Original Article

Study on prevalence and sociocultural aspects of tobacco use in India

ABSTRACT

Aim: The present study focuses on the prevalence of tobacco use and aims to determine various sociocultural aspects of tobacco use in Indian population.

Materials and Methods: The study sample comprised 384 participants. There were three study groups, and in each study group, there were 128 participants. Group A was tobacco users without oral precancer, Group B was tobacco users with oral precancer, and Group C was healthy individuals with no history of tobacco or areca nut use and oral precancer. Both male and female adults in the age group of 18 years and above visiting the Outpatient Department of Oral and Maxillofacial Surgery at King George's Medical University were recruited for the study. The study participants were explained in detail about the study, and informed consent was obtained through them. Data have been collected using a standard structured predesigned questionnaire. The questionnaire consisted of the details of the demographic profile of the study participants, details of tobacco use, and the major social and cultural reasons which motivated them to consume tobacco. Data were extracted from the case sheet, and the data were entered into a worksheet for the purpose of analysis. The analysis was performed using the commercially available Statistical Package SPSS.

Conclusion: The rate of tobacco prevalence is very high among the Indian population, and a number of social and cultural factors are responsible for its use. To curb this problem, more studies could be done to find the causes responsible for its use.

Keywords: Oral cancer, precancer, sociocultural, tobacco

INTRODUCTION

The Indian population is rising at a rapid pace and has crossed over 1 billion. This changing scenario has resulted in the loss of old values and traditions, an unhealthy environment resulting in a higher degree of tobacco use prevalence. Tobacco use is a global social problem, and no part of the society has remained untouched from its curse. The tobacco use badly affects both the user and the entire society. As the social organization becomes highly complex, the tobacco consumption also increases. According to the official data of the ministry of social justice and empowerment, India has an estimated 3.4 million tobacco users which exclude alcoholics, which figures around 11 million in the country. Due to increased urbanization, majority of the population remain alienated. On account of the increasing maladjustment, the incidence of tobacco addiction is showing an upward trend.

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Tobacco addiction also has a chain reaction impact.^[1,2] If any member of the family is a user, then the entire family gets affected. It causes enormous psychosocial problems such as depression, despair, irritation, complex feelings, financial

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losses, increased crime, and many more social issues.^[3-5] A lot of oral health complications and periodontal diseases such as oral precancer, oral cancer, alveolar bone loss, cleft lip and palate, and bruxism arise due to tobacco use.^[6]

The causes of the popularity of tobacco use are social acceptability, religious beliefs, and perceived health benefits. One common reason for all forms of tobacco consumption is the infusion of symbolic and often moral tones. Some of the psychosocial factors which influence the use of tobacco are a family history of tobacco use by elders, peer pressure and influence, easy availability of these products, personality factors, underlying emotional problems, and most importantly, the aggressive marketing strategies of the tobacco industry. People with a psychological burden are likely to use tobacco and related products as these products have anxiety-relieving and mood-elevating properties. Initiation of tobacco helps them to identify with the group and hence reduces social anxiety.^[7] To summarize, multiple factors determine the initiation of tobacco use. Areca nut is regarded by many Indians as the fruit of divine origin. It is believed that God blesses the fruit which is then distributed to the followers. In addition to its religious connotations, areca nut is used as a traditional avurvedic medicine. It is also used as a mouth freshener after meals a taste enhancer. for indigestion and for gynecological problems and for prevention of pregnancy-related morning sickness. Chewing also increases the capacity to work and causes a hot sensation in the body. It is also used among the poor to avoid boredom and to suppress hunger.^[8,9]

Tobacco consumption is globally a great economic burden and gives birth to serious health hazards. Due to the severity of its use, several health-related problems emerge such as cardiovascular diseases, various cancers, and lung diseases and oral health complications. The type of tobacco consumption and causes of tobacco consumption vary from region to region and person to person.

