Original Article

Incidence of tobacco chewing in families of patients with oral squamous cell carcinoma

Rashmi Nigudkar, Minal Chaudhary, Madhuri Gawande, Swati Patil, Alka Hande, Lalit Kanthale

Department of Oral Pathology and Microbiology, Sharad Pawar Dental College, Wardha, Maharashtra, India

ABSTRACT

Introduction: Oral cancer is a major health problem worldwide, owed to its high incidence and low survival rate as well as to the functional and cosmetic deficiencies that accompany the disease even after the treatment. The occurrence of oral cancer is particularly high among men, for whom it is the eighth most common cancer. **Aim and Objectives:** (1) To evaluate the effectiveness of antitobacco campaign. (2) To assess the prevalence of deleterious habits among families of patients with oral squamous cell carcinoma (OSCC). **Materials and Methods:** The study was carried out in the Department of Oral Pathology and Microbiology and 30 histopathologically diagnosed cases of OSCC were included in the study. The family members of these patients were given a questionnaire. **Results:** It was found that out of the 30 families included, only 7 families were such, in which the patient as well as the family members had quit the habit. Only 2 families were such that only the patient had the deleterious habit. **Conclusion:** Tobacco smoking and chewing is one of the prime factors responsible for oral pre-cancer and cancer. The incidence and prevalence of such lesions in South Asian countries like India is high owing to the increased production and consumption of tobacco.

Key words: Antitobacco campaign, squamous cell carcinoma, tobacco

INTRODUCTION

Oral cavity is prone for a myriad of changes with advancing age as well as environmental and lifestyle-related factors. Oral cancer is one of the leading causes of morbidity and mortality in developing countries, especially in India. Tobacco consumption in smokeless and smoking form along with alcohol is considered as the basic risk factor.[1] Tobacco is a major health challenge with various tobacco products for use which have deleterious effects on the body. It was 400 years ago that tobacco was introduced in India, by the Portuguese.[2] India is the second largest producer and consumer of tobacco after China. Initially, in India, tobacco was used as the product to be smoked, but nowadays, tobacco can be used in various forms such as pan chewing and betel quid chewing. In India, bidi smoking is the most popular form of tobacco smoking and paan with tobacco is the chewing form.[3] Dry tobacco-areca nut preparations such as paan masala, gutkha, and mawa are also popular and highly addictive. The estimated number of tobacco users in India, among those 10 years of age and above is around 250 million.[1] Oral squamous cell carcinoma (OSCC) is the sixth most common cancer and accounts for approximately 5% of all malignant tumors worldwide. Incidence and survival rates of cancer are clearly linked to socioeconomic factors.[4] Low socioeconomic status is as well significantly associated with increased oral cancer risk in high and lower income countries across the world.

Aim and objectives

1. To evaluate the effectiveness of antitobacco campaign in families of patients with OSCC

Address for correspondence: Dr. Rashmi Nigudkar,
Department of Oral Pathology and Microbiology,
Sharad Pawar Dental College, Sawangi, Wardha, Maharashtra, India.
E-mail: rshmnigudkar@yahoo.co.in

Access this article online

Quick Response Code:

Website: www.ccij-online.org

DOI: 10.4103/2278-0513.200110

Cite this article as: Nigudkar R, Chaudhary M, Gawande M, Patil S, Hande A, Kanthale L. Incidence of tobacco chewing in families of patients with oral squamous cell carcinoma. Clin Cancer Investig J 2016;5:513-5.

