



CREATING AWARENESS, ON DOOR TEACHING AND SCREENING OF RURAL PEOPLE FOR ORAL POTENTIALLY MALIGNANT DISORDERS.

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ABSTRACT

Objective- Rural population in India consumes high amount of tobacco which causes oral potentially malignant disorders (OPMD), if left unnoticed and untreated finally results in oral squamous cell carcinoma (OSCC). Hence, the awareness of such lesions/conditions is important. The objective of the study is to create awareness among rural people about potentially malignant disorders and also to teach them how to conduct self examination of oral cavity so as to decrease the incidence of OSCC.

Methods- A personal interview was done to analyse the people's knowledge regarding OPMD and OSCC. People were screened for all variety of lesions in their oral cavity, brush scrap smear test was also done when required. On door teaching of screening of their oral lesion was done in 8 step mechanism. Flash card with useful information was distributed to broaden their vision on OPMD and OSCC.

Results- 24.33 % of individual had potentially malignant disorders and 2.71 % of individuals had dysplastic changes. Among the people with lesion only 15 % were aware of the lesion present in their oral cavity. 100 % individuals with any kind of oral lesion consumed tobacco in different forms. Among the individuals who consumed tobacco 14.28 % of individuals tried ceasing the habit. 98.65% individuals were interested in generating knowledge about OSCC. 100 % individual wanted regular dental camp to be scheduled in their village.

Conclusion- This study highlights a need for education concerning the risk factors for oral lesions, its clinical manifestations and the impact of adverse habits on health in long term. This was observed that inspite of constrained factors like limited manpower, regular screening will result in early detection of cases leading to a greater survival and less radical treatment.

KEYWORDS : OPMD, OSCC, Screening, Tobacco, Awareness, Incidence.

INTRODUCTION:

Oral cancer is a serious health problem, and it is the sixth most common cancer in the world. In high-risk countries like India, Pakistan, Sri Lanka and Bangladesh. It is also one of the most common cancers in men and may contribute up to 25% of all new cases.¹ Oral squamous cell carcinoma (OSCC) develops generally from preexisting oral potentially malignant disorders (OPMD) including oral leukoplakia, erythroplakia, submucous fibrosis, and lichenoid reaction. In 1978, working group of WHO classified 'precancer' into 'lesions' and 'conditions' with following definitions.² A precancerous lesion is 'a morphologically altered tissue in which oral cancer is more likely to occur than in its apparently normal counterpart'. A precancerous condition is 'a generalized state associated with a significantly increased risk of cancer'. The current Working Group of WHO (2005) did not favor subdividing precancer to lesions and conditions and the consensus view was to refer to all clinical presentations that carry a risk of cancer under the term 'potentially malignant disorders' to reflect their widespread anatomical distribution.³ However they have not proposed a definition for OPMD.

MATERIALS AND METHODS

The present study was conducted in Bilkisganj, a village 30-35 kms away from Bhopal, capital city of Madhya Pradesh. People willing to participate in the study were randomly selected and a total sample size of 222 individuals of both the genders was chosen. Voluntary informed consent was obtained from the village head before the survey. The participants were explained properly about the research and the examination to be done and later on the examination was conducted.

A group of three interns from a dental college were trained to examine the oral cavity of the subjects and conduct brush scrap smear test for cytology in suspected cases. The interns went door to door and collected information from the subjects including their gender, age, adverse habits and then they examined the oral cavity of the participating subjects with the help of diagnostic instruments (mouth mirror and probe) and also taught the subjects to self examine their oral cavity for the same. A brush smear for cytology was collected from the ulceroproliferative lesions to confirm malignancy.

A flash card regarding the ill effects due to consumption of tobacco and areca nut/betel nut, clinical manifestations of OPMD and OSCC were given to broaden their vision and create awareness among rural people.

RESULT

Among 222 individuals with an average age of 41 yrs (range 23yrs - 72 yrs) 54 (24.33%) had potentially malignant disorders and 06 (2.71%) had ulceroproliferative lesions indicative of malignancy while the rest had relatively healthy oral cavity (figure 1). All the smears of the ulceroproliferative lesions came out to be positive for malignancy. Among the 54 patients with OPMD, 36 (66.67%) had leukoplakia, 12 (22.23%) had oral submucous fibrosis, 03(5.56%) had lichen planus and 03 (5.56%) had erythroplakia (figure 2). All the 60 (100%) patients with oral lesions consumed tobacco in any form. Among the 60 patients with oral lesions 54 had poor oral hygiene (figure 3). Among the 60 patients with oral lesions only 09 (15 %) were aware of the fact that they had a lesion in their oral cavity, rest 51 (85 %) were unaware (figure 4). 219(98.65) from 222 individuals wanted to gain knowledge on dental health and diseases related to oral (figure 5). While each and every individual wanted regular health camps to be conducted in their village.

DISCUSSION

OSCC is one of the common cancers in India accounting for 50–70% of total cancer mortality.⁶ OPMDs are those lesions and conditions that have an increased potential for malignant transformation and are risk indicators of future malignancies.^{7,8} It is noteworthy that many OSCC develop from OPMDs. Correct diagnosis and timely treatment of OPMDs may help prevent malignant transformation in oral lesions.

