

THE STUDY OF ORAL CANCER SYMPTOMS AMONG TOBACCO CONSUMING RURAL WOMEN IN KANPUR REGION

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ABSTRACT

Oral cancer is one of the major health problem in the developing world. Consuming tobacco and its products is a known cause of oral cancer in the people from lower socioeconomic background. Tobacco consumption by women in India is very uncommon and socially unacceptable, but nowadays, the trend of tobacco consumption habits has been increasing in rural women. This study was performed on 200 rural women of 20 to 60 years age group in the Kanpur region; those were consuming tobacco products like gutkha, khaini, bidi, cigarette and pan with tobacco, individually. 18 (9%) women showed symptoms of mouth cancer. The prevalence of symptoms were found highest 11

(61%), among women in 50-60 year age group and lowest 2 (11%) among women in 20 to 30 year age group. In oral cancer symptoms the association of chewing gutkha was found highest (44%), followed by Khaini (27.7%), Pan with tobacco (16.6%), bidi (11%), Cigarette (0%).

KEYWORDS: Oral cancer, Rural women, Tobacco products, Smokeless tobacco, Mortality.

INTRODUCTION

Oral cancer has been considered as a major health issue and ranked among the top three cancers in Indian.^[1] The prevalence of oral cancer is 30% among all cancers. Any malignant

neoplasm which is found on gingiva, tongue, lip, palate or in cheek lining might be considered as oral or mouth cancer. Use of tobacco and its products as bidi, cigarette, gutkha, khaini, pan with tobacco are the most common risk factors for oral cancer.^[2] Tobacco is considered as one of the top killer in the world and killing up to half of its regular users. India is on the level of the third largest producer and consumer of tobacco worldwide.^[3,4] In India and South Asian countries, the incidence of oral cancer is higher. The worldwide death rate is 10% caused by tobacco, almost 5.4 million a year, of which 80% occur in developing countries. The frequency of death in India is nine lakh individuals each year because of tobacco related illnesses and more than 2200 Indians die per day because of tobacco consumption. 40% of all cancers in India is produced by tobacco use. In the world, India is having most elevated number of oral cancer cases among which 90% concerns with tobacco.^[3] Although the use of tobacco is less common among women still tobacco consumption among women is getting more consideration as of now because tobacco causes about 1.5 million deaths in women.^[5] In India, tobacco use by women has doubled in the last five years, according to the global adult tobacco survey (GATS). Approximately 20% women are smokers worldwide. Around 250 million women are daily smokers worldwide, among them 22% of women are related to developing countries and 9 percent of women in developing countries smoke tobacco.^[6] Proposed study is focused to analyze the oral cancer symptoms among tobacco consuming rural women in Kanpur region.

MATERIALS AND METHOD

Study design and area

This cross-sectional study conducted in a rural area of the Kanpur region of 260 Sq. km, in which the population was about 2,532,138 and among them the male population was 1,374,121 (53.8%) and female population was 1,177,216 (46.2%) while the total literacy level was 1,758,807 (69%) in which 997,001 (72%) reported as male literacy and 761,806 (64.7%) found as female literacy.

Inclusion Criteria

All women either smoking tobacco or using smokeless tobacco of the rural Kanpur region were included.

Exclusion Criteria

Women those consumed tobacco occasionally and consumed more than one source of tobacco were excluded from this study.

Study population

In the current study, a total no. of 200 tobacco consuming rural women in 20-60 year age group were selected in the Kanpur region for data collection. Systematic random sampling was done in this study and written consent information sheet was obtained from all participants. All women were asked questions from the prepared questionnaire about tobacco use.

Clinical manifestation

Difficulty in swallowing or Chewing, difficulty in moving of the tongue and jaw, lack of sensation of the tongue or elsewhere in the mouth, swelling of the jaw, loosening and pain in the teeth, voice changes, a lump in the neck, thickening in the cheek, a white or red patch on the gums, tongue, tonsil, or lining of the mouth, persistent mouth pain is another common oral cancer sign. The changes are found in the surface texture, producing a flat and rough lesion.^[7,8]

RESULTS



Figure-1: Different types of smokeless tobacco products.



Figure-2: A tobacco consuming rural women with oral cancer symptoms.