In a country like India, we find that tobacco is consumed in varied smoking and nonsmoking forms. Smoking tobacco includes hookah, cigarette, bidis, charas, and so on, while on the other hand, nonsmoking tobacco products include pan, pan masala, gutkha, gul manjan, surti, supari, and khaini. It is evident that there are several sociocultural aspects which motivate the individuals to consume tobacco in one way or the other. The consumption of tobacco products may leads to develop oral precancer conditions such as leukoplakia, erythroplakia and oral submucous fibrosis. It has been noticed that tobacco is highly addictive, and once a person adopts this habit, then it becomes difficult for him to escape from it. India is the largest producer and consumer of tobacco. In a country like India, people consume tobacco in varied forms and the disease also differs from people to people. Among all the other tobacco-related diseases, the oral health complications, especially the oral precancers and cancers, are the leading causes of death. The study suggests that people consuming tobacco and related products are more often trapped in the clutches of diseases such as oral precancer, cancer, tooth loss, cardiovascular diseases, and asthma as compared to nonusers.

The study suggests that there are several sociocultural aspects responsible for tobacco use. In a conservative and traditional country like India, the culture and several social ways of living are so deeply rooted that many times the person forcefully turns into a user. For example, the traditional and conservative people believe and treat tobacco as an effective medicine for curing pregnancy-related illness, toothache, headache, and curing digestion-related problems. At the time of religious and cultural ceremonies such as pooja, marriage, and festivals, people of all castes and creeds consume and use tobacco. The role models in cinemas and advertisements, illiteracy, poverty and unemployment, youth unrest, peer influence, family history of tobacco use, and broken families are the other social factors which increase the tendency of tobacco use. The preservation of these social and cultural attributes has influenced the people to great extent resulting in the increase in the rate of tobacco use and health problems.

This study aims to understand various social and cultural aspects of tobacco use in India and to examine the knowledge, practices, and the beliefs which tend and motivates the individual for its use.

The present study focuses on the prevalence of tobacco use and aims to determine various sociocultural aspects of tobacco use in Indian population.

MATERIALS AND METHODS

The study sample comprised 384 participants. There were three study groups, and in each study group, there were 128 participants. Group A was tobacco users without oral precancer/dysplasia.

Group B was tobacco users with oral precancer (H/P confirmed). Group C was healthy individuals with no history of tobacco or areca nut use and oral precancer. Both male and female adults in the age group of 18 years and above visiting the Outpatient Department of Oral and Maxillofacial Surgery at King George's Medical University were recruited

for the study. The nonconsenting participants, participants having any form of the metabolic and debilitating disease, participants having cancer, and participants below the age group of 18 years were excluded from the study. The study participants having precancer or not and who were users and nonusers of 18 years and above willing to give informed consent were included for the study. The study participants were explained in detail about the study, and informed consent was obtained through them.

Data have been collected using a standard structured predesigned questionnaire. The questionnaire consisted of the details of the demographic profile of the study participants, the practice of chewing tobacco, areca nut, the age of habit commencement, type, frequency, and duration, and through this questionnaire, the individuals were also inquired about what were the major social and cultural reasons which motivated them to consume tobacco.

Demographic details, findings of the investigation, and treatment details of all patients were extracted from the case sheet, and the data were entered into a worksheet (Excel 05; Microsoft Corp., Banjara Hills, Hyderabad, India). Questionnaire data were also entered in the worksheet for the purpose of analysis. Statistical analysis was performed through SPSS software (2016), IBM corporation, USA.

RESULTS

A total of 384 patients were included in the study. There were three study groups, and in each study group, there were 128 participants. Group A comprised users with oral precancer, Group B comprised users without oral precancer, and Group C comprised nonusers and healthy individuals.

Age-based distribution

On the basis of age, it was found that tobacco consumption was prevalent in all age groups, but as the age increases, the risk of development of oral precancer also increases. In Group A, there was no user with precancer found between 18 and 30 years of age, only 3.12% users having precancer were reported between 31 and 34 years of age, and 96.87% were above 35 years of age. It was observed that the majority of the patients who were above 35 years of age were having oral precancer. In Group B, i.e., users without oral precancer, it was found that highest percentage, i.e., 64.06% were between 18 and 25 years of age, 17.96% were between 26 and 30 years of age, 13.28% were between 31 and 35 years of age, 3.12% were between 36 and 40 years of age, and 1.56% were above 40 years of age. In Group C, there was an appropriate ratio found between all age groups [Table 1].

