

Original Research Article

## A Study to Assess the Prevalence and Attitude Related to Tobacco Products among People in Selected Areas of District Mohali

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### ABSTRACT

**Background of the study-** Tobacco use is a leading cause of preventable deaths worldwide, so in developing countries like India. Tobacco consumption in various forms has been an integral part of Indian culture since many decades. Since few years, the vices of tobacco consumption have come to forefront in various populations across the world. India is the second largest consumer of tobacco products and third largest producer of tobacco in the world.

The analysis of NFHS-3 data shows that the use of tobacco and smoking are fairly common in India, particularly among males. There are some population subgroups in North-Eastern states among which smoking in females is fairly common. The prevalence of tobacco use is relatively higher in the rural than the urban population. Tobacco use increases with age in India, though it is sizeable even among youth, especially among young males. It also shows that tobacco use decreases with increase in education levels as well as rise in the wealth status, though more than one-third of males with 12 or more years of schooling or males in the highest wealth quintile use tobacco.

**Materials & Methods** - A total of 200 subjects of village Sahauran, Radiala, TDI slums and Sahauran slums were selected by convenience sampling as per inclusion and exclusion criteria. The data was collected from subjects by questionnaire consisting of socio-demographic variables, questionnaire regarding attitude and prevalence related to tobacco products usage.

**Result** - The study of findings revealed that the prevalence of smoking tobacco among 76 (38.7%) people, while it is consumed in smokeless form by 65 (32.50%) of people of selected villages. It also showed that tobacco products are consumed more commonly by males than females, between 26-47 years of age group, who are illiterate, earning below 10,000 monthly family incomes. The most common form of smoking tobacco is manufactured cigarette. As per occupation it is more prevalent among laborer class, living in nuclear families. Overall 17.50% males get exposed to second hand smoke, including 3% non-smokers. It also concluded that maximum 86.50% of subjects have negative attitude towards tobacco products usage and 89.50% wants to quit tobacco usage and have a positive attitude towards quitting.

**Conclusion** - It was concluded that tobacco product prevalence in smoking form is quite more than smokeless form i.e. 38% as compared to 32% respectively.

**Key words** - Prevalence, Attitude, Tobacco products, People

### INTRODUCTION

Tobacco has been used by people for centuries, but cigarette smoking and large scale cigarette manufacturing appeared only

in the 19th century. Cigarette smoking has since spread worldwide and in 2000 about one in three adults, or about 1.1 to 1.2 billion people worldwide, smoked. It is

estimated that smoking is responsible for four million deaths in the world each year. [1]

In India, tobacco was introduced by Portuguese traders in 1600 AD and was most commonly consumed by men and women in the form of hookah, cigar. India is the second largest consumer of tobacco products and third largest producer of tobacco in the world. The World Health Organization aims to reduce the global burden of disease and death caused by tobacco, thereby protecting present and future generations from the devastating health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke. The framework convention mandates Member states to progressively enforce its provisions, and WHO support countries in their efforts to implement tobacco control measures. [1]

Tobacco is a product prepared from the leaves of the tobacco plant by curing them. The plant is part of the genus "Nicotiana" and of the "Solanaceae" (nightshade) family. Tobacco contains the alkaloid nicotine, which is a stimulant. Dried tobacco leaves are mainly used for smoking in cigarettes, cigars, pipe tobacco and flavored shisha tobacco. They can also be consumed as snuff, chewing tobacco, dipping tobacco and snus. [2]

Of all the prevalent smoking forms of tobacco, bidi is the most popular product in India, especially in rural areas. It is estimated that one-third of all tobacco produced in India is used for bidi making. Cigarette smoking is the second-most popular form of tobacco smoking in India, and is observed mainly in urban areas. Hookah, *chuttas*, *dhumti*, chillum, cigars, cheroots and pipes are some other forms of smoking tobacco in different parts of the country. Paan (betel quid) with tobacco is the most common form of chewable tobacco. Dry tobacco areca-nut preparations, such as paan masala, gutkha and *mawa*, are also popular. Along with smoking and chewing, other tobacco products such as *mishri*, *gul*, *bajjar*,

*gudakhu*, etc., are widely used as applications to the teeth and gums. Many of these products are also popular among females. [1]