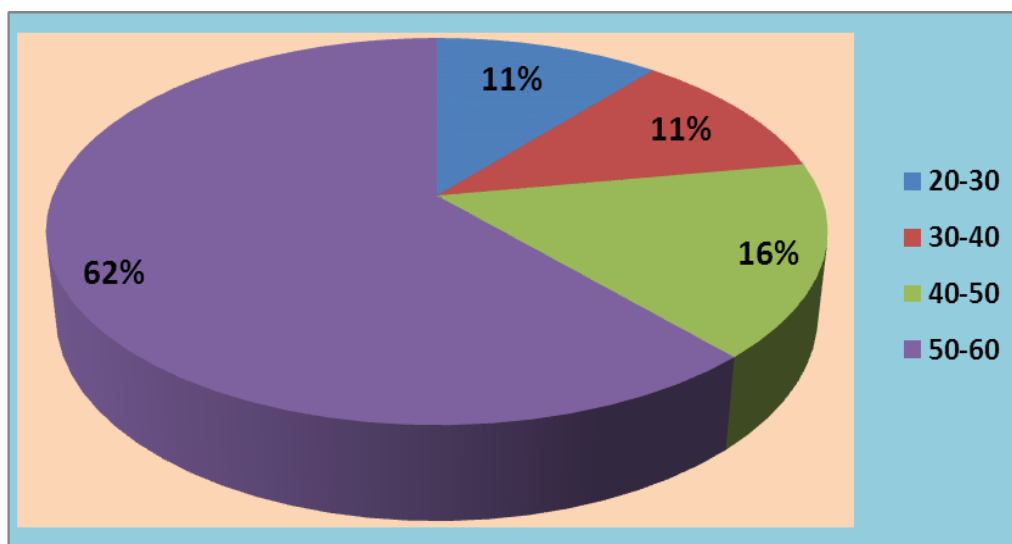


Figure 3: Age-wise (years) percentage of rural women with oral cancer symptoms.

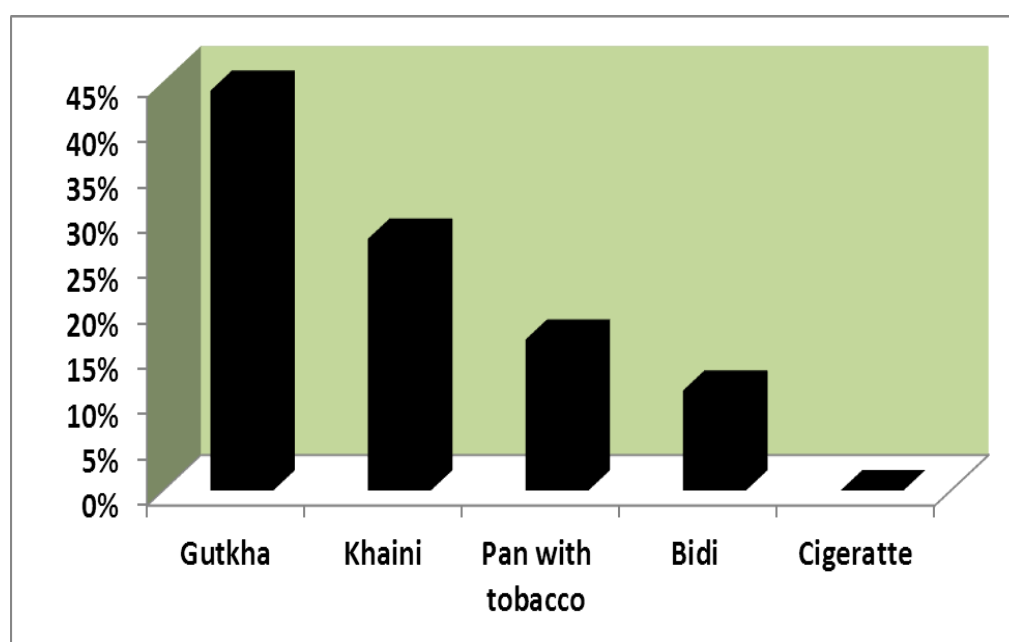


Figure 4: Graph showing percentage of rural women with oral cancer and its association with different tobacco products.

DISCUSSION

In the South Asian region, tobacco is a major threat for oral cancer among women. Tobacco and alcohol play a key role in causing oral and oropharyngeal cancers. Addiction of these things is very harmful, when used in continuations. These products contain many carcinogens as thiocyanate, nicotine and hydrogen cyanide. Many epidemiological studies have reported that about 80% of oral cancer patients relate to smoking.^[9] Oral carcinoma is one of the most common cancers worldwide, and is one of the most frequent causes of death. Approx

1,45,400 deaths and 3,00,400 cases were notified worldwide from oral cavity cancer including lip cancer in 2012. A large no. of 48,330 incidences of oral cancers were reported in USA, 2016, among them 13,550 were female. In 2016, an estimated death rate in the USA due to oral cancers was approximate 9,750, among them 2,660 were female.^[10]

In our study, among 200 rural women 18 (9%) were showing symptoms of oral cancer. The occurrence of cancer in different parts of the oral cavity is found usually between 51-55 years of age group in most of the countries.^[11] This report showed resemblance with our study. In this study The prevalence of symptoms was found highest (62%) among women of age group 50 to 60 years and lowest in women of 20 to 40 years age group (11%). In India, most of the women use tobacco in smokeless form. In India, it has been calculated roughly that one-third of women utilize tobacco in one form or another.^[12] In our study, association of chewing gutkha was found highest (44%), followed by Khaini (27.7%), Pan with tobacco (16.6%), bidi (11%), Cigerate (0%) with oral cancer symptoms among rural women. A study reported in Pune, Maharashtra showed the highest (32%) association of gutkha in case of oral cancer, supports our study.^[13, 14]

CONCLUSION

Tobacco is found positively associated with oral cancer symptoms in rural women. The oral cancer symptoms were found highest in gutkha consuming women while cigarette showed lowest association. The highest percentage of oral cancer symptoms were found among rural women in 50 to 60 year age group.

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