



## OPEN ACCESS

### Key Words

Tobacco, smoked, rural, varanasi

### Corresponding Author

Tumul Nandan,  
Department of Community  
Medicine, UNS ASMC, Jaunpur, India  
doc0094@gmail.com

### Author Designation

<sup>1</sup>Assistant Professor and HOD

<sup>2,4</sup>Assistant Professor

<sup>3</sup>Statistician cum Assistant Professor

<sup>5</sup>Professor and HOD

**Received:** 20 October 2023

**Accepted:** 24 November 2023

**Published:** 30 November 2023

**Citation:** Sachchidanand, Ashutosh Singh, Navin Kumar, Tumul Nandan and Santosh Kumar Barman, 2023. Assessment of Tobacco Usage Among Young Rural Population of Varanasi District of Uttar Pradesh, India. Res. J. Med. Sci., 17: 261-264, doi: 10.59218/makrjms.2023.12.261.264

**Copy Right:** MAK HILL Publications

## Assessment of Tobacco Usage Among Young Rural Population of Varanasi District of Uttar Pradesh, India

<sup>1</sup>Sachchidanand, <sup>2</sup>Ashutosh Singh, <sup>3</sup>Navin Kumar,  
<sup>4</sup>Tumul Nandan and <sup>5</sup>Santosh Kumar Barman

<sup>1,3,4</sup>Department of Community Medicine, UNS ASMC, Jaunpur, Uttar Pradesh, India

<sup>2</sup>Department of Pathology, UNS ASMC, Jaunpur, Uttar Pradesh, India

<sup>5</sup>Department of Community Medicine, GSVM Medical College, Kanpur, Uttar Pradesh, India

### ABSTRACT

The Southeast Asian Region of the World Health Organisation has the highest tobacco consumption rate. According to Global Adult Tobacco Survey 2016-2017, in India, 28.6% of adults aged 15 and above use tobacco in any form. To assess tobacco usage among young people of rural areas of Varanasi. A cross sectional study done in rural areas of Varanasi where 182 eligible participants of age group 15-24 years of age answered a predesigned and pretested proforma. Data was analysed using Statistical Packages for Social Sciences (SPSS) version 20. Close to 40% of the male participants were using smoked tobacco products as opposed to only 8% females. For smokeless tobacco usage, this figure was 28-13% respectively. The usage of tobacco among males was more than females across all types of tobacco products. Smoked tobacco products were more in usage than smokeless tobacco products.

## INTRODUCTION

Tobacco has been in use since time immemorial. From spiritual and religious reasons to being used as a painkiller, tobacco has been used in some form or another. Tobacco has social, political and economic impact and is closely tied to collective images and attitudes. Tobacco products come in varied forms and broadly categorised under smoked (like cigarette, bidi, cigar, pipe, etc.) and smokeless tobacco (khaini, guthka, pan masala, etc.). All forms of tobacco, either smoking or smokeless, are harmful.

The Southeast Asian Region of the World Health Organisation has the highest tobacco consumption rate. Nearly 29% of adults aged fifteen years and older use tobacco in some or the other form<sup>[1-3]</sup>.

In India, tobacco has become a major public health issue. According to the World Health Organization, tobacco use is a major risk factor for many diseases like cancer, lung disease, cardiovascular disease and stroke. In India, it accounts for nearly 1.35 million deaths every year. India is also the second largest producer and consumer of tobacco<sup>[4]</sup>. According to Global Adult Tobacco Survey 2016-2017, in India, 28.6% of adults aged 15 and above use tobacco in any form. 19.9 crore adults in rural areas use tobacco in India.

In the region of eastern Uttar Pradesh tobacco usage is more of a cultural practice. Knowing tobacco usage pattern of might help in raising awareness as well as regulating the use of tobacco besides aiding in program formulation and implementation regarding different aspects of tobacco control.

### Objectives:

- To assess tobacco use among young people of rural areas of Varanasi

## MATERIALS AND METHODS

This cross-sectional study was conducted among rural youth from 15-24 years were considered as study participants. The study was undertaken from July 2023 till September 2023. Ethical approval was obtained from the ethics committee of the Institute of Medical Sciences, Banaras Hindu University and consent of the participants were obtained before start of the study.