In the study pathological screening with the help of toluidine blue and brush smear cytology were done to reach to a final diagnosis. The cases which turned out to be malignant were confirmed by biopsy.

Public awareness is very low in respect to the knowledge of risk factors and methods of early detection of OPMD.⁴ It seems probable that in both high risk and general population, neither the symptoms

of OSCC nor the main risk factors are well-understood. Hence, patients are frequently diagnosed with advanced stage of cancer with low survival rates.⁵ The early detection of cancer is of critical importance because survival rates markedly improve when the oral lesion is identified at an early stage.

Previous studies concerning awareness of patients towards potentially malignant disorders concluded that there is an extreme lack of knowledge on OPMD. This survey aims to get information about awareness of existing OPMD in rural people and awareness of them regarding the development of cancer in future. This survey also aims to downgrade the stage of OSCC at the time of diagnosis in rural areas by broadening their vision on the same and teaching them to self examine their oral cavity for any such disorders. The survey also aims to screen their oral cavity so that appropriate measures could be taken to provide them with a healthy lifestyle.

Although there are community screening programs for oral cancer, chronic tobacco chewers and smokers, who are at a higher risk, do not take advantage of it. Hence, patients are frequently

diagnosed with advanced stage of cancer. Lack of awareness about signs and symptoms of oral OPMDs among general population and even some physicians are believed to be responsible for the diagnostic delay of these entities.

The study showed that there is some relationship between tobacco consumption and OPMD, similar to the result seen in other studies.^{9,10} The study clearly showed that there is extreme lack of knowledge in rural people regarding OPMD which was also concluded in the study conducted by Sangeetha et al.¹¹

CONCLUSION

The present study concluded that the rural people are highly unaware of the OPMD and the risk factors leading to it. However, most of them were interested to develop knowledge on the same. The need of the hour is to implement and propagate health education campaigns emphasizing on oral cancer, risk factors, preventive strategies, symptoms, and signs of OPMD so as to create a healthy and disease free India.

Figure 1 – Showing the clinical picture of the total sample.

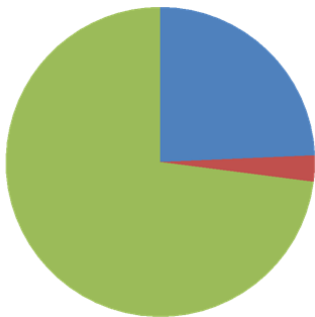


FIGURE 2 – SHOWING THE CLINICAL DIAGNOSIS OF THE INDIVIDUALS WHO HAVE OPMD.

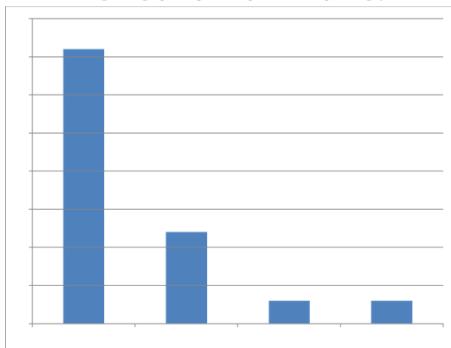


FIGURE 3 – SHOWING THE STATUS OF ORAL HYGIENE OF THE INDIVIDUALS WITH LESIONS.

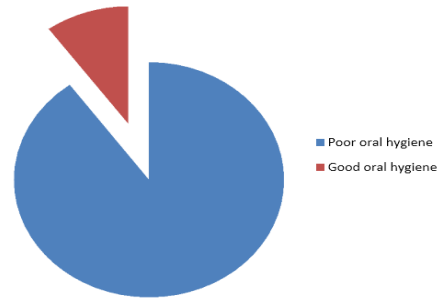


FIGURE 4 – SHOWING THE KNOWLEDGE OF THE LESION AMONG THE INDIVIDUALS WITH LESION.

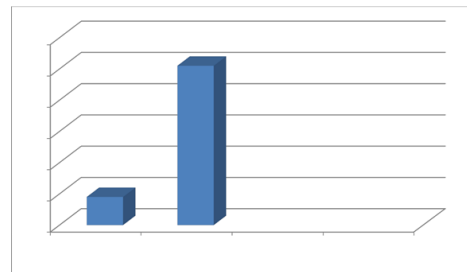
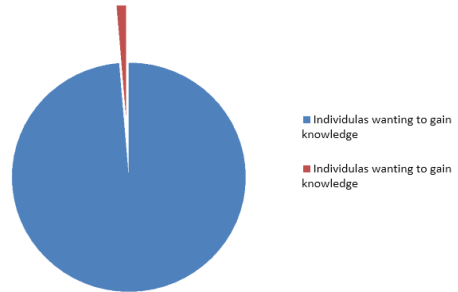


FIGURE 5 – SHOWING THE INTEREST OF THE INDIVIDUAL ON DEVELOPING KNOWLEDGE ON OPMD AND OTHER DENTAL HEALTH RELATED ISSUES



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