Time duration and frequency of consumption-based distribution

It was noticed that as the time duration and frequency of tobacco consumption increase, the risk of disease progression also increases. In Group A, no individual reported who was consuming tobacco for about 1 year, 3.12% were reported who were consuming tobacco between 1 and 3 years, 31.25% population were consuming tobacco between 4 and 6 years, 34.37% population were consuming tobacco between 6 and 9 years, and 31.25% population were consuming tobacco for >10 years, while in Group B, there were users in every age group but not diseased. The nondiseased users consuming for a long time were very few. The frequency of consumption is also related to the development of the disease. About 83% population were consuming tobacco for >10 times a day [Table 2].

Type of consumption-based distribution

In both the groups, the highest percentage were of chewers as compared to smokers. Some of them were also reported who were both chewers and smokers. The majority of diseased patients were chewers as compared to smokers. Very few were reported who were consuming alcohol also, but they were not diseased. In Group A, 31.25% were smokers, 53.90% were chewers, and 14.84% were both chewers and smokers, while in Group B, 33.59% were smokers, 52.94% were chewers, 11.71% were both chewers and smokers, and 2.34% were alcohol users [Table 3].

Gender-based distribution

In Group A, there were 77.34% males and 22.65% females; in Group B, there were 71.87% males and 28.12% females; and

Table 1: Comparison of the age distribution of study participants

Age	Group A Users with oral precancer, <i>n</i> (%)	Group B Users without oral precancer, <i>n</i> (%)	Group C Nonuser and healthy individuals, <i>n</i> (%)
18-25	-	82 (64.06)	25 (19.53)
26-30	-	23 (17.96)	28 (21.87)
31-35	4 (3.12)	17 (13.28)	23 (17.96)
36-40	26 (20.31)	4 (3.12)	27 (21.09)
>40	98 (76.56)	2 (1.56)	25 (19.53)
Total	128	128	128

in Group C, there were 83.59% females and 16.40% males. The ratio of male patients were high as compared to female patients for oral pre cancer. In the healthy group, there were more females as compared to males [Tables 4-6].

Residence-based distribution

In Group A, there were 58.59% of rural population and 41.40% of urban population; in Group B, there were 46.87% of rural population and 53.12% of urban population; and in Group C, there were 49.21% of rural population and 50.78% of urban population. It was concluded that there was a rise in disease progression among rural population as compared to urban population. However, the rural-urban ratio of tobacco users

in Group B and healthy individuals in Group C was almost equal [Table 7].

Education-based distribution

It was observed that there were the highest percentage of illiterates (49.0%), followed by primary, middle school, and graduates/PGs who were having precancerous lesions. In Group B also, there were the highest percentage of illiterates (40.0%), followed by primary and graduates/PGs who were users. In Group C, it was found that those who were more educated (95.0%) were healthy as compared to illiterates and less-educated population [Table 8].

Table 2: Time duration and frequency of tobacco consumption

Time duration	Group A Users with oral precancer	Group B Users without oral precancer	Frequency	Group A Users with oral precancer	Group B Users without oral precancer
3 months	-	40 (31.25)	1-2 times	-	11 (8.59)
4-6 months	-	27 (21.09)	4-6 times	2 (1.56)	97 (75.78)
7-9 months	-	13 (10.15)	7-9 times	20 (15.62)	17 (13.28)
10-12 month	-	11 (8.59)	>10 times	29 (22.65)	-
1-3 years	4 (3.12)	9 (7.03)	>20 times	45 (35.15)	3 (2.34)
4-6 years	40 (31.25)	14 (10.93)	>30 times	32 (25.00)	-
7-9 years	44 (34.37)	8 (6.25)			
>10 years	40 (31.25)	6 (4.68)			
Total	128	128		128	128

Table 3: Type of tobacco consumption

	Group A Users with oral precancer, <i>n</i> (%)	Group B Users without oral precancer, <i>n</i> (%)
Smoker Bidi/cigarette/hukka/pipe/cigar/charas/ganja	40 (31.25)	43 (33.59)
Chewers Gutkha/khaini/surti/marijuana/gul manjan/supari/paan masala	69 (53.90)	67 (52.34)
Both smokers and chewers	19 (14.84)	15 (11.71)
Alcohol	-	3 (2.34)
Total	128	128

Table 4: Gender distribution

Gender	Group A	Group B	Group C		
	Users with oral precancer, <i>n</i> (%)	Users without oral precancer, <i>n</i> (%)	Nonusers and healthy individuals, <i>n</i> (%)		
Male	99 (77.34)	92 (71.875)	21 (16.40)		
Female	29 (22.65)	36 (28.125)	107 (83.59)		
Total	128	128	128		

