

PREVALENCE OF TOBACCO CONSUMPTION IN A RURAL COMMUNITY OF BANGLADESH

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Abstract

This cross sectional study was conducted in a rural community of Sreepur Thana during the month of November 2007. The objective of this study was to estimate the prevalence of tobacco consumption in the study area and observe some other associated variables. Respondents of both sexes aged 15 years and above were considered. The estimated sample size was 550 out of which 426 were found to be consumers of tobacco. Majority of the study population were males (68.4%). Illiteracy was found in 34.7% of the respondents. Most of them had some type of small business (38.2%) and a monthly expenditure between Tk.3001-6000 in 44% of the households. Prevalence of tobacco user was estimated to be 77.5%. Of them, 59% were smokers and 41% chewers. The most common form of smoking and chewing was found to be cigarette (69%) and jarda (94.6%) respectively. A large percentage of the respondents (94%) knew about the adverse health effects caused by consumption of tobacco.

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Key Words: Tobacco consumption, smoking, rural community.

Introduction

Consumption of tobacco is a major risk factor for mortality. Data show that one in two smokers will die from a tobacco-related disease.¹ Tobacco kills over four million people every year and by 2020 this is projected to rise to 8.4 million. Over 70% of these deaths will occur in developing countries². Tobacco consumption is amongst the largest preventable causes of death today. Bringing down this consumption rate to save lives has been declared a public health priority by the WHO.

Tobacco is derived from the plant *Nicotiana tabacum*. The leaves of the plant is prepared for smoking, chewing, etc., by being dried, cured, and manufactured in various ways. Smoking is not only associated with lung cancer but is also linked to cardiovascular diseases, tuberculosis, and chronic respiratory diseases.³ Although about half of Bangladeshi men and one-fifth of women use tobacco in either smoking or in a smokeless form, awareness about its harmful effects is low.⁴

Tobacco consumption is often found to be disproportionately higher among lower socioeconomic groups.⁵ The gaps in tobacco consumption need to be examined to see which people are most likely to consume tobacco and which areas are more likely to have higher tobacco consumption. Such analyses are critical for designing policies and interventions aimed at achieving overall reductions in tobacco consumption.

Materials and Methods

This cross sectional study was done in four purposively selected villages in Sreepur union of Gazipur district from 20th November to 2nd December 2007 as a part of the residential field site training (RFST) program of medical students of IMC.

The study population consisted of both men and women aged 15 years and above and the estimated sample size was 550. Regular smokers and chewers (those

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who smoked or chewed at least once daily) were used as prevalence indicators. Information was collected from the respondents by face to face interview using a pre tested questionnaire. It included variables related to their socio demographic condition, smoking and chewing habits, knowledge and awareness about the adverse health hazards etc.

Results

Table 1 shows that half of the respondents were aged between 31-60 years with the majority being males (68.4%). Nearly 35% respondents were found to be illiterate and the percentage of respondents having primary and secondary level education was almost same (22%). Regarding occupation, 38.2% were involved in some type of small business while 27.4% were housewives. Tin roofed houses were the most

Table-1: Socio demographic information of the study population (n=550)

Variables	(n)	%
Age		
15-30 yrs	226	41.1
31-60 yrs	275	50.0
> 60 yrs	49	8.9
Sex		
Male	376	68.4
Female	174	31.6
Education		
Illiterate	191	34.7
Can Read & Write	73	13.3
Primary	123	22.4
Secondary	124	22.5
Above	39	7.1
Occupation		
Farmer	81	14.7
Service	57	10.4
Housewife	151	27.4
Day labourer	51	9.3
Small Business	210	38.2
Housing		
Tin roof	339	61.6
Kacha	157	28.5
Pucca	54	9.9
Sanitary Latrines		
Present	478	86.9
Absent	72	13.1
Monthly expenditure		
Tk 0-3,000	187	34.0
Tk 3,001-6,000	241	43.8
Tk 6,001-10,000	122	22.2

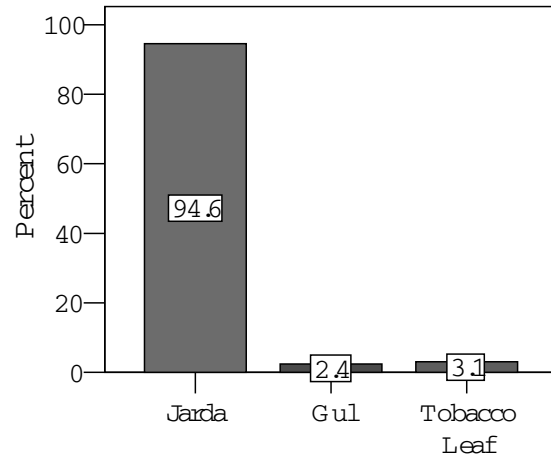


Fig-1. Forms of tobacco chewed by the respondents

common type found in that area (61.6%) and sanitary latrine was present in nearly 87% of them. Monthly expenditure was between Tk. 3001-6000 in 44% of the respondents.

Prevalence of tobacco user in the study area was 77.5%. Of them, 59.1% being smokers and 41% chewers. Among the smokers, majority of them were males (98.4%). Chewing habit was also found to be prevalent among 64.1% females.

Among the smokers, the most popular form of smoking was cigarette (69.1%). In those who were found to be chewing tobacco, it was found that chewing 'jarda' was almost universal (94.6%) while a minute percentage chewed 'gul' and tobacco leaf (Fig-1).

About 42% of the smokers puffed 6-20 sticks daily while the frequency of chewing was 1-5 times a day in 59% of them as shown in Table 2. A large percentage of the respondents (94%) knew about the adverse health effects of tobacco consumption while the rