

## A Study of Tobacco Consumption among Male in Urban Field Practice Area of Katihar Medical College, Katihar

Gulshan Imroz<sup>1</sup>, Purnendu Kumar Singh<sup>2</sup>, Mukesh Nandan<sup>3\*</sup>

<sup>1</sup>Junior Resident-III, Department of Community Medicine, Katihar Medical College, Katihar, Bihar, India

<sup>2</sup>Professor & Head, Department of Community Medicine, Katihar Medical College, Katihar, Bihar, India

<sup>3</sup>Assistant Professor, Department of Community Medicine, Katihar Medical College, Katihar, Bihar, India

---

Received: 08-02-2023 / Revised: 05-03-2023 / Accepted: 04-04-2023

Corresponding author: Dr. Mukesh Nandan

Conflict of interest: Nil

---

### Abstract:

**Introduction:** Tobacco use is the major cause of morbidity and premature death, but it is preventable. In some parts of the society, it is socially accepted. To assess the prevalence of Tobacco consumption among male in urban field practice area of Katihar Medical College, Katihar.

**Methods:** A Community based cross-sectional study was conducted between August 2021 to October 2021 among 384 male of age 15 and above years in urban field practice area of Katihar. A pre-tested and predesigned questionnaire taking after consent and was done by using MS-Excel.

**Results:** This study shows that 173 (45%) males out of 384 consumed tobaccos in one or other form. Smokeless tobacco like (zarda, gutkha, khaini) are commonly used by male 60.7%. The most common reasons found for tobacco consumption were parents 34.3%. The most common age group of tobacco consumption was 15-19 years 22.5%. Majority of nuclear family consumed tobacco.

**Conclusion:** In my study, the prevalence of tobacco consumption was higher in male so we have to formulate prevention strategies like anti-tobacco education should be initiated right from the early age.

**Keywords:** Cigarette smoking, Smokeless tobacco use, Prevalence, Male.

---

This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.

---

### Introduction

Tobacco use is one of the most common risk factors for chronic disease such as lung disease, cardiovascular disease, oral cancer and others. So many studies not limited to WHO reports 2012- 2019, globally more than 7 million people were killed because of use of tobacco and one person dies within 6s in India due to due to consumption of tobacco. [1]

The National reports of Global Adult Tobacco Survey (GATS) was conducted in 2017, according to this report 30 different types of smokeless tobacco are available in India along with different varieties of smoked form. [2]

Tobacco become a major public health issue in India due to different varieties and

types of tobacco form and which cause a negative health impact. [3]

Tobacco uses in Northeast region of India, with a large burden of tobacco related diseases and deaths. According to National Family Health Survey (NFHS-5) data of Bihar 40.3% prevalence of tobacco use among men age 15 years and above [4].

According to WHO estimates, 45 million women and 194 million men consumed tobacco either in smoked or smokeless form in India.

In Northeast region tobacco problems are more complex than any other states in India with a huge burden of tobacco associated diseases and deaths. [5]

In India various form of chewed tobacco used as khaini (lime mixture), zarda, gutkha, pan masala, smoked tobacco in form of bidi, cigarettes, hookah, pipe, etc and in applied forms like snuff, etc. [6]

In Northeast region of India very few studies had been conducted that's why this study was conducted in urban area of Katihar Medical College and sufficient information about tobacco use and highlighted the strategies for prevention and control was obtained.

### Materials & Methods

**Type of Study:** Community based cross-sectional observational study.

**Period of Study:** From August 2021 to October 2021.

**Sample Size:** 384 males age 15years and above residing in Sharifganj, an urban field practice area of Katihar Medical College, Katihar.

The sample size was calculated at 95% confidence interval using the formula.