Table 5: Religion distribution of Group A, B, C

Gender	Group A Users with oral precancer, <i>n</i> (%)	Group B Users without oral precancer, <i>n</i> (%)	Group C Nonusers and healthy individuals, <i>n</i> (%)
Hindu	50 (39.06)	55 (42.96)	82 (64.06)
Muslim	69 (53.90)	69 (53.90)	44 (34.375)
Sikh	9 (7.03)	4 (3.125)	2 (1.56)
Christian	-	-	-
Others	-	-	-
Total	128	128	128

Occupation-based distribution

It was observed that the highest percentage of participants in Groups A and B were unemployed (Group A: 75.0% and Group B: 83.59%), followed by shop owners/clericals/farmers/ semi-professionals/professionals. In Group C, there were very few unemployed people (6.25%) who were healthy, and in other categories, there was almost equal ratio found [Table 9].

Socioeconomic status distribution

It was observed that in Group A, a maximum number of diseased patients (75.78%) were belonging to low socioeconomic status as compared to high [Table 10].

In Group B also, a maximum number of users (82.81%) were belonging to low socioeconomic status as compared to high, and in Group C, the highest rate of healthy individuals (46.87%) were of higher status as compared to other socioeconomic categories.

Social aspects of tobacco use

A set of questions was designed to inquire about social aspects of tobacco use. The options for answer of each question were coded as: always = 1, never = 2, sometimes = 3, can't say = 4, and not applicable = 5 [Table 11].

Question 1: Do you think that tobacco use makes you look smart? Question 2: Use due to peer influence? Question 3: Due to family history of its use? Question 4: Use due to the influence of media and advertisements? Question 5: Use due to the stress due to poverty, unemployment, etc.?

In Group A on questioning, people responded as below:

- Question 1: 14.06% = 2, 27.34% = 3, and 58.59% = 4
- Question 2: 91.40% = 1 and 8.59% = 3
- Question 3: 96.09% = 1 and 3.90% = 3
- Question 4: 68.75 = 2, 19.53% = 3, and 11.71% = 4
- Question 5: 97.65% = 1 and 2.34% = 3.

Table 6: Marital status distribution

Marital status	Group A Users with oral precancer, <i>n</i> (%)	Group B Users without oral precancer, n (%)	Group C Nonusers and healthy individuals, <i>n</i> (%)		
Married	67 (52.34)	65 (50.78)	64 (50.00)		
Unmarried	61 (47.65)	63 (49.21)	64 (50.00)		
Total	128	128	128		

Table 7: Residential distribution of Groups A, B, and C

	-					
Residential distribution	Group A	Group B	Group C			
	Users with oral precancer, n (%)	Users without oral precancer, n (%)	Nonusers and healthy individuals, n (%)			
Rural	75 (58.59)	60 (46.87)	63 (49.21)			
Urban	53 (41.40)	68 (53.12)	65 (50.78)			
Total	128	128	128			

Table 8: Educational status distribution of Group A, B, C

Educational status distribution	Group A Users with oral precancer, <i>n</i> (%)	Group B Users without oral precancer, <i>n</i> (%)	Group C Nonusers and healthy individuals, <i>n</i> (%)
Primary	31 (24.21)	42 (32.81)	-
Middle school	27 (21.09)	-	17 (13.28)
10^{th} and $10 + 2$	-	-	34 (26.56)
Graduate + PG	8 (6.25)	36 (28.125)	71 (55.46)
Illiterate	62 (48.43)	50 (39.06)	6 (4.68)
Total	128	128	128

Table 9: Occupation distribution

Occupation distribution	Group A Users with oral	Group B Users without oral	Group C Nonusers and healthy individuals a (%)		
Unomployed		107 (92 50)	9 (6 25)		
onempioyed	96 (75)	107 (63.59)	0 (0.25)		
Unskilled	-	-	28 (21.87)		
Semiskilled/skilled	-	-	30 (23.43)		
Shop owners/clericals/farmer	24 (18.75)	18 (14.06)	33 (25.78)		
Semiprofessional/professional	8 (6.25)	3 (2.34)	29 (22.65)		
Total	128	128	128		

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In Group B on questioning, people responded as below:

- Question 1: 19.53% = 2, 12.5% = 3, and 61.96% = 4
- Question 2: 80.46% = 1 and 19.5% = 3
- Question 3: 100% = 1
- Question 4: 3.12% = 1, 78.12% = 2, 16.40% = 3, and 2.34% = 4,
- Question 5: 100% = 1.

