PRÉVALENCE OF (OSF) ORAL SUBMUCOUS FIBROSIS AND RISK FACTORS IN KARACHI

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ABSTRACT

Objective: Oral sub mucous fibrosis (OSMF) is a pre-malignant lesion of the buccal mucosa. It results in the progressive inability to open the mouth. Objective of this study to check prevalence and risk factors. Method: Cancer of oral cavity and larynx is the most frequently recorded malignancy in males. Adolescents are the most vulnerable population to initiate tobacco use. It is now well established that most of the adult users of tobacco start tobacco use in childhood or adolescence. Tobacco and its related products have flooded the Pakistani market being cheap and convenient and have become popular in young and old illiterate people. They have been identified as a high risk for occurrence of the precancerous lesion (oral sub mucous fibrosis). Results: There has been a rapid increase in trade and use of smokeless tobacco products in recent years in the country; even the advertisement and promotional campaigns by the manufacturers also play an important role in initiation of the habit by adolescents, which is a matter of serious concern to the health planners. Conclusion: Taking into consideration the enormous health complications associated with tobacco use, it is of utmost importance to understand the factors leading to its use and to plan strategies to reduce its intake. Programs should be conducted in schools and public places to make the people aware of its hazards and risks by its use.

Keywords: Tobacco, Malignancy, Adolescence.

INTRODUCTION

Oral cancer is one of the cause factors of four leading non communicable diseases (i.e. cardiovascular diseases, cancer, chronic obstructive pulmonary disease and diabetes). These diseases have caused 30 million deaths globally. Use of tobacco and its various forms are one of the major risk factors of oral cancer. In 1990, it was estimated that tobacco caused just 3.9 million deaths demonstrating the rapid evolution of the tobacco epidemic and new evidence of the size of its hazard, with most of the increase in developing countries[1].

In India 30% to 40% of all reported cancers are oral cancers[2], a remarkably high prevalence that is closely associated with several form of tobacco smoking and chewing. The occurrence of oral cancer is most likely related to socio-economic status in United States as it has also been shown to be in Britain[3]. A standard measure of oral cancer severity is the five years relative survival rate[4]. The prospects of survival are considerably higher when the cancer is confined to a local lesion as opposed to regional or distant spread having already occurred when the diagnosis is made[5]. Five year survival is 4times greater when tumors are diagnosed at localized stages rather than after metastasis has occurred [6]. It follows that cancer and pre-cancerous lesion should be diagnosed as early as possible if treatment is to have good prognosis.

Early detection of oral cancer by using visual inspection of the mouth is being considered in countries where incident is high, such as Bangladesh, India, Pakistan and Sri Lanka[7]. Oral cancer is the eleventh most common cancer worldwide and tobacco use is estimated to account for about 41% of oral/pharyngeal cancer cases in men and 11% in women. Among males, cancer of oral cavity and larynx is the most frequently recorded malignancy, whereas in females, breast cancer is the most common type followed by oral cancer. Exposure to tobacco and other environmental carcinogens is high and infrastructure for analgesic care is limited and in most cases are not accessible[8].

Smokeless tobacco is an important etiological factor in cancer of the mouth, lip, tongue and pharynx. The sub-continent has one of the highest rates of oral cancer in the world. 65% of all cancer in men and 33% of all cancers in women are tobacco related. Annual incidence of oral cancer is said to be 10/10000 of males[9]. The prevalence in use of areca nut and its dependence is rapidly increasing in India in the form of pan masala especially by the youth[10]. Most pan masala preparations in addition to areca nut also have tobacco, areca lime, and catechu, tannin which are found to promote excessive and harmful use and lead dependency[11]. All areca nut products, even those without tobacco are associated with oral sub mucous fibrosis (OSF). Both time period and daily frequency of areca nut use, increases the risk of oral cancer suggesting a dose responsible relationship[12,13]. An increased risk for the development of oral malignancy (Squamous cell carcinoma and its precursor's leukoplakia and sub mucous fibrosis) has been reported in various studies of areca nut users only, with adding tobacco further increasing the risk[12]. In a recent exercise, the International Agency for Research on cancer of the World Health Organization evaluated areca nut as a carcinogenic substance with the help of newer data[14]. Our research group has also done this type of work regarding awareness, frequency of diseases and dispensing practice[15-18].

METHODOLOGY

The survey was conducted among 100 peoples (age 40-80) of Pakistani belonging to different categories of our society including working man, women and house maids. The study is based on general interview which were taken at different public places. Survey was examined or inspect closely and thoroughly. General interview included the questions regarding use of tobacco and related products. Due to the use of tobacco and its related products, some of the patients were suffering from oral sub mucous fibrosis and were experiencing symptoms like burning sensation of mouth and tongue, irritation of mouth with chilies and spicy food, difficulty or inability in opening mouth.

RESULTS

Results of the study showed that 50% of the study subjects were using tobacco and its related products as shown in figure #1, amongst them 60% were male (figure#3). Different types of products were being used amongst them pan was most common (figure#4). Out of 50% individual who were using tobacco 7% of Oral Submucous Fibrosis individuals were suffering from OSF (figure#2).
Fig. 1: Habit of tobacco and its products use

Fig. 2: Percentage of OSF.

Fig. 3: Use of tobacco in different gender.
DISCUSSION

From the survey we revealed that almost every age person and specially males are engage in using tobacco and its products. Mostly lower class peoples are using tobacco but in middle and upper class youngsters and adults are also involve in using this product in the form of SHEESHA which contains a huge amount of tobacco in it.

We observe that firstly people using tobacco and later they switch to areca nut which is more harmful. We also observe that initially people start this habit for fun and later on they continue for pleasure and somewhat due to dependence on it. We also noticed in our survey that most people use tobacco and its product during night time and most of them unaware of its harmful effects. And whose which know the harmful effects from its use do not take them seriously. Most of the people do not want to withdraw the tobacco use and if anyone wants this due to not proper guidance and withdrawal effects they started its use again. Physicians also told us that OSF is a pre-cancerous condition and in Pakistan people come when they reach to the 3rd and 4th stage of cancer so there is no OSF suffering patients.

CONCLUSION

Findings of the present study indicate that:

Tobacco and their products use are one of the root causes of the precancerous lesions, particularly (OSF) oral sub-mucous fibrosis that can finally lead to carcinoma of the oral cavity.

The onset of the disease is early because of easy access to the above mentioned products.

Lack of awareness about OSF amongst the population.

Dental health education programme about the hazards of tobacco and its related products must be conducted.

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