**Study area:** Four villages from one Community Development Block (Kashi Vidyapeeth block) of Varanasi district.

**Tools of the study:** Predesigned and pretested proforma was used to examine the tobacco usage pattern of tobacco and its related products.

**Sample size:** one hundred eighty two eligible participants of age group 15-24 years of age.

**Inclusion criteria:** Only permanent residents of the study area were included in the study.

**Exclusion criteria:** Participants with obvious mental retardation and lack of understanding were excluded from the study.

**Method of data collection:** Data was recorded on the predesigned and pretested proforma on hard copies while going house to house till all the eligible participants were met.

**Statistical analysis:** Data was entered in Microsoft Excel and analyzed by using Statistical Packages for Social Sciences (SPSS) version 20. Appropriate tables were generated and  $\chi^2$  test was applied for statistical association. Statistical significance was defined as  $p < 0.05$ .

## RESULTS

Out of 182 participants, 98 (53.8%) were male. Majority (82.4%) of them were less than 20 years of age. Fifty five (32.2%) subjects were from SC/ST category, as much as 52.7-11.7% subjects were from other backward category (OBC) and other caste category respectively. Participants with intermediate education were 63.2%. One hundred and thirty two (72.5%) participants were from nuclear family. As much as 42.1-42.3% participants had family size  $\leq 6$  and 7-9, respectively. 11.0-28.6% participants were from very low and low socio-economic status, corresponding value for participants with middle and upper middle status were 44.5-6.0%, respectively.

Out of 98 male participants, 27 (27.6%) were using Cigarettes/Bidi. Majority (92.9%) of female participants were not using Cigarettes/Bidi. Smoked tobacco products other than Cigarette/Bidi were being used by 12.3% male and 1.2% female participants respectively. Overall this value was 7.1%. There was significant ( $p < 0.01$ ) difference seen in smoked tobacco products other than Cigarette/Bidi.

Smokeless tobacco products were being used by 28.6% male and 11.9% female participants respectively. Overall this value was 20.9%. There was significant ( $p < 0.01$ ) difference in male and female participants in terms of their usage of any form of smokeless tobacco products. As much as 71.4% male and 88.1% female participants did not consume any smokeless tobacco products. Gutkha, Khaini, alone and in combination were consumed by 22.4%. 1.0%, 5.1% male participants respectively. Gutkha and Khaini were consumed by 11.9% female participants. There existed significant ( $p < 0.05$ ) difference in the consumption of smokeless tobacco products by male and female participants.

Table 1: Socio-demographic characteristics of study participants

Socio-economic and demographic profile	Frequency	Percentage
<b>Gender</b>		
Male	98	53.8
Female	84	46.2
<b>Age (years)</b>		
<20	150	82.4
20-30	32	17.65
<b>Caste</b>		
General	31	17.0
Other backward caste	96	52.7
Schedule caste (ST)	51	28.0
Schedule tribe (ST)	4	2.2
<b>Educational status</b>		
Illiterate	4	2.2
Below high school	18	9.9
High school	18	9.9
Intermediate	115	63.2
Graduate	17	9.3
<b>Type of family</b>		
Joint	132	72.5
Nuclear	50	27.5
<b>Size of family</b>		
0-6	73	40.1
7-9	77	42.3
>10	32	17.6
<b>Economic status</b>		
Upper middle	11	6.0
Middle	81	44.5
Lower	52	28.6
Very low	20	11.0

Table 2: Gender wise distribution of study participants according to their usage of smoked and smokeless products

