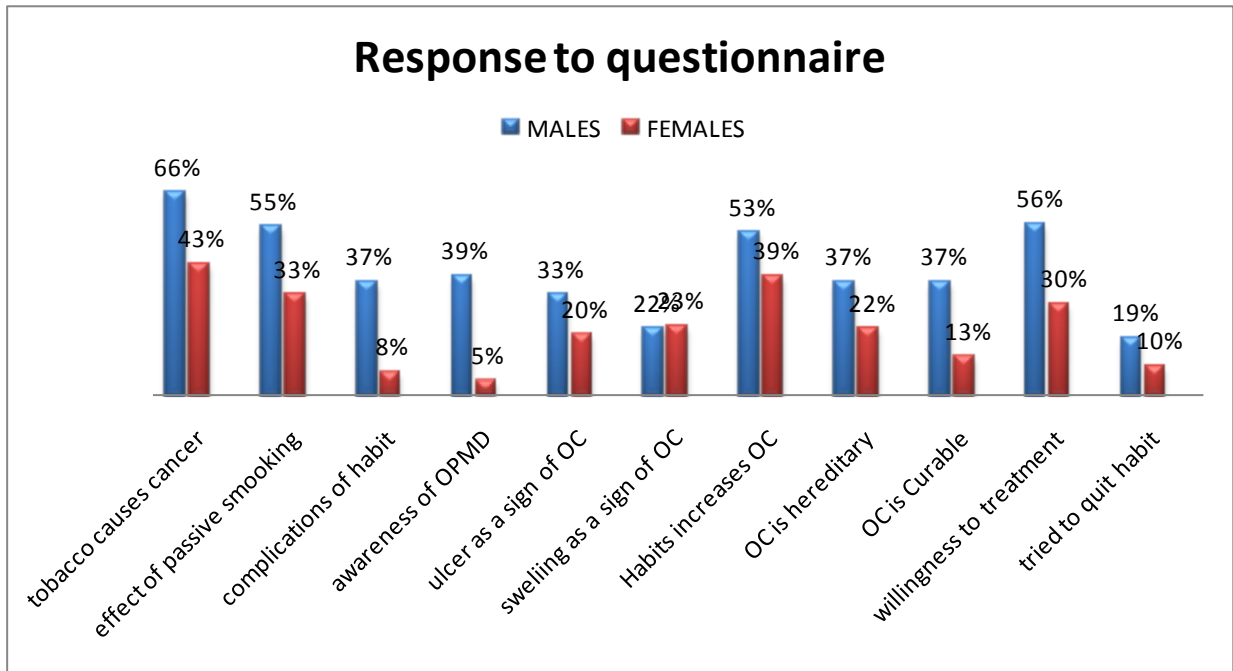


Table 1: Distribution of Study samples

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Parameters	Males	Females
No of participants N=300	251	49
Only Smoking	176	-
Only Tobacco chewing	53	47
Both	22	2