Cultural aspects of tobacco use

A set of questions was designed to inquire about social aspects of tobacco use. The options for answer of each question were coded as: always = 1, never = 2, sometimes = 3, can't say = 4, and not applicable = 5 [Table 12].

Question 1: Do you consider tobacco as a traditional medicine? Question 2: You use tobacco on festive occassions, weddings, etc.? Question 3: You offer tobacco to the visiting guests?

In Group A on questioning, people responded as below:

- Question 1: 39.06% = 1, 23.43% = 2, 31.25% = 3, and 6.25% = 5
- Question 2: 87.5% = 1 and 12.5% = 3
- Question 3: 85.93% = 1, 10.93% = 3, and 3.12% = 5.

In Group B on questioning, people responded as below:

- Question 1: 40.62% = 1, 28.125% = 2, and 32.03% = 3
- Question 2: 95.31% = 1 and 4.68% = 3
- Question 3: 91.40% = 1 and 8.59% = 3.

Table 10: Socioeconomic status distribution of Groups A, B, and C

Socioeconomic status distribution	Group A Users with oral precancer, <i>n</i> (%)	Group B Users without oral precancer, <i>n</i> (%)	Group C Nonusers and healthy individuals, <i>n</i> (%)
Upper	2 (1.56)	9 (7.03)	28 (21.87)
Upper middle	-	-	60 (46.87)
Lower middle	9 (7.03)	3 (2.34)	20 (15.62)
Upper lower	20 (15.62)	10 (7.81)	14 (10.93)
Lower	97 (75.78)	106 (82.81)	6 (4.68)
Total	128	128	128

Table 11: Social causes

	Alway	Group A Users with oral precancer Always=1, never=2, sometimes=3, can't say=4, not applicable=5				Group B Users without oral precancer Always=1, never=2, sometimes=3, can't say=4 not applicable=5				ay=4,		
	1	2	3	4	5	п	1	2	3	4	5	п
Do you think that tobacco use	-	18	35	75	-	128	-	25	16	87	-	128
make you look smart	-	14.06	27.34	58.59	-		-	19.53	12.5	67.96	-	
Use due to peer influence	117	-	11	-	-	128	103	-	25	-	-	128
	91.40	-	8.59	-	-		80.46	-	19.53	-	-	
Due to family history of its use	123	-	5	-	-	128	128	-	-	-	-	128
	96.09	-	3.90	-	-		100	-	-	-	-	
Use due to the influence of	-	88	25	15	-	128	4	100	21	3	-	128
media and advertisements	-	68.75	19.53	11.71	-		3.12	78.12	16.40	2.34		
Use due to the stress due to	125	-	3	-	-	128	128	-	-	-	-	128
poverty, unemployment, etc.	97.65	-	2.34	-	-		100	-	-	-	-	

Table 12: Cultural causes

	Group A Users with oral precancer Always=1, never=2, sometimes=3, can't say=4, not applicable=5						Group B Users without oral precancer Always=1, never=2, sometimes=3, can't say=4, not applicable=5					
	1	2	3	4	5	п	1	2	3	4	5	n
Do you consider tobacco as a traditional medicine	50	30	40	-	8	128	52	36	41	-	-	128
	39.06	23.43	31.25		6.25		40.62	28.125	32.03			
You use tobacco on festive occassions, weddings, etc.	112	-	16	-	-	128	122	-	6	-	-	128
	87.5		12.5				95.31		4.68			
You offer tobacco to the visiting guests	110	-	14	-	4	128	117	-	11	-	-	128
	85.93		10.93		3.12		91.40		8.59			

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DISCUSSION

Tobacco use is a major global public health problem. It is the leading preventable cause of premature death worldwide. Tobacco is used in both smoking and chewing form in India. Smoking of tobacco is mainly in the form of bidi, followed by cigarette, hookah, chillum, etc. Some common forms of chewing tobacco are gutkha, khaini, marijuana, mawa, gul manjan, and pan with tobacco.^[10-12]

A total of 384 patients were enrolled in the study. The patients were further divided into three study groups: Group A: tobacco users with oral precancer, Group B: tobacco users without oral precancer, and Group C: nonusers and nondiseased participants. Each group comprised 128 participants. A standard structured questionnaire was prepared, and data collection was done and it was found that a higher frequency among males is attributed to the prevailing Indian social scenario where males being the wage earner are privileged to spread their earnings for their pleasure.

