

## Original Research Article

# Knowledge, attitude and practices regarding oral cancers amongst secondary school students in Lucknow district

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## ABSTRACT

**Background:** The world at present is heading towards various types of non communicable diseases which are also known as modern epidemics. Oral cancer is the eleventh most common cancer in the world. It accounts for approximately 2.4 percent of all cancers with high incidence rate in developing countries. Globally, it represents an incidence of 3% and 2% of all cancers among men and women respectively. The aim of the study is to assess Knowledge and Practices about oral cancers amongst the students of intermediate college.

**Methods:** Study design was a cross sectional study. Study population was a list of intermediate colleges from Block Kakori was prepared with the help of social workers of the Department of Community Medicine. Two schools from the list were randomly selected by simple random sampling. Study area was at Kakori Block. Study duration was on July 2011- October 2011. Sample size was a total of 180 students were enrolled for the study who were present at the time of data collection. Data was tabulated using Microsoft Excel and analysed giving descriptive information.

**Results:** Tobacco and alcohol are considered most potent causative agents of oral cancer by the majority (91.1% and 74.4%) of the students. 51.1% of students considered it a blood disease, 25% of students told that it is infectious. When asked about knowledge regarding signs and symptoms of oral cancer majority (61.7%) of the students told that indigestion or difficulty in swallowing, unusual weight loss/gain (54.4%) and nagging change or hoarseness of voice by 41.1% students. Television emerges as the source of information about cancer for 55.00% students. 11.10% of students admitted to be using tobacco regularly with cigarette/bidi (42.3%) being the most common type of tobacco usage followed by gutka (30.8%).

**Conclusions:** There is very much need of spreading more awareness about cancer and its prevalence. Correlation between oral cancers and tobacco abuse needs to be highlighted. Significant number of students was not having adequate awareness about signs and symptoms of oral cancers.

**Keywords:** Oral cancers, Tobacco, School students, Knowledge, Practices

## INTRODUCTION

The world at present is heading towards various types of non-communicable diseases which are also known as modern epidemics. Among the modern epidemics cancer is second largest non-communicable disease and it has a sizable contribution in the total number of deaths.

Oral cancer is the eleventh most common cancer in the world (Atessa, et al).<sup>1</sup> It accounts for approximately 2.4 percent of all cancers (Rhodus) with high incidence rate in developing countries (Peterson).<sup>2,3</sup> Globally, it represents an incidence of 3% and 2% of all cancers among men and women respectively (Greenlee, et al).<sup>4</sup> The incidence of oral cancer is rising in most countries,

especially in developing countries. In the general male population, oral cancer is the sixth most frequent cancer.<sup>5</sup> Squamous cell carcinoma (SCC) accounts for 95% of oral cancers, and it is associated with avoidable etiological risk factors.<sup>6</sup> Approximately 419,000 new oral cancer cases diagnosed annually worldwide.<sup>7</sup>

Predisposing factors for oral cancer are heavy use of tobacco, excess alcohol consumption, diet deficient in fruit and vegetables, paan and betel nut chewing and poor oral hygiene.<sup>8</sup>

Oral cancer is largely preventable (Pavia et al).<sup>9</sup> Early diagnosis of the malignancy greatly increase survival rates as the mouth is easily accessible for self or clinical examination. The prognosis of oral cancer is poor with lowest survival rates of less than 50 percent, within a five-year period (Greenlee et al).<sup>4</sup>

### Objective

The aim of the study was to assess knowledge and practices about oral cancers amongst the students of intermediate college.

## METHODS

### Study design

A cross sectional study

### Study population

A list of intermediate colleges from Block Kakori was prepared with the help of social workers of the Department of Community Medicine. Two schools from the list were randomly selected by simple random sampling.

### Study area

Kakori Block

### Study duration

July 2011- October 2011

### Sample size

A total of 180 students were enrolled for the study who were present at the time of data collection.

### Inclusion criteria

Students studying in class 10<sup>th</sup> to 12<sup>th</sup> after taking verbal consent.

### Exclusion criteria

Students studying in classes upto 9<sup>th</sup>.

### Tools of data collection

The investigating tool so used is preformed, pretested questionnaire. This had both open and close-ended questions related to various aspects of cancer.

Subjects are enrolled after taking verbal consent from them. The study is performed in accordance with national and international guidelines stated at the declaration of Helsinki and complies with the legal requirements regarding confidentiality. Different factors related to cancer and information is gathered. Subjects are assessed for awareness of various cancers & associated risk factors. Moreover they are also interviewed about their knowledge of mortality and morbidity associated with cancer.

### Data analysis

Data was tabulated using Microsoft Excel and analysed giving descriptive information.

## RESULTS

Tobacco and alcohol are considered most potent causative agents of oral cancer by the majority (91.1% and 74.4%) of the students (Table 1).

**Table 1: Knowledge regarding causes of oral cancers amongst secondary school students.**

	No.	%	Total
<b>Irregularity in eating habits</b>	41	22.8	180
<b>Alcohol</b>	134	74.4	180
<b>Tobacco</b>	164	91.1	180
<b>Sharp teeth</b>	44	24.4	180
<b>Ill fitted denture</b>	76	42.2	180
<b>Hot food</b>	19	10.6	180
<b>Spicy/junk food</b>	34	18.9	180
<b>Non- veg food</b>	22	12.20	180

**Table 2: Knowledge regarding characteristics of oral cancers amongst secondary school students.**

	Frequency	%	Total
<b>Blood disease</b>	92	51.1	180
<b>Hereditary</b>	32	17.8	180
<b>Infectious</b>	45	25.0	180
<b>Fatal</b>	88	48.9	180
<b>Incurable</b>	56	31.1	180
<b>Transmission by casual contact or kissing</b>	23	12.8	180
<b>Can religious healers/ quacks treat cancer</b>	36	20.0	180

51.1% of students considered it a blood disease, 25% of students told that it is infectious. Meagre 17.8% students

considered cancer to be associated by hereditary factors despite much higher correlation between cancer and hereditary. 20.8% students have the misconception that religious healers and quacks can treat cancer (Table 2).

