

Tobacco Prevalence Among the Males Hapur, Uttar Pradesh

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ABSTRACT

Background: Tobacco use is not exclusively, or even principally, a problem in developed countries; it is rapidly becoming a global pandemic, infiltrating even the poorest nations. About one in every three adults smokes and the majority are in developing countries (800 million) and most of them are male (700 million). The smoking epidemic is spreading from its original focus, among men in high-income countries to women in high-income countries and men in low-income and medium-income countries.

Materials and Methods: A cross-sectional study was designed in a rural setting at Hapur from March 2019 to July 2019. Total of 200 male subjects from Hapur, Uttar Pradesh were randomly included in the study. The age group of the samples were from 25 years to 65 years. Statistical analysis was performed.

Results: A total of 200 males were included in this study. The mean age of the subjects was 41.42 ± 10.03 Years. Prevalence of smoked tobacco is far less than its chewable form. Mean age smoking initiation was as early as 28 years and 27 years for chewable tobacco. The Prevalence of smoking (10.61%) was highest in the age group of 56 years and above, while the prevalence of smokeless tobacco consumption was highest in 36 to 45-year age group (27.32%).

Conclusion: Tobacco is one of the most revenue earning commodity for any country; hence, it becomes difficult for any government to ban the product. However, we as a clinician, has a more prominent role to play in society. We should spread awareness among the people and help them reduce the risk associated with tobacco use.

Keywords: Complete Denture Hygiene, Oral health, Oral hygiene practices.

INTRODUCTION

Tobacco has emerged as the giant killer of mankind. Tobacco use is one of the major cause of oral cancer¹. Each year tobacco consumption leads to over 5 million death worldwide. In our country, India, nearly one million people die due to tobacco-related diseases yearly. Tobacco was introduced in South Asia in early 16th century². This area is one of the biggest exporter and consumer of all types of

tobacco worldwide². Tobacco in traditional forms like betel quid and powder, tobacco with lime, is commonly used among all age groups¹.

Tobacco use is not exclusively, or even principally, a problem in developed countries; it is rapidly becoming a global pandemic, infiltrating even the poorest nations. About one in every three adults smokes and the majority are in developing

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countries (800 million) and most of them are male (700 million). The smoking epidemic is spreading from its original focus, among men in high-income countries to women in high-income countries and men in low-income and medium-income countries. Tobacco is used in a number of forms in South Asia. The prevalence of at least one form of tobacco daily in Bangladesh ranged between 33.4% and 41%^{7, 8}; smoking rate varied between 21% to 25%; the chewed tobacco rates were 17% in Pakistan, 21% in India; and the prevalence of gul use in Bangladesh was 1.5%, whereas it was 25.7% in India. The distribution of tobacco consumption is not uniform; it is disproportionately higher in lower socioeconomic groups, poor, semi-skilled manual occupation groups, unemployed and poor educational achievers. In countries of South Asia traditional values do not permit smoking by women, but there is no such taboo against using smokeless tobacco. The use of chewing tobacco, bidis (hand-rolled cigarettes) and cigarettes is widespread in Bangladesh and an estimated 70% of the tobacco produced is used for cigarettes and bidis, 20% is consumed as chewing tobacco and the remaining 10% is used in other forms of tobacco. From 1992 to 1996, annual per capita consumption of cigarettes increased by 33%

Consumption of tobacco is also directly attributed to heart and lung disease³. It is estimated that there are approximately one billion smokers in the world. These smokers consume about 6 trillion cigarettes annually⁴. Chewable tobacco is a significant risk factor for oral cancers⁵. A study by Giovina⁶ reported that tobacco consumption was frequent and more considerable in the lower socioeconomic group.

Data on tobacco usage are scant or lacking in many of the poorest nations. The Bangladeshi tobacco data, so far available, are based on small-scale studies. At country level, core public health functions such as health monitoring, health surveillance and public health research are needed. Monitoring and surveillance data in relation to tobacco use and its impacts is one of the main requirements. In relation to monitoring and surveillance, standardised estimates of smoking prevalence (that is, using the agreed standardised definitions of tobacco use) are needed to chart the progress of developing countries through the stages of the tobacco epidemic, and to determine specific

strategies for intervention. Without these data, the extent and range of the impact of tobacco cannot be gauged. This study aimed to find out the magnitude of tobacco usage in Bangladesh with particular focus on variation by gender and locality

India is a hub to about 700 billion annual 'bidis' consumers. Bidi is a type filter less hand-rolled cigarette. In India, tobacco is used in different varieties and available at a various price range. India is the one of the largest producer and second-largest consumer of tobacco products across the globe⁷. A survey undertaken by the Global Adult Tobacco Survey (GATS) showed that 52 per cent of adults in this country were exposed to passive smoking (SHS) at home. Narayana et al.⁸, in his study, reported an increased role of lack of education as a predictor of smoking in men and women. Bala et al.⁹ concluded that smoking was more prevalent in illiterates than literates with less than seven years of schooling.