$n = \frac{Z^2 * P * Q}{d^2}$  where p is 40.3%, q is (100-p) and 5% allowable error.

$$\begin{aligned} n &= (1.96)^2 * 40.3 * (100 - 40.3) / 5 * 5 \\ &= 3.84 * 40.3 * 59.7 / 25 \\ &= 384 \end{aligned}$$

**Data Collection:** Data was collected from 384 males through a pre-tested and pre-designed questionnaire after taking informed consent and establishing good rapport with family, information had been recorded in the questionnaire.

The study was carried out in Sharifganj, an urban field practice area of Katihar Medical College, Katihar. Total population in that area are approximately 15,000 and every 40<sup>th</sup> person was selected by systematic random sampling if 40<sup>th</sup> person was not male then choose next. This procedure was continued and up to 384 males were selected.

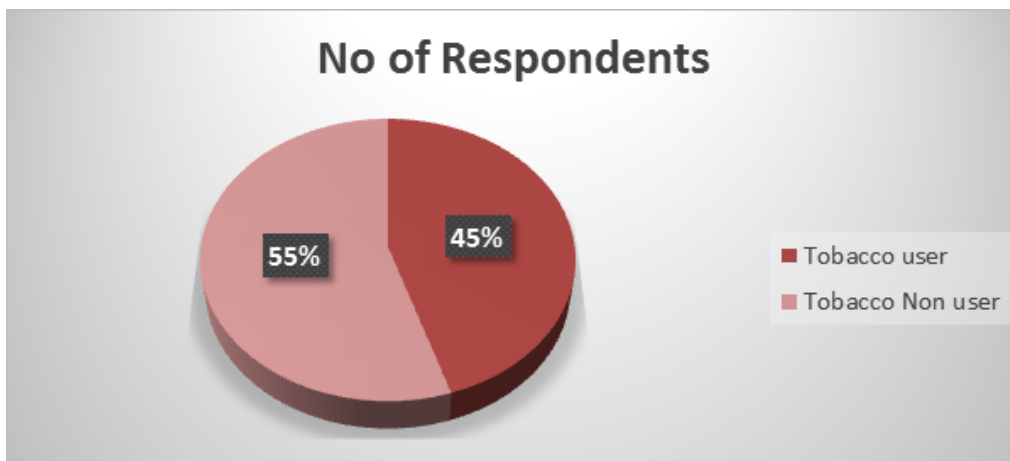
The data thus collected, was first coded and transferred to a master chart from which simple as well as co-relational tables were prepared, analysed and statistically evaluated.

**Inclusion Criteria:** All men who are willing to give informed consent to participate in the study.

**Exclusion Criteria:** Men who are not willing to participate in the study.

### Results

This pie diagram shows that out of 384 male, 173 (45.05%) males are tobacco users and rest of them are non-users 211 (54.94%).



**Figure 1: Number of respondents according to tobacco user and non- user**

**Table 1: Number of tobacco users according to age group**

Age Group (In years)	No. of Tobacco user	Percentage (%)
15-19	39	22.5
20-24	31	17.9
25-29	20	11.5
30-34	17	9.8
35-39	29	16.8
40-44	11	6.3
45-49	17	9.8
>50	09	5.4
<b>Total</b>	<b>173</b>	<b>100</b>

This table shows number of users according to age group in which majority belong to 15-19 years of age group which was 39 out of 173 users (22.5%) followed by 20-24 years of age which was 17.9 percent then 35-39 years of age 16.8 percent.

**Table 2: Number of tobacco user according to age of initiation**

Age of Initiation	No. of Tobacco user	Percentage (%)
15-19	68	39.3
20-24	41	23.6
25-29	51	29.6
>30	13	7.5
<b>Total</b>	<b>173</b>	<b>100</b>

This table shows number of tobacco user according to age of initiation which was mostly occurred in 15-19 years of age 39.3%, 68 out of 173 followed by 25-29 years which was 29.6 percent.