The analysis of NFHS-3 data shows that the use of tobacco and smoking are fairly common in India, particularly among males. There are some population subgroups among which smoking in females is fairly common, such as in North-Eastern states. In general, males smoke as well as chew tobacco whereas females mainly use chewing forms of tobacco, except in a few areas where prevalence of smoking among females is higher. In coastal areas of Andhra Pradesh and Odisha, females smoke cheroot (called *chutta*) in a reverse manner (i.e. with glowing end inside the mouth). In some parts of Northern India, females often smoke hookah. In addition to chewing and smoking, a range of tobacco products in different parts of the country are applied on the teeth and gums. [1]

Prevalence of tobacco use is relatively higher in the rural than the urban population. Tobacco use increases with age in India, though it is sizeable even among youth, especially among young males. The data also shows the tobacco use decreases with increase in education levels as well as rise in the wealth status, though more than one-third of males with 12 or more years of schooling or males in the highest wealth quintile use tobacco. [1] Tobacco use is much higher among both males and females in scheduled tribes compared to other caste groups. There are great many regional and state level variations in tobacco use.

The use of tobacco among both females and males in all the states of the North-Eastern part of India is much higher and exceeds the national average. Tobacco use among males in the North-Eastern states ranges from 62 percent in Sikkim to 83 percent in Mizoram. The reported high prevalence of tobacco in the North-Eastern part of India is consistent with the findings of the Global School Personnel Survey in the North-Eastern part of India, 2012 and the National Household Survey of Drugs

and Alcohol Abuse, 2002. Even the tobacco use rates in the states of the East (Odisha, West Bengal, Jharkhand and Bihar) and Central regions (Uttar Pradesh, Madhya Pradesh and Chhattisgarh) of India are higher than the national average. As also reported by World Health Organization (WHO) 2015, case fatality rate in case of tobacco (smoking) addiction is more than 15%. Estimates in 2015 have shown that 6 million people die as a result of direct cost of tobacco smoking (or other less common addiction methods). More than 3/4th of all such deaths are due to direct smoking causes; and the rest are attributed to passive smoking. Nearly 80% of smokers are residents of low or middle income and/or developing countries. [3]

### **Health impact of tobacco use**

Smoking increases the incidence of clinical tuberculosis and is a cause of half of the male tuberculosis deaths in India. Nearly half of cancers among males and one-fourth of cancers among females are tobacco related. The cohort study from rural India estimated the relative risk of death due to tobacco use to be 40-80 percent higher for any type of tobacco use; 50-60 percent higher for smoking and 90 percent higher for reverse smoking; and 15-30 percent higher for use of chewing tobacco in males and females respectively and 40 percent higher for chewing tobacco and smoking combined. [3]

The more immediate effects of tobacco can disrupt social life, this can cause many oral disease. Tobacco use can lead to oral cancer, Gum diseases and nicotine addiction and it increase the risk of cardiovascular disease. Tobacco is used in different forms such as betel quid, Pan Masala, naswar, tobacco lime preparations gutka, khaini, zarda. Habitual betel quid chewing is commonly practiced by men & women in Bangladesh, India, Nepal and Shri Lanka. Gutka, betel quid tobacco was found to be popular in Karnataka and pan masala is very popular in urban areas of India. [4]

### **Economic impact of tobacco use**

Tobacco use has economic implications for the society and nation as a whole. Individual household's economic implications of tobacco include direct cost of tobacco products and indirect cost due to the expenditure arising from the adverse health effects of tobacco use. A health cost study in India revealed that the direct and indirect costs of the three major tobacco-related diseases, namely cancer, coronary artery disease (CAD) and chronic obstructive lung disease (COLD) (for the year 2002-03), exceeded the total combined revenue and capital expenditure by the Centre and States on medical and public health, water supply and sanitation. [3]

According to an independent study conducted in 2004, taking into account tuberculosis, Respiratory diseases, cardiovascular diseases and cancers, the total economic cost of tobacco use in India was about 16 percent more than the total tax revenue collected from tobacco. An analysis of the data from the 52<sup>nd</sup> Round of the NSS reveals a higher risk of impoverishment due to borrowing and distress sale of assets during hospitalization of member of households that reported tobacco use. Findings of the survey also recommend the inclusion of tobacco and alcohol control in anti-poverty measures and poverty reduction strategies and development frameworks for the poor in developing countries. [1]

### **MATERIALS & METHODS**

A total of 200 (two-hundred) subjects including adult men and women were selected by purposive sampling according to inclusion and exclusion criteria for the study. The subjects were verbally informed about the purpose and objectives of the study and ensured about confidentiality of information collected. Data was collected from subjects regarding socio-demographic variables, prevalence and attitude related to tobacco products usage through structured questionnaire referring Global Adult Tobacco Survey

(GATS) and GATS core questionnaire by WHO.