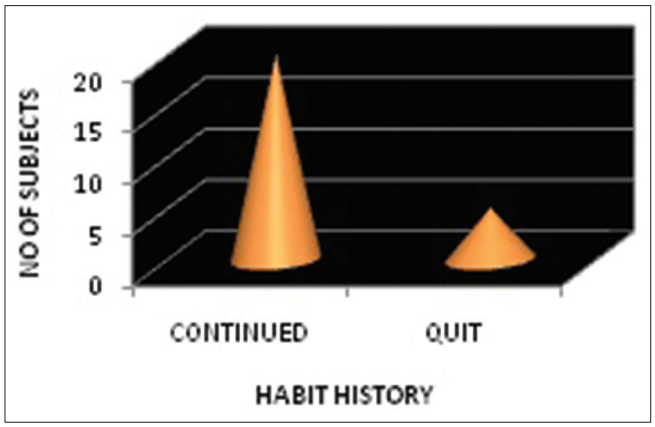

Figure 1: The presence and absence of habit

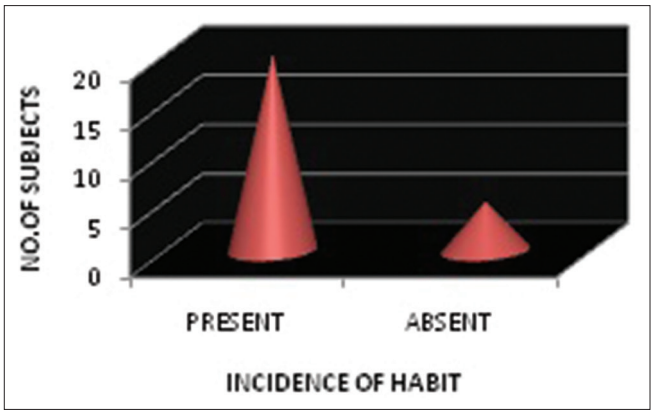

Figure 2: The continuation and quitting of the deleterious habit

2. To assess the prevalence of deleterious habits such as tobacco chewing and pan chewing. in families of patients with OSCC.

MATERIALS AND METHODS

The study was carried out in the Department of Oral Pathology and Microbiology at Sharad Pawar Dental College, Wardha. Families of 30 known cases of OSCC were included in the study. Informed consent verbally was taken from the participants and all participants were asked to fill a questionnaire. The questionnaire consisted of questions like:

1. How many members were present in the family other than the patient?
2. Whether any family member had any habit such as tobacco chewing, kharra chewing, and paan chewing?
3. If any habit present, then since how many years and the duration of the habit?
4. If the habit has been quit or the habit is still continued?

RESULTS

Out of the 30 families evaluated, members of 23 families were such, where the habit still continued while members of five families discontinued the habit. There were two families where only the patient had the habit.

DISCUSSION

The figures obtained in our study show that out of 30 families of OSCC patient, members of 23 families had the deleterious habits [Figures 1 and 2].

Out of these people in only members of 5 families quit the habit [Figures 1 and 2]. There were only 2 families where only the patient had the habit. If the earning or the dominant male is abusing tobacco, there are 76% chances that junior/senior generation are more likely to have this habit (according to our study). The habit was more commonly seen in males than females.

These figures very well prove that the antitobacco awareness program conducted by the government is not so effective. Furthermore, the firsthand experience of OSCC in the family does not have any effect on the other junior and senior family members from stopping the deleterious habit.

CONCLUSIONS

Use of tobacco is one of the prime factors responsible for oral precancer and cancer. The incidence and prevalence of such lesions in South Asian countries such as India are high owing to the increased production and consumption of tobacco.[5] Furthermore, relative lack of awareness regarding the harmful effects of tobacco is a major reason for the same. Preventive measures should begin at grass-root levels aimed at individuals who are at high risk for tobacco usage along with intervention at community level and policy level interventions by the concerned policy makers.[6] Health professionals including dentists should also play an active role in prevention and control of tobacco-induced lesions due to the direct contact with patients who are at increased risk.[7]

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Sridharan G. Epidemiology, control and prevention of tobacco induced oral mucosal lesions in India. Indian J Cancer 2014;51:80-5.
2. Patel P, Patel V. Oral mucosal lesions among residents of a town in North Gujarat. Natl J Med Res 2011;1:3-6.

3. Sudhakar S, Praveen Kumar B, Prabhat MP. Prevalence of oral mucosal changes in Eluru, Andhra Pradesh (India) – An institutional study. J Oral Health Community Dent 2011;5:42-6.
4. Saraswathi TR, Ranganathan K, Shanmugam S, Sowmya R, Narasimhan PD, Gunaseelan R. Prevalence of oral lesions in relation to habits: Cross-sectional study in South India. Indian J Dent Res 2006;17:121-5.
5. Kaur J, Jain DC. Tobacco control policies in India: Implementation and challenges. Indian J Public Health 2011;55:220-7.
6. World Health Organization (WHO). Fresh and Alive: MPOWER, WHO Report on the Global Tobacco Epidemic. Geneva, Switzerland: WHO; 2008.
7. Government of India, Ministry of Health and Family Welfare, Global Adult Tobacco Survey, India. 2009-2010.