**Table 3: Reason for the tobacco user**

Reason	No. of Tobacco user	Percentage (%)
Curiosity	25	14.4
Fun	18	10.4
Friend	48	27.7
Parents	59	34.3
Brother/Sister	23	13.2
<b>Total</b>	<b>173</b>	<b>100</b>

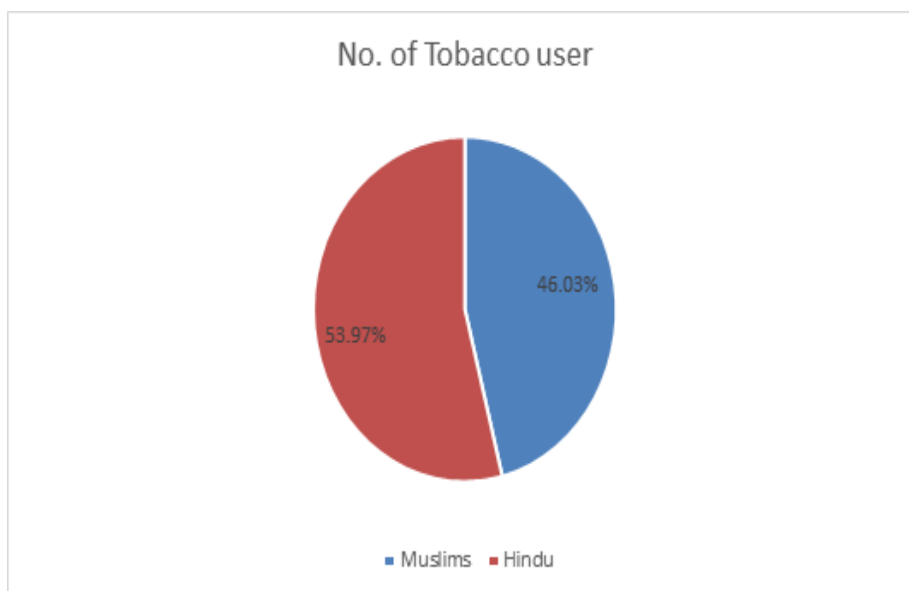
This table shows number of tobacco users according to reason of initiation of tobacco use was seen most due to parents which was 34.3 percent followed by friend which was 27.7 percent.

**Table 4: Number of users according to type of tobacco**

Type of Tobacco	No. of users	Percentage (%)
Cigarette	14	8.0
Bidi	44	25.4
Khaini	57	32.9
Zarda	15	8.6
Gutkha	28	16.5
Mixed Variety	15	8.6
Total	173	100

This table shows number of tobacco users according to type of tobacco use, in which mostly used khaini. Among 173 users 57 were used khaini (32.9%). 25.4 percent was used bidi followed by gutkha (16.5%).

This pie diagram shows majority of Hindu are tobacco users which was 53.97 percent and 46.03 percent were Muslims.



**Figure 2: Number of Tobacco users according to religion**

**Discussion**

In the present study it was observed that the prevalence of tobacco uses among male in urban field practice area of Katihar Medical College aged 15 years and above was 45%. Pandey G. K. et al. in their study also observed the overall tobacco consumption in Hoogly District, Calcutta was 51% [5]. Bhusan Nath A. in their study also observed the overall tobacco consumption in in urban slums of Silchar was 55.46% [6]. Most of the tobacco users belonged to 15 to 19 years of age (22.5%). In the study of Bhusan Nath

A., majority users are belonged to 45 to 49 years of age [6]. Similar observations were also observed in other studies done by Sharma R et al [7] and Gupta I et al [8].

The age of initiation of tobacco use was seen highest in age group of 15 to 19 years was 39.3%. Bhusan Nath A [6]. also observed that the age of initiation of tobacco use was highest in age group of 15 to 19 years of age was 54.29% Pandey G.K. et al reported in their study that the age of initiation was highest in 20 years and above age group (55.2%) [5]. Similar observation

was also noticed in other studies done by Bala DV et al [9] and Sharma N et al [10].