**Inclusion criteria**

- People willing to participate in the study.
- People present at the time of data collection.
- Men and women aged 15 years or above.

**Exclusion criteria**

- People not available during the time of data collection.
- People not willing to participate in the study.
- People below the age of 15 years.

**Data processing and analysis-**

The data collected from 200 subjects was analyzed using Descriptive statistics based on law of probability which provided a means of drawing conclusions about the population from which data was obtained for the study. The statistical measures used for analysis included frequency and percentage distribution and presented in the form of tables and figures.

**RESULTS**

Analysis and interpretation of data was organised under the following headings:

**Part 1-** It included data related to socio-bio-demographic variables.

**Part 2-** It included data related to prevalence of tobacco products usage.

**Part 3-** Data related to practice regarding related to attitude towards usage and quitting tobacco products.

**Part 4-** It included data related to association of tobacco prevalence with selected socio-demographic variables

**Table 1: Detailed Smoking status by gender N=200**

Smoking status	Overall f (%)	Male f (%)	Female f (%)
<b>Current smokers</b>	76 (38.00)	63 (31.50)	13 (06.50)
• Daily Smokers	57 (28.50)	51 (25.50)	06 (03.00)
• Occasional	19 (09.50)	12 (06.00)	07 (03.50)
<b>a) Current Non-smoker</b>	124 (62.00)	80 (40.00)	44 (22.00)
⇒ Former smoker	13 (06.50)	11 (05.50)	02 (01.00)
• Former daily	07 (03.50)	07 (03.50)	00 (00.00)
• Former Occasional	06 (03.00)	04 (02.00)	02 (01.00)
⇒ Never smoker	111 (55.50)	69 (34.50)	42 (21.00)

**Table 2: Smokeless Tobacco use by gender N = 200**

Smokeless tobacco products	Overall f (%)	Male f (%)	Female f (%)
<b>Current Smokeless tobacco users</b>	65 (32.50)	48 (24.00)	17 (08.50)
• Daily users	47 (23.50)	36 (18.00)	11 (05.50)
• Occasional	18 (09.00)	12 (06.00)	06 (03.00)
<b>Current Non-Smokeless tobacco users</b>	135 (67.50)	90 (45.00)	45 (22.50)
➤ Former user	14 (07.00)	12 (06.00)	02 (01.00)
• Former daily	07 (03.50)	07 (03.50)	00 (00.00)
• Former occasionally	07 (03.50)	05 (02.50)	02 (01.00)
➤ Never smokeless tobacco user	121 (60.50)	78 (39.00)	43 (21.50)

**Table 3: Current smokers of various smoked tobacco products by selected socio- demographic characteristics N=200, n=76**

Demographic variables	Any smokeless tobacco product (f)	Any smoked tobacco product (f)	Type of cigarettes		Other smoked tobacco (f)
			Manufactured (f)	Hand rolled (f)	
<b>Gender</b>					
Male	48	63	37	19	07
Female	17	13	06	05	02
<b>Age (in years)</b>					
15-25	05	09	06	03	00
26-36	17	26	11	12	03
37-47	28	22	12	04	06
48-58	14	15	10	05	00
>58	01	04	04	00	00
<b>Religion</b>					
Hindu	46	66	39	20	07
Sikh	19	10	04	04	02
Muslim	00	00	00	00	00
Christian	00	00	00	00	00
Others	00	00	00	00	00
<b>Monthly Income</b>					
Below 10,000	45	55	31	17	07
10,001-20,000	18	19	11	07	01
20,001-30,000	02	02	01	00	01
>30,000	00	00	00	00	00

Table3: continued...					
<b>Education</b>					
Illiterate	31	46	24	15	07
Primary	22	22	13	08	01
Matric	10	06	05	01	00
Sen. Secondary	02	01	00	00	01
Graduation	00	01	01	00	00
<b>Occupation</b>					
Unemployed	04	04	02	01	01
Laborer	39	59	35	18	06
Private job	04	06	02	03	01
Government job	01	00	00	00	00
Self employed	17	07	04	02	01
<b>Family type</b>					
Nuclear	50	57	32	17	08
Joint	15	19	11	07	01
<b>Habitat</b>					
Rural	42	45	26	10	09
Urban	00	00	00	00	00
Semi urban	00	00	00	00	00
Urban slum	23	31	17	14	00
<b>Total</b>	<b>65</b>	<b>76</b>	<b>43</b>	<b>24</b>	<b>09</b>