The present study was conducted in rural settings of Hapur District. Hapur is a rural area. The objective of the present study was to study the consumption of tobacco in different forms and population.

MATERIALS AND METHODS

A cross-sectional study was designed in a rural setting at Hapur from Jan 2019 to April 2019. Total of 250 male subjects from hapur, were randomly included in the study. The age group of the samples were from 25 years to 65 years¹⁰. To analyse the sample size, the prevalence was taken as 35% in the rural population, and formulae used was $n = 4qp/L^2$ where L was born as 15%. The calculated sample size was 200 but considering that few subjects may not respond to study, the sample size was kept at 250.

All the demographic details and information on tobacco use was obtained by using a predesigned and pre tested questionnaire Informed consents were taken by all the subjects. Data entry was done using Microsoft Excel (Microsoft office Version 2016, USA.) and analysed by SPSS (v8 for windows, IL, USA.).

Table 1: Socio-demographic profile of the study population (250).

Socio-demographic Variables	N(%)
Age	
25-35	71 (29)
36-45	44 (17)
46-55	85 (33.5)
≥56	54 (20.5)
Type of Family	
Nuclear	29(11)
Joint	227 (89)
Marital Status	
Single	82 (33)
Married	165 (66)
Widow/widower	3 (1.5)
Education	
Illiterate	84 (33)
Educated	166 (67)

Table 2: Data of Tobacco smoking habits among males.

Status of smoking	N(%)
Current Smoker	34 (13)
Bidi	29 (85)
Cigarette	57(16)
Current Non Smoker	120 (87)
Former Smoker	58 (48)
Never Smoker	56 (51)
Mean age of smoking initiation	28.23 ± 7.38 Years

Table 3: Data regarding the use of smokeless tobacco products.

Status of tobacco use type	N(%)
Current User	146 (57)
Pan Masala	35 (27)
Gutka	78 (53)
Tobacco with lime	33 (21)
Current Non User	110 (45)
Former User	56 (48)
Never Used	59 (52)
Mean age of initiation	27.28 ± 6.13 Years

Table 4: Prevalence of tobacco consumption in different age group.

Age Group	Current smokers (%)	Current use of smokeless tobacco (%)
25-35	5.53	14.82
36-45	7.81	29.21
46-55	4.87	19.49
≥56	9.61	24.82

RESULTS

A total of 250 males volunteered for this study. Majority of subjects belonged in the age group of 46 to 55 age group (33.5%) followed by 25 to 35 years age group (29%). The mean age of the subjects was 42.67 ± 9.03 Years. Majority of participants belonged to the joint family (89%) whereas 11% belonged to a nuclear family. Data also showed that most of the subject who were married (66%), consumed more amount of tobacco than the single ones (33). The analysis also shows that educated people (67%) consumed more tobacco than illiterate ones (33%) (Table 1).

Table 2 shows that the prevalence of smoking is much lower. When it comes to the preference, then people choose bidi (85%) on a cigarette (16%). The subjects who were currently non-smokers were divided into two groups of former smokers and never smokers. The subjects who never smoked were 52%, followed by former smokers (48%). Mean age smoking initiation was as early as 28 years.

Next data was analysed for the subjects who used smokeless tobacco products (Table 3). Most of the subjects consumed gutka (53%) followed by pan masala (27%) and tobacco with lime (21%). Among the current no user group, 48% were the former user, whereas 52% never used the smokeless tobacco product. The mean age of smokeless tobacco consumption initiation was 27 Years.

Table 4 shows the prevalence of smoking (10.61%) was highest in the age group of 56 years and above followed by 36 to 45-year age group (6.87%), 46 to 55-year age group (5.32%), and 25 to 35-Year age group (4.51%). Prevalence of smokeless tobacco consumption was highest in 36 to 45-year age

group (29.21%) followed by more than 56 years age group (24.82%), 46 to 55-year age group (19.49%), and 25 to 35 Year age group (14.82%).

DISCUSSION

Tobacco usage is thought to be a long-standing problem in Bangladesh, although until now no large-scale study has been undertaken. The present study covering both urban and rural areas has been undertaken to answer some key questions about the extent of all forms of tobacco usage.