As males are more socially active, so this habit is more prevalent to them as compared to females.

The data indicate that the incidence of oral precancer can be attributed to increased consumption of chewing tobacco. Near about 54% were chewers, 15% were both chewers and smokers, and there were only 31% who were smokers in Group A.

In Group B also, the majority were of chewers. There were 53% chewers, 13% were both chewers and smokers, and there were only 34% who were smokers in Group B.

It was found that the disease progresses as the time duration and frequency of consumption increase. In Group A, users having oral precancer, there were 3.12% people who were consuming for about 3 years, 31.25% were consuming for about 4–6 years, 34.37% were consuming for about 7–9 years, and 31.25% were consuming for >10 years. The participants who were consuming for a short time duration were found to be nondiseased.

The frequency of usage also affects the rate of disease progression. It was noticed that about 90% of the participants who were consuming >10 times/day were having oral precancerous lesions.

Age is also an important factor for disease progression. It was found that tobacco use was prevalent among all age groups ranging from 18 years and above, but oral precancerous lesions were found in patients of above 35 years of age. On the basis of the residential distribution of the study population, it was found that in Group A, the rural population was more diseased as compared to urban population. There were 58% rural population and 42% urban population who were diseased. In Groups B and C, there were no significant differences noticed between rural and urban ratios.

On the occupation-based distribution, it was found that the highest percentage of diseased patients and users in Groups A and B were unemployed followed by others. In Group A, there were 75% unemployed, and in Group B, there were 84% unemployed, and the remaining belonged to shop owners, clericals, farmers, semi-professionals, and professionals. In Group C, there were only 6% unemployed and the remaining percentage belonged to shop owners, clericals, farmers, semi-professionals, and professionals, semi-professionals, and professionals.

Hence, the highest range of the population in both Groups A and B (users with oral precancer and users without oral precancer) was of low-socioeconomic status.

It has been observed that people are inclined toward this habit of consuming tobacco because of numerous social and cultural aspects. The culture and society together play an aggressive role in promoting this evil. The use of tobacco is often prompted by peer influence, role models, family history of tobacco use, considering it as a medicine, using it on festive occasions, and offering it to guests. Such habits later lead to addiction and long-term use.

The tobacco use is frequently associated with oral premalignancies. Hence, we can say that tobacco use is an alarming problem. Negligence of tobacco use may help in curbing oral health issues. The present study focuses on the prevalence of tobacco use and finding various sociocultural aspects promoting its use in Indian population.

Concerted efforts would, therefore, help in early detection, management, and monitoring the efficacy of treatment.

RESULTS AND FINDINGS

It was concluded that tobacco consumption was prevalent in all age groups, but as the age increases, the risk of development of oral precancer also increases as it was observed that the majority of the patients who were above 35 years of age were having oral precancer. In Group C, there was an appropriate ratio found between all age groups.

When a person consumes tobacco in large quantity, then it is more harmful. When it is less consumed, then also the disease may occur, but as the time duration and frequency of tobacco consumption increase, the risk of disease progression also increases. In both the groups, the highest percentage were of chewers as compared to smokers. Some of them were also reported who were both chewers and smokers. The majority of diseased patients were chewers as compared to smokers. Very few were reported who were consuming alcohol also, but they were nondiseased.

Hence, male patients were more reported with oral precancer condition as compare to female patients. In the healthy group, there were more females as compared to males.

Hence, it was concluded that the majority of participants belonged to Hindu and Muslims, there were very few Sikhs, and none of the other religion people were reported in all the three study groups. The highest number of diseased people were Muslims followed by Hindus and Sikhs.

The ratio of married and unmarried was almost equal, and no significant difference was found in marital status.