Table 4: Cigarettes smoked per day among daily cigarette smokers by selected social demographic characteristics N=200

Demographic variables	Number of Cigarettes Consumed (per day)					Total
	<5	5-9	10-14	15-24	>25	
<b>Overall Gender</b>	<b>14</b>	<b>05</b>	<b>30</b>	<b>27</b>	<b>00</b>	<b>76</b>
Male	10 (13.15)	03 (03.94)	24 (31.57)	26 (34.21)	00	63 (82.89)
Female	04 (05.26)	02 (02.63)	06 (07.89)	01 (01.31)	00	13 (17.10)
<b>Age</b>						
15-25	03 (03.94)	02 (02.63)	01 (01.31)	03 (03.94)	00	09 (11.84)
26-36	06 (07.89)	03 (03.94)	15 (19.73)	02 (02.63)	00	26 (34.21)
37-47	00 (00.00)	00 (00.00)	07 (09.21)	15 (19.93)	00	22 (28.94)
48-58	04 (05.26)	00 (00.00)	06 (07.89)	05 (06.57)	00	15 (19.73)
>58	01 (01.31)	00 (00.00)	01 (01.31)	02 (02.63)	00	04 (05.26)
<b>Residence</b>						
Rural	10 (13.15)	13 (17.10)	10 (13.15)	12 (15.78)	00	45 (59.21)
Urban	00 (00.00)	00 (00.00)	00 (00.00)	00 (00.00)	00	00 (00.00)
Semi urban	00 (00.00)	00 (00.00)	00 (00.00)	00 (00.00)	00	00 (00.00)
Urban slum	03 (03.94)	07 (09.21)	08 (10.52)	13 (17.10)	00	13 (17.10)
<b>Education</b>						
Illiterate	06 (07.89)	15 (19.73)	10 (13.15)	15 (19.73)	00	46 (60.52)
Primary	10 (13.15)	10 (13.15)	02 (02.63)	00 (00.00)	00	22 (28.94)
Metric	02 (02.63)	02 (02.63)	00 (00.00)	02 (02.63)	00	06 (07.89)
Sen. Secondary	01 (01.31)	00 (00.00)	00 (00.00)	00 (00.00)	00	01 (01.31)
Graduate	00 (00.00)	01 (01.31)	00 (00.00)	00 (00.00)	00	01 (01.31)

Table 5: Current smokers who purchased cigarette from various places by selected socio demographic characteristics N =76

Place	Overall	Gender		Age		Habitat	
		M	F	15-24	>25	Rural	Urban slum
Store	20	18	02	00	20	12	08
Street vendor	38	30	08	07	31	26	12
Duty free shop	00	00	00	00	00	00	00
Outside the country	00	00	00	00	00	00	00
Kiosks	16	15	01	02	14	05	11
Another person	02	00	02	00	02	02	00
Don't remember	00	00	00	00	00	00	00
Refused	00	00	00	00	00	00	00

Table 6: Current smokeless tobacco users who purchased smokeless tobacco from various places by selected socio demographic characteristics N=65

Place	Overall	Gender		Age		Habitat	
		M	F	15-24	>25	Rural	Urban slum
Store	17	16	01	01	16	10	07
Street vendor	30	21	09	00	30	29	01
Duty free shop	01	00	01	00	01	01	00
Outside the country	00	00	00	00	00	00	00
Kiosks	14	09	05	03	11	00	14
From another person	03	02	01	01	02	03	00
Don't remember	00	00	00	00	00	00	00
Refused	00	00	00	00	00	00	00

**Table 7: Current smokers who noticed health warning on cigarette package and considered quitting because of health warning during last 30 days, by selected socio demographic characteristics N=200, n=76**