The prevalence of smoking within the males of Uvarsad was 13% (table 2) which is in accordance with the study conducted by Bhagyalaxmi et al.¹¹, in the district of Gandhinagar and Mehan et al. in Vadodara¹². According to mehan et al., the prevalence of smoking in Vadodara males were 12.2%¹². whereas the prevalence data by Bhagyalaxmi in Gandhinagar was 12.8%¹¹. The study conducted by ICMR-WHO lower incidence at the national level. This can be attributed to the difference in sample variation at the national level. In one study a rural area of Sitamarhi district with 2910 male and 2586 females participants tobacco use prevalence was 74.1 and 45.0 among men and women respectively. Among professional groups too like school personnel (daily smoking 14.5%, everyday smokeless tobacco use 41.7%),¹³ print media personnel, (98%)¹³; male medical students, (43 %) ¹⁴ and dental students (boys 65.9%, girls 38.5%) in Bihar tobacco use was reported high.

Tobacco consumption in the literate group of subjects was more than the illiterate group. Similar findings have been reported by Maralani V¹⁵. This study demonstrated the role of education in tobacco addiction. She stressed tobacco habits are acquired as early as 12 to 18 years, at the time of schooling long before the higher education is obtained.

Tobacco is used in a number of forms in South Asia.⁶ In the 1980s bidi smoking was common in Bangladesh, but since then smokers generally prefer cigarettes and in this sample 71.4% smoked cigarettes. In the study of Rahman et al all the sample smoked cigarettes. The average number of sticks (irrespective of type of smoking) smoked per day was 9.3, which is about one-third lower than the 12.6 sticks/day reported by Rahman et al. A study in Mumbai found that 4.6% were heavy

smokers (>20 sticks), which is much lower than the present study (13.6%). No comparable Bangladeshi data were available. In addition to prevalence, consumption data are also needed to fully understand population exposure to the hazards of tobacco use. In this study the frequency of smoking varied with type of tobacco. Bidi users smoked significantly more frequently (on average, 13.2 sticks per day) than cigarette smokers (on average, 8.1 sticks per day) after adjusting for sociodemographic variables. The proportion of heavy smokers (>20 sticks/day) was about 10 times higher for bidi smokers (38.2%) than for cigarette smokers (3.8%). No other comparable Bangladeshi study exists but in India Gupta found similar percentages (34.9% of bidi and 4.6% of cigarette smokers were heavy smokers). Bidi smokers are exposing themselves to greater health hazards than cigarette smokers, as there are greater risks of developing cancers of the oral cavity, oesophagus, stomach, larynx, lungs and some other chronic diseases.

Osazuwa-Peters conducted a study in which she reported that married men were less likely to consume tobacco products¹⁶, but our research shows that married men consumed more amount of tobacco products than their counterparts. In his study, he found 66% of unmarried men to be smokers. When compared with our study only 33% of single men were smokers.

In this study, the mean age of tobacco initiation was recorded as 28.23 Years in smokers and 27.28 years in tobacco chewers. In another study conducted at Jamnagar, the mean age of tobacco initiation was found to be 26.5 years in smokers and 23.6 years in tobacco chewers¹⁷. Tobacco and gutka were the significant forms of tobacco that were consumed in the present study. This finding was in accordance with Joshi et al. who also found mawa masala was the predominant form of tobacco abuse¹⁷. The reason for this can be attributed to the low cost which is preferable in the rural and low-income group.

In the current study, smoking was most prevalent in age group 56-years, and above whereas, smokeless tobacco consumption was highest in 36 to 45-year age group. The very finding of this study is very similar to the survey conducted by Dhara et al. who also reported that smoking is more prevalent in the

age group of 55 years and above¹⁸. According to the study conducted by GATS-India in 2009, smoked tobacco consumption was highest in a 45-54-year group whereas, and chewable tobacco use was highest in 65-year and above group. The reason for this increase can be due to the financial affordability at the given age. Sen et al. reported a similar finding in his study. He too concluded that tobacco consumption was increased along with the increase in age¹⁹.

CONCLUSION

India is one of the biggest consumers of tobacco products across the globe. Citizens of this region are introduced to tobacco products at an early age of 28 years. Tobacco usage increased with the progression in age and reached its highest at the age of 56 years and above. Prevalence of tobacco was demonstrated more in the educated group of people. Hence it is the right time to make the general public aware of the ill effect of smoking or any tobacco consumption methods, and a change in government policy is urgently required.

CONFLICTS OF INTEREST

The authors declare they have no potential conflict of interests regarding this article.

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