

# Epidemiological Profile of Oral Cancer Patients Attending Katihar Medical College, Katihar (Bihar)

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## ABSTRACT

**Background:** India has very high incidence of oral cancer. The purpose of this prospective study was to analyze the epidemiology of oral cancer patients in katihar medical college. **Methods:** Prospective study was performed in 100 patients of diagnosed oral cancer from October 2016 to August 2018. **Results:** The largest number of cases in this study was distributed in age group of 56 yr – 70 yrs of age (46%). The lowest number of case distribution were noted in 25-35yrs (4%). Tobacco chewing in the form of paan ,khaini , gutka , was habit of 48% where as smoking in the form of bidi cigarrets was in 27% of patients . 13 % of patients were both of tobacco chewing and smoking habits. **Conclusion:** Smokeless tobacco specially in our country in the form of paan khaini , gutka are heavily consumed specially in younger age of society which has to stop at any cost to decrease the incidence of oral cancer.

**Keywords:** Alcohol, Oral cancer, Smoking, Tobacco.

## INTRODUCTION

Compared to western countries, India has high incidence of oral cancers.<sup>[1]</sup> Tobacco chewing, smoking and alcohol consumption are major contributing factors for oral carcinoma.<sup>[2]</sup> Several studies from all over the world demonstrate smoking and smokeless tobacco products as etiological factors for oral cancer.<sup>[3]</sup> Alcohol consumption further increase the risk.<sup>[4]</sup> Worldwide the incidence of oral cavity and oropharyngeal cancer increases 10 fold, with significant changes in its relative proportional incidence.<sup>[5]</sup> In parts of India and southeast Asia oral cavity and oropharyngeal cancer represent greater than 30% of all cancer , likely related to geographic differences in tobacco and other carcinogen consumption. Both tobacco and alcohol contribute independently to the development of cancer of the oral cavity.<sup>[6]</sup> There is 35 fold increase in risk of cancer for men who smoke two or more packs of cigarettes and consume more than four alcoholic drinks per day.<sup>[7]</sup> Common practice in Southeast Asia include Bidi smoking (tobacco rolled within a betel leaf) and the consumption of paan, a quid composed of the piper betle leaf, areca nut,

lime, sweeteners, and sometimes tobacco. This quid is placed in the mouth and sucked or chewed over several hours, thereby remaining in contact with the oral mucosa for a significant amount of time.<sup>[8]</sup> Pipe and cigar smoking have also been linked to cancer of the oral cavity.<sup>[9]</sup> The purpose of this prospective study was to analyze the epidemiology of oral cancer patients in katihar medical college .

## MATERIALS AND METHODS

All the patients of oral cancer attending department of ENT in Katihar Medical College from october 2016 to august 2018 were analyzed. Detail history was taken from all patients. Details of age, sex, occupation, tobacco habits, alcohol habits and any other types of habit were completely noted.

## RESULTS

Total number of patients was 100 for study purpose. Of the total 100 patients 72 (72%) were male , and 28(28%) were female. [Table 1]

**Table 1: Gender Distribution**

Total no	Male	Female
100	72(72%)	28(28%)

Age description of patients is shown in [Table 2]. The largest number of cases in study were distributed in age group of 56 yr – 70 yrs of age

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(46%). The lowest number of age distribution were noted in 25-35yrs (4%).

**Table 2: Age Distribution**

25 – 35	36-45	46-55	56 -70	71-80	ABOVE 80
04%	06%	33%	46%	08%	03%

Data of occupation of patients is shown in. [Table 3] It clearly shows that maximum number of patient are usually from manual labour group (78%).

**Table 3: Occupational Status Of Patients**

Manual labour	78(78%)
Agriculture	10(10%)
Professional workers	12(12%)

Data of tobacco habits is shown in [Table 4]. Majority of patients were tobacco users (88%). 12% of patient were no any habits of tobacco. Tobacco chewing in the form of paan, khaini, gutka, was habit of 48% where as smoking in the form of bidi cigarrets was in 27% of patients. 13 % of patients were both of tobacco chewing and smoking habits.

**Table 4: Tobacco Habits Distribution**

No tobacco	Tabacco chewing	Tabacco smoking	Chewing and smoking
12(12%)	48(48%)	27(27%)	13(13%)

Duration pattern is shown in [Table 5]

**Table 5: Duration Of Tobacco Consumption**

No habits	< 5 yrs	5-10 yr	10-20yr	>20yrs
12%	10(10%)	18(18%)	25(25%)	35(35%)

This is clearly observed that 35% of patients of oral cancer were taking tobacco of more than 20 year and 25% of patients for 10-20yr.

**Table 6: Alcohol Habits**

Non alcoholic	Alcoholic habits
67 (67%)	33(33%)

Out of 100 patients it has been observed that 67 patients were nonalcoholic and 33 patients were alcoholic respectively.

## DISCUSSION

Present study shows that majority of patients were male. Male to female ratio was 2.5: 1. Some other studies done in India also shows higher male to female ratio.<sup>[10]</sup> Males have easy to find tobacco products easily rather than to female. Most of the patient were from age group of (56-70 yrs) which was also verily matched with other studies conducted by different author of india.<sup>[11]</sup>

Tabacco habits is one of the most important risk factors for oral disease like oral cancers, oral mucosal lesion. All the forms of tobacco like cigarettes, cigar, pipe tobacco and smokeless tobacco chewing tobacco and snuff are widely used in India, and all have a bad oral health consequences. All the forms of tobacco causes oral cancer.<sup>[12,13]</sup> In this study we have found that majority of patients of oral cancer were from poor economic manual workers (78%) . Poor people used to consume more tobacco products because of less education. In this study we have found that duration of tobacco consumption is also a significant risk factor in causation of oral cancar. Tobacco exposure in 35% of patient was for more than 20 yr where as in 25 % of patient tobacco exposure was of 10-20 yrs. Oral cancer occur preferentially in tongue, buccal mucosa and gingiva, exhibiting predilection for men over 50 yrs old.<sup>[14]</sup> In the last year however there has been an increase in the incidence of this lesion in younger patients , that is under 45 yr.<sup>[15,16]</sup> Poor socioeconomic status, neglected oral hygiene , and recurrent trauma from ill-fitting dentures have also been implicated in the development of oral cavity cancers.<sup>[17,18]</sup>

## CONCLUSION

Tobacco smoke contain multiple carcinogens enough to induce process of carcinogenesis in oral cavity. Smokeless tobacco specially in our country in the form of paan khaini, gutka are heavily consumed specially in younger age of society which has to stop at any cost to decrease the incidence of oral cancer.

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