Demographic variables	Current Smokers Who	
	noticed health warning on cigarette packages f (%)	thought about quitting because of warning label f (%)
<b>Overall</b>	38 (50)	26 (33.3)
<b>Age (in years)</b>		
• 15-25	05 (06.57)	05 (06.57)
• 26-36	17 (22.36)	09 (11.84)
• 37-47	08 (10.57)	07 (03.94)
• 47-58	04 (05.26)	03 (03.94)
• >58	03 (03.94)	02 (02.63)
<b>Gender</b>		
• Male	33 (43.42)	23 (30.26)
• Female	05 (06.57)	03 (03.94)
<b>Education</b>		
• Illiterate	22 (28.94)	13 (17.10)
• Primary	11 (14.47)	09 (11.84)
• Matric	04 (05.26)	03 (03.94)
• Senior secondary	00 (00.00)	00 (00.00)
• Graduate	01 (01.31)	01 (01.31)
<b>Occupation</b>		
• Unemployed	02 (02.63)	02 (02.63)
• Laborer	27 (35.52)	16 (21.05)
• Private job	04 (05.26)	03 (03.14)
• Government job	00 (00.00)	00 (00.00)
• Self employed	05 (06.57)	05 (06.57)
<b>Habitat</b>		
• Rural	24 (31.57)	22 (28.14)
• Urban	00 (00.00)	00 (00.00)
• Semi urban	00 (00.00)	00 (00.00)
• Urban slums	14 (18.42)	04 (05.26)

**Table 8: Current smokeless tobacco users who noticed health warning on smokeless tobacco products package and considered quitting because of health warning during last 30 days, by selected socio demographic variables N=200, n=65**

Demographic variables	Current Smokeless Tobacco Users Who	
	Notice health warning on smokeless tobacco product f (%)	Thought about quitting because of health warnings f (%)
<b>Overall</b>	24 (36.92)	15 (23.07)
<b>Age (in years)</b>		
• 15-25	02 (03.07)	02 (03.07)
• 26-36	06 (09.23)	03 (04.61)
• 37-47	11 (16.92)	07 (10.76)
• 47-58	05 (07.69)	03 (04.61)
• >58	00 (00.00)	00 (00.00)
<b>Gender</b>		
• Male	19 (29.23)	13 (20.00)
• Female	05 (07.69)	02 (03.07)
<b>Education</b>		
• Illiterate	11 (16.92)	06 (09.23)
• Primary	08 (12.30)	05 (07.69)
• Matric	05 (07.69)	04 (06.15)
• Senior secondary	00 (00.00)	00 (00.00)
• Graduate	00 (00.00)	00 (00.00)
<b>Occupation</b>		
• Unemployed	03 (04.61)	01 (01.53)
• Laborer	14 (21.53)	10 (15.38)
• Private job	00 (00.00)	00 (00.00)
• Government job	01 (01.53)	00 (00.00)
• Self employed	06 (09.23)	04 (06.15)
<b>Habitat</b>		
• Rural	20 (30.76)	13 (20.00)
• Urban	00 (00.00)	00 (00.00)
• Semi urban	00 (00.00)	00 (00.00)
• Urban slum	04 (06.15)	02 (03.07)



**Table 9: Current smokers who made a quit attempt and received health care provider assistance in past 12 months by selected demographic characteristics N=200, n=76**

Demographic variables	Smoking cessation advice health care seeking behavior		
	Made quit attempt f(%)	Visited health care provider f(%)	Advised to quit by health care provider f(%)
<b>Overall</b>	33 (43.42)	12 (15.78)	12 (15.78)
<b>Age (in years)</b>			
• 15-25	03 (03.94)	01 (01.31)	01 (01.37)
• 26-36	15 (19.73)	04 (05.26)	04 (05.26)
• 37-47	09 (11.84)	05 (06.57)	05 (06.57)
• 48-58	05 (06.57)	01 (01.31)	01 (01.31)
• >58	01 (01.31)	01 (01.31)	01 (01.31)
<b>Gender</b>			
• Male	28 (36.84)	09(11.84)	09 (11.84)
• Female	05 (06.57)	03(03.94)	03 (03.94)
<b>Education</b>			
• Illiterate	20 (26.31)	06 (07.89)	06 (07.89)
• Primary	08 (10.52)	03 (03.94)	03 (03.94)
• Metric	03 (03.94)	03 (03.94)	03 (03.94)
• Senior secondary	01 (01.31)	00 (00.00)	00 (00.00)
• Graduate	01 (01.31)	00 (00.00)	00 (00.00)
<b>Habitat</b>			
• Rural	21 (27.63)	11 (14.47)	11 (14.47)
• Urban	00 (00.00)	00 (00.00)	00 (00.00)
• Semi-urban	00 (00.00)	00 (00.00)	00 (00.00)
• Urban slums	12 (15.78)	01 (01.31)	01 (01.31)