Hence, it was concluded that there was a rise in disease progression among rural population as compared to urban population. However, the rural-urban ratio of tobacco users in Group B and healthy individuals in Group C was almost equal.

It was observed that there were the highest percentage of illiterates followed by primary, middle school, and graduates/ PGs who were having precancerous lesions.

In Group B also, there were the highest percentage of illiterates followed by primary and graduates/PGs who were users. In Group C, it was found that those who were more educated were healthy as compared to illiterates and less-educated population.

It was concluded that the highest percentage of participants in Groups A and B were unemployed, followed by shop owners/ clericals/farmers/semi-professionals/professionals. In Group C, there were very few unemployed people who were healthy, and in other categories, there was almost equal ratio found.

Hence, it was concluded that a maximum number of diseased patients were belonging to low socioeconomic status as compared to high.

In Group B also, a maximum number of users were belonging to low socioeconomic status as compared to high, and in Group C, the highest rate of healthy individuals was of upper middle status as compared to other socioeconomic categories. In Group A on questioning, people responded as below:

- Question 1: 14.06% never/27.34% sometimes/58.59%
 can't say
- Question 2: 91.40% always/8.59% sometimes
- Question 3: 96.09% always/3.90% sometimes
- Question 4: 68.75 never/19.53% sometimes/11.71% can't say
- Question 5: 97.65% always/2.34% sometimes.

In Group B on questioning, people responded as below:

- Question 1: 19.53% never/12.5% sometimes/61.96% – can't say
- Question 2: 80.46% always/19.5% sometimes
- Question 3: 100% always
- Question 4: 3.12% always/78.12% –never/16.40% sometimes/2.34% – can't say
- Question 5: 100% always.

In Group A on questioning, people responded as below:

- Question 1: 39.06% always/23.43% never/31.25% sometimes/6.25% not applicable
- Question 2: 87.5% always/12.5% sometimes
- Question 3: 85.93% always/10.93% sometimes/3.12%
 not applicable.

In Group B on questioning, people responded as below:

- Question 1: 40.62% always/28.125% never/32.03% sometimes
- Question 2: 95.31% always/4.68% sometimes
- Question 3: 91.40% always/8.59% sometimes.

CONCLUSION

Hence, it may be concluded that tobacco use is highly prevalent among Indian folks and a variety of sociocultural aspects together are responsible for its use. A lot of studies have been done to investigate the prevalence of tobacco use and its influencing factors. More studies could be done to find the causes of promoting its use so that this problem may be curbed and lead our nation healthy and strong.

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Conflicts of interest

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REFERENCES

- Townsend AL, Biegel DE, Ishler KJ, Wieder B, Rini A. Families of persons with substance use and mental disorders: A literature review and conceptual framework. Fam Relat 2006;55:473-86.
- Zung WW. A self-rating depression scale. Arch Gen Psychiatry 1965;12:63-70.
- Daley DC, Douaihy A. Group Treatments for Addiction: Counseling Strategies for Recovery and Therapy Groups. Murrysville, PA: Daley Publications; 2011.
- Cavaiola AA. In search of a new metaphor for the impact of drug abuse on families. Fam Ther 2000;27:81-7.
- 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;12:e4.

- Williams S, Malik A, Chowdhury S, Chauhan S. Sociocultural aspects of areca nut use. Addict Biol 2002;7:147-54.
- Trivedy CR, Craig G, Warnakulasuriya S. The oral health consequences of chewing areca nut. Addict Biol 2002;7:115-25.
- Shimkhada R, Peabody JW. Tobacco control in India. Bull World Health Organ 2003;81:48-52.
- Kaur P. Monitoring tobacco use and implementation of prevention policies is vital for strengthening tobacco control: An Indian perspective. Int J Public Health 2010;55:229-30.
- Daley DC, Douaihy A. A Family Guide to Addiction and Recovery. Murrysville, PA: Daley Publications; 2010.
- Morita N, Naruse N, Yoshioka S, Nishikawa K, Okazaki N, Tsujimoto T, et al. Mental health and emotional relationships of family members whose relatives have drug problems. Nihon Arukoru Yakubutsu Igakkai Zasshi 2011;46:525-41.
- Aung AT, Pickworth WB, Moolchan ET. History of marijuana use and tobacco smoking topography in tobacco-dependent adolescents. Addict Behav 2004;29:699-706.