**Table 3: Knowledge regarding signs and symptoms of oral cancers amongst secondary school students.**

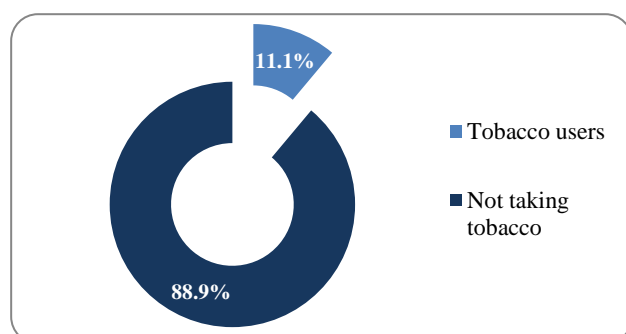
	Frequency	%	Total
Change in bowel/bladder habits	82	45.6	180
Non-healing sore throat	79	36.7	180
Indigestion or difficulty in swallowing	111	61.7	180
Nagging change or hoarseness of voice	74	41.1	180
Prolonged and frequent fever	93	51.7	180
Unusual weight loss/gain	98	54.4	180
Hair loss/fall	110	61.1	180
Loss of appetite	88	48.9	180

When asked about knowledge regarding signs and symptoms of oral cancer majority (61.7%) of the students told that indigestion or difficulty in swallowing, unusual weight loss/gain (54.4%) and nagging change or hoarseness of voice by 41.1% students (Table 3).

**Table 4: Source of information about oral cancer amongst secondary school students.**

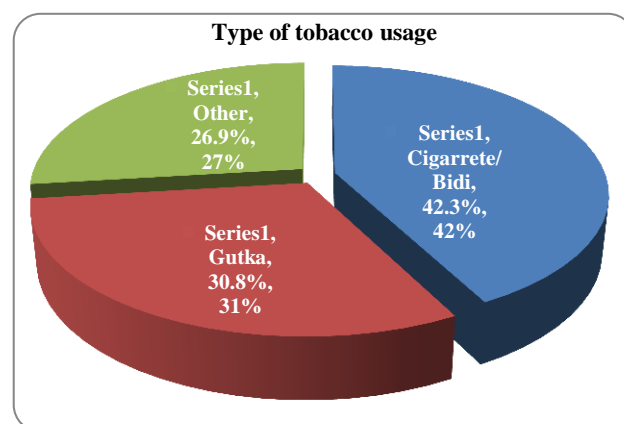
	No.	%	Total
Newspaper	38	21.10	180
TV	99	55.00	180
Teachers	21	11.70	180
Textbooks	1	0.60	180
Internet	18	10.00	180
Friends	3	1.70	180

Television emerges as the source of information about cancer for 55.00% students. Awareness gained through teachers and textbooks is meagre 11.70% and an alarming 0.60% respectively (Table 4).



**Figure 1: Practices of secondary school students regarding tobacco use.**

11.10% of students admitted to be using tobacco regularly with Cigarette / Bidi (42.3%) being the most common type of tobacco usage followed by Gutka (30.8%) (Figure 1 and 2).



**Figure 2: Practices regarding type of tobacco usage amongst secondary school students.**

## DISCUSSION

In present study tobacco and alcohol are considered most potent causative agents of oral cancer by the majority (91.1% and 74.4%) of the students. In a study by Somaia et al in Jeddah it was observed that respondents were aware of the major risk factors most likely associated with oral cancer, since the highest percentages identified tobacco (97%), precancerous oral lesions (92%) family history (86.9%) and alcohol usage (83%) as the main risk factors for oral cancer.<sup>10</sup> In a study by Al Dubail et al, in Malaysia found that regarding knowledge of risk factors, most of the respondents agreed that the following are risk factors for oral cancer; smoking (95.5%), poor oral hygiene (90.5%), family history (90.0%), alcohol (84.5%) and poor fitting dentures (83.0%).<sup>11</sup> In a study by Okoh and Enabulele, although the graduating dental students easily identified alcohol and tobacco as risk factors for oral cancers, knowledge of other risk factors such as poor nutrition, oral sex and sunlight was on the average, and a total of 96.7% of the dental students routinely ask patients on the use of alcohol and tobacco, whereas in our study 93% of students were aware of all the risk factors for oral cancer.<sup>12</sup>

In present study knowledge regarding signs and symptoms of oral cancers, majority 61.7% of the students told that indigestion or difficulty in swallowing, unusual weight loss/gain 54.4% and nagging change or hoarseness of voice by 41.1% students. More than half of the respondents could identify the clinical signs and symptoms of oral cancer. A similar finding was reported in Pakistani undergraduate medical and dental students whereas a low level of knowledge was found in Iranian population.<sup>1,13</sup>

## Limitations of study

### Small sample size

Duration of study was short for getting any statistically significant results.

## CONCLUSION

Perspective of students about most prevalent forms of cancers was mixed with Cancers of oral cavity being seen as most common cancer ahead of Breast cancer and Lung Cancer respectively. Cancer of Cervix is seen as least common cancer which is not so the case in actual clinical prevalence. There is very much need of spreading more awareness about cancer and its prevalence. Correlation between oral cancers and tobacco abuse needs to be highlighted. Significant number of students was not having adequate awareness about signs and symptoms of Oral cancers.

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