**Table 10: Current smokeless tobacco users who made a quit attempt and received health care provider assistance in past 12 months, by selected socio demographic characteristics N=200, n=65**

Demographic variables	Smokeless cessation advice health care provider seeking behavior		
	Made a quit attempt f (%)	Visited health care provider f (%)	Advised to quit by health care provider f (%)
<b>Overall</b>	16 (24.61)	14 (21.50)	14 (21.50)
<b>Age (in years)</b>			
• 15-25	03 (04.61)	03 (04.61)	03 (04.61)
• 26-36	03 (04.61)	03 (04.61)	03 (04.61)
• 37-47	07 (10.76)	05 (07.69)	05 (07.69)
• 48-58	03 (04.61)	03 (04.61)	03 (04.61)
• >58	00 (00.00)	00 (00.00)	00 (00.00)
<b>Gender</b>			
• Male	14 (21.53)	12 (18.46)	12 (18.46)
• Female	02 (03.07)	02 (03.07)	02 (03.07)
<b>Education</b>			
• Illiterate	07 (10.76)	06 (09.23)	06 (09.23)
• Primary	09 (13.84)	08 (12.30)	08 (12.30)
• Matric	00 (00.00)	00 (00.00)	00 (00.00)
• Sen. Secondary	00 (00.00)	00 (00.00)	00 (00.00)
• Graduate	00 (00.00)	00 (00.00)	00 (00.00)
<b>Habitat</b>			
• Rural	10 (15.38)	08 (12.30)	08 (12.30)
• Urban	00 (00.00)	00 (00.00)	00 (00.00)
• Semi-Urban	00 (00.00)	00 (00.00)	00 (00.00)
• Urban slums	06 (09.23)	06 (09.23)	06 (09.23)

**Table 11: Attitude towards tobacco products usage N = 200**

Score	f (%)
0-4	027.00 (13.50)
5-9	173.00 (86.50)

Table 11 represents the attitude of subjects towards usage of tobacco products. It shows that maximum 173 (86.50) of subjects have negative attitude towards tobacco products usage while only 27(13.50) subjects have positive attitude towards it.

**Table 12: Attitude towards quitting tobacco products N = 200**

Score	f (%)
0-3	021.00 (10.50)
4-7	179.00 (89.50)

Table 12 describes the attitude of subjects towards quitting tobacco products usage and shows that majority 179 (89.50) of subjects have positive attitude whereas only 21 (10.50) have negative attitude towards quitting tobacco products.

**Table 13: Association of gender with tobacco smokers and non-smokers N=200**

Gender	Smokers	Non-Smokers	Total	Chi-square
Male	63	80	143	7.8105* p=0.005194
Female	13	44	57	
Total	76	124	200	

\*Significant  $p < 0.05$

**Table 14: Association of gender with smokeless tobacco products users and non-users N=200**

Gender	Smokeless tobacco users	Non-users	Total	Chi-square
Male	48	90	138	1.0573 <sup>NS</sup> p=0.303835
Female	17	45	62	
Total	65	135	200	

NS= Non-Significant  $p > 0.05$

**Table 15: Association of gender with smoked and smokeless tobacco products users**

Gender	Smoked tobacco users	Smokeless tobacco users	Total	Chi-square
Male	63	48	111	1.7126 <sup>NS</sup> p=0.190645
Female	13	17	30	
Total	76	65	141	

NS= Non-Significant  $p > 0.05$

**Table 16: Association of age with smoked and smokeless tobacco products users**

Age group (in years)	Smoked tobacco users	Smokeless tobacco users	Total	Chi-square
15-25	09	05	14	4.7518 <sup>NS</sup> p=0.313722
26-36	26	17	43	
37-47	22	28	50	
48-58	15	14	29	
>58	04	01	05	
Total	76	65	141	

NS= Non-Significant  $p > 0.05$

## DISCUSSION

The study findings revealed that the prevalence of smoked tobacco was among 76 (38.7%) people, while it is consumed in smokeless form by 65 (32.50%) people of selected villages. It also showed that tobacco products are consumed more commonly by males rather than females, between 26-47 years of age, who are illiterate, earning below 10,000 monthly incomes. The most common mode of tobacco use is smoked tobacco. As per occupation it is more prevalent in laborer class, having nuclear families in rural areas. Out of total 76 (38%) of respondents using smoked tobacco products; 43 (56.5%) use manufactured cigarettes.