	Male		Female		Total		Chi-square	p-value
	No	Percentage	No	Percentage	No	Percentage		
<b>Cigarette/ bidi</b>								
Yes	27	27.6	6	7.1	33	18.1	12.69	<0.05
No	71	72.4	78	92.9	149	81.9		
<b>Smoked tobacco products other than cigarettes/bidi</b>								
Yes	12	12.2	1	1.2	13	7.1	8.33	<0.05
No	86	87.8	83	98.8	169	92.9		
<b>Smokeless tobacco products</b>								
Yes	28	28.6	10	11.9	38	20.9	7.60	<0.05
No	70	71.4	74	88.1	144	79.1		
<b>Types of smokeless tobacco products</b>								
None	70	71.4	74	88.1	144	79.1	23.84	<0.05
Gutka	22	22.4	0	0.0	22	12.1		
Khaini/surti	1	1.0	0	0.0	1	0.6		
Others (combinations)	5	5.1	10	11.9	15	8.2		

## DISCUSSIONS

In the present study 68% male and 20% females were found to be using tobacco in some form or the other. Nearly 36% participants were found using smoked form of tobacco in the present study. A study in North India by Vivek Gupta *et al.*<sup>[5]</sup> finds over 50% of males in rural areas are using tobacco as compared to about 17% of females. Also, in rural areas nearly 44% of tobacco usage was in the form of bidi.

A study by Kolappan Chockalingam *et al.*<sup>[6]</sup> around Chennai finds the prevalence of tobacco smoking to be close to 15% and for smokeless tobacco close to ten percent in rural areas. The study finds that the odds of using tobacco was significantly higher among males, a finding similar to the present study. A study by Goyal *et al.*<sup>[7]</sup> on pattern of usage of tobacco among females finds nearly 16% participants use some form of tobacco, this result was close to the finding of the present study as well.

A study by Annadurai *et al.*<sup>[8]</sup> finds the prevalence of smoking to be nearly 36% similar to the present study. A study by Rani *et al.*<sup>[9]</sup> finds 30% of the participants 15 years and above, 14% of females and 47% males used tobacco in any form.

## CONCLUSION

In the present study the prevalence of use of tobacco products was found to be close to most other studies conducted. This study finds that overall the use of smoked tobacco products was higher than smokeless tobacco products and males were using tobacco more as compared to females. Further studies need to be conducted to ascertain the reasons as to why the youth are using tobacco products and government and non government agencies need to conduct information, education and communication activities to control the use of tobacco products.

## REFERENCES

1. WHO, 2000. World Health Organization. WHO global report on trends in prevalence of tobacco use-third edition Internet. 3rd Ed WHO Global, tobacco, ISBN-17: 978-92-4-000003-2, Pages: 121.
2. Mackay, J. and M. Eriksen, 2002. The tobacco atlas Internet. Publications of the world health organization 2002. World Health Organization, Tobacco Atlas, ISBN-13: 92 4156 2099, Pages: 50.
3. TCS., 2022. Tobacco Control in the South-East Asia Region Internet., <https://www.who.int/southeastasia/health-topics/tobacco/tobacco-control-in-the-south-east-asia-region>
4. TCS., 2017. Tobacco., <https://www.who.int/india/health-topics/tobacco>
5. Yadav, K., K. Anand. and V. Gupta, 2010. Patterns of tobacco use across rural, urban, and urban-slum populations in a north Indian community. Indian. J. Community. Med., 35: 245-251.
6. Chockalingam, K., C. Vedhachalam, S. Rangasamy, G. Sekar, S. Adinarayanan, S. Swaminathan and P.A. Menon, 2013. Prevalence of tobacco use in urban, semi urban and rural areas in and around chennai city, India. Plos. one, Vol. 8. 10.1371/journal.pone.0076005
7. Goyal, L.D., M. Verma, P. Garg and G. Bhatt, 2022. Variations in the patterns of tobacco usage among Indian females-findings from the global adult tobacco survey India. BMC Women's Health, Vol. 22 .10.1186/s12905-022-02014-3
8. Annadurai, K., G. Mani and R. Dhanasekaran, 2014. Tobacco usage among males in rural tamil nadu, India: A cross-sectional study. Int. J. Med. Students, 2: 18-21.
9. Rani, M., 2003. Tobacco use in India: prevalence and predictors of smoking and chewing in a national cross sectional household survey. 4 Edn.