The reason for initiation of tobacco use was seen as curiosity (14.4%), fun (10.4%), friend (27.7%), parents (34.3%) and brother/ sister (13.2%). In study of Bhusan Nath A. mentioned peer pressure (50.76%), fun (35.35%), curiosity (25.76%) and parent smoking habit (5.30%) [6]. Other studies also mentioned same results Pandey GK et al [5] and Sharma N et al [10].

According to different type of tobacco use it was observed that majority used khaini (32.9%), 25.4% used bidi, 16.5% used gutkha and 8.6% used mixed variety. In the study of Shah and Vaite they also found that 30.3% used bidi, 20% used gutkha, 8% used cigarette and 2.3% used khaini [11]. Bhusan Nath A. observed that majority of used khaini 32.32%, 25.5% used bidi, 13.64% used gutkha and 10.10% used mixed variety [6].

Tobacco uses among Muslims population was 46.03% lower than Hindu population 53.97% in present study. Similar observation was seen in other studies done by Bhushan Nath A et al [6] and Rani M et al [12,13].

### Conclusions

In my study, the prevalence of tobacco consumption was high and initiation tobacco use at an early age. So, we have to formulate prevention strategies like strong anti- legislation act which is followed strictly, anti- tobacco education and Health Awareness campaign etc. should be initiated right from the early age. Tobacco control programmes should be conducted along with other health and development programmes in order to control the growing hazards of tobacco use and its bad effects on health and the economy of the country.

### References

1. Nazri AZ, Simon NH, et al. Prevalence of Tobacco consumption among men in Amarpur village, Uttar Pradesh, India, May 2019: A Cross-sectional study.

- Journal of Health and Research; April-June 2020; 7(2):115-121.
2. Niaz K, Maqbool F, Khan F, Bahadar H et. al. Smokeless tobacco (paan and gutkha) consumption, prevalence, and contribution to oral cancer. *Epidemiol Health*. 2017;39: e2017009.
3. Patil PB, Bathi R, Chaudhari S. Prevalence of oral mucosal lesions in dental patients with tobacco smoking, chewing, and mixed habits: A cross-sectional study in South India. *J Family Community Med*. 2013; 20:130-5.
4. National Family Health Survey-5 Data, Bihar 2019-2020.
5. Pandey GK, Raut DK, Hazra S, Vajpayee A, Pandey A, Chaterjee P. Patterns of Public Health. 2001; 35(3): 82-87.
6. Bhusan Nath A. A study of tobacco consumption among the adult population in the urban slums of Silchar, Assam. *International J of Public Health Research*. Mar-Apr 2017; 4(2):38-43.
7. Sharma R, Pednekar MS, Rehman AU, Gupta R. Tobacco use among school personnel in Rajasthan, India. *Indian J Cancer*. 2004 Oct- Dec; 41(4): 162-6.
8. Gupta I, Sankar D. Tobacco consumption in India- a new look using data from the National Sample Survey. *J Public Health Policy*. 2003; 24(3-4): 233-45.
9. Bala DV, Bodiwala IN, Patel DD, Shah PM. Epidemiological determinants of tobacco use in Gujarat state, India. *Indian Journal of Community Medicine*; 2006; 31(3).
10. Sharma N, Singha MM, Jiloha RC. An epidemiological study of cigarette smoking among male college students of Delhi University. *Indian Journal of Public Health* 2006; 31(1).
11. Shah S, Vaite S. Pawement dwellers in Mumbai, India. Prioritizing tobacco over basic needs. In *Efroymsen Ded, tobacco and poverty. Observation from India and Bangladesh* 2002.

12. Rani M, Bonu S, Jha P, Nguyen SN, Jamjoum L. Tobacco use in India-Prevalence and predictors of smoking and chewing in a national cross sectional household survey. *Tob control*. 2003 Dec; 12(4):e4.
13. Chakdoufi S., Moumen A., & Guerboub A. Dyslipidemia and Diabetic Retinopathy in Moroccans Type 2 Diabetics Patients: A Cross-Sectional Study. *Journal of Medical Research and Health Sciences*, 2023; 6(3): 2471–2479.