It also shows that among current smokers, maximum number of subjects smoked 10-14 cigarettes per day and the most common source for smoked and

smokeless tobacco products was street vendors followed by stores and kiosks.

Out of 76 current smokers, about half 38 (50%) noticed pictorial warnings on cigarettes packs during last 30 days and 26(33.3%) thought about quitting. Similarly, out of 65 current smokeless tobacco users, 24 noticed health warnings and more than half 15 thought about quitting.

It also describes that 33 (36.3%) current smokers attempted to quit smoking out of which 12 (15.78%) visited health care provider and all were advised to quit tobacco smoking which shows that 36.3% made a quit attempt after receiving advice from health care provider. Similarly, 16 (24.61%) subjects attempted to quit smokeless tobacco products out of which 14 (21.50%) visited health care provider and all were advised to quit which shows that 87.50% made a quit attempt after receiving advice from health care provider.

It also concluded that maximum of subjects 86.50% had negative attitude towards tobacco product usage and 89.50% wants to quit tobacco usage and had a positive attitude towards quitting.

The statistical analysis of association of gender with tobacco smokers and non-smokers was found significant at  $p < 0.05$  level while it was non-significant with smokeless tobacco products users and non-users.

Narayan, Dhondibarao and Ghanshyam (2014) conducted a cross sectional study on 2913 tribal adults to assess prevalence of tobacco consumption in Maharashtra. The study findings showed that prevalence of tobacco consumption is high 77.78% out of these 45.42% males and 26.46% female adults habituated to it. The study concluded that prevalence of tobacco consumption was high in tribal adults. [5] Contrary to this, the present study showed the prevalence related to tobacco consumption is low i.e., 76(38%) subjects smoked tobacco and 65 (32.5%) are smokeless tobacco users. However similar to above study it shows that maximum tobacco users are males (55.50%).



Christian (2013) conducted a descriptive study on 100 students selected by purposive sampling to assess knowledge and attitude regarding cigarette smoking. It showed that 83.2% of subjects had negative attitude towards cigarette smoking. The study concluded that there is probability of having a role model from family regarding the habit of cigarette smoking. [6] Similar to this study, it was found that 86.5% subjects have negative attitude towards tobacco products usage and 89.5% have positive attitude towards quitting tobacco. Only 19.5% subjects were influenced from family members regarding tobacco products usage.

Zahiruddin, Gaidhane and Bawanku (2013) conducted a cross-sectional study on 240 adults to assess prevalence of tobacco use among tribal adults at Wardha, India. The data was collected by interview technique and findings showed the prevalence of smokeless tobacco were 55.45% & smoked tobacco was 53.41% respectively. The study concluded that there is high prevalence of tobacco use among tribal adults. [7] Contrary to this study, present study shows the prevalence related to tobacco consumption is low i.e., 76(38%) subjects smoke tobacco and 65(32.5%) are smokeless tobacco users.

Daniel, Nagraj and Kamath (2013) conducted a cross-sectional survey using personal interviews on 832 individuals above 19 years of age & was analyzed by high square test and multiple logistic test. The results showed that prevalence of tobacco use was 17.5% among less educated, low socio-economic people. The study concluded that improvement in the educational and socio-economic status may lead to a decline in the use of tobacco. [8] Similar to this study prevalence of tobacco use was high among illiterate people of low socio-economic status working as laborers and earning less than 10,000 monthly income.

Sahib, and Badri (2014) conducted a cross-sectional descriptive study among 2915 students from 30 preliminary schools in Baghdad during November 2014. The

sample was selected by using multistage sampling technique ranging of 54.3% series between 10-13 years and 51.9% of them were females those are non-smokers while the rest reported that both or one of them parents were smokers. Out of total participants 82.4% and 66.2% knew about direct and indirect risks of cigarette smoking respectively. Smoking is considered inconvenient by 51.4% and 34.6% considered it sign of non-confidence. [9] Similar to this, the present study concludes that 113 (56.5) subjects knew about harmful effects of tobacco products and 20 (10) considered it as a sign of lack of confidence.

## CONCLUSION

The present study was concluded on the basis of following assumptions:

- There will be high prevalence related to tobacco product usage.
- Tobacco products are consumed more commonly by males as compared to females.
- Tobacco products will be commonly used by people of labor class.
- Tobacco products usage will be high in rural areas as compared to urban slums areas.
- Tobacco products usage will be more among illiterate people.
- Most of people will have positive attitude related to tobacco product usage.
- Most of people will have a negative attitude related to quitting tobacco products.

The analysis of data shows that tobacco products were consumed more commonly by males who are illiterate, working as laborers and staying in rural areas. So, the following assumptions were accepted:

- Tobacco products will be more common among males as compared to females.
- Tobacco products usage will be high in rural areas as compared to urban slums area.

- Tobacco products will be commonly used by people of labor class.
- Tobacco products usage will be more among illiterate people.

The analysis of data also revealed that smoking was prevalent only among 38% of subjects and smokeless tobacco among 32.50% so prevalence was quite low, and most of subjects had negative attitude towards tobacco products usage and positive towards quitting tobacco. So, the following assumptions were rejected:

- There will be high prevalence related to tobacco product usage.
- Most of people have a positive attitude towards tobacco products usage.
- Most of people have a negative attitude related quitting tobacco products.

The present study also considered the following hypothesis.

**Ho-** There is no significant association of gender with tobacco smokers and non-smokers.

The statistical analysis of association of gender with tobacco smokers and non-smokers was found significant at  $p < 0.05$  level, so null hypothesis was rejected.

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#### REFERENCES

- 1 Tobacco products. [Internet]. 2016 December [cited 2017 April 2]. Available from: [https://en.m.wikipedia.org/wiki/Tobacco\\_products](https://en.m.wikipedia.org/wiki/Tobacco_products)
- 2 Youth asses to tobacco. [Internet]. 2014 March [cited 18 May 2017]. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/11768192>
- 3 The Global Tobacco Crisis. Tobacco-Global agent of Death. [Internet]. 2018 March [cited 19 March 2018]. Available from: [www.who.int/mediacentre/factsheets/fs339/en/](http://www.who.int/mediacentre/factsheets/fs339/en/)
- 4 Data and Statistics. Centre for disease control and prevention. [Internet]. 2017 September [cited 25 October 2017]; 24(7). Available from: [https://www.cdc.gov/tobacco/data\\_statistics/index.htm?s\\_cid=osh-stu-home-nav-005](https://www.cdc.gov/tobacco/data_statistics/index.htm?s_cid=osh-stu-home-nav-005)
- 5 Narayan Dhekale Dilip, Dhondibarao Gadekar Rambhau, Ghanshyam Kolhe Charulata. Prevalence of tobacco consumption among adults. The APSS Journal [Internet]. 2011 October [cited 8 February 2017]; 5(5): 1060-1063. Available from: <https://pdfs.semanticscholar.org/eaec/571cab8a3f7b1187833a6ac80a0bbb76d5d1.pdf>
- 6 Christian, Kevin, Silas. Knowledge and attitude regarding cigarette smoking among UG students. Journal of Nursing and Health Science [Internet]. 2014 November-December [cited 7 May 2017]; 3 (6): 49-54. Available from: [www.iosrjournals.org/iosr-jnhs/papers/vol3-issue6/Version-2/L03624954.pdf](http://www.iosrjournals.org/iosr-jnhs/papers/vol3-issue6/Version-2/L03624954.pdf)
- 7 Zahiruddin Quazi, Gaidhane Abhay, Bawanku Shilpa. Prevalence of tobacco use among tribal adults. Annals of Tropical Medicine and Public Health [Internet]. 2011 January [cited 5 March 2017]; 4(2): 74-80. Available from: <https://www.atmph.org/article.asp?issn=1755-6783>
- 8 Daniel AB, Nagaraj K, Kamath R. Prevalence and determinants of tobacco use,' National Journal of research in community medicine [Internet]. 2008 July-August [cited 1 July 2017]; 21 (4): 163-5. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/19267035>
- 9 Sahib Abbas Jabbar, Al-Badri Husham J Abd. Assessment of the knowledge & attitudes of preliminary schools students toward smoking in Baghdad. Epidemiology Public Health Journal [Internet]. 2016 January [cited 7 May 2017]; 13 (1). Available from: <https://ebph.it/article/viewFile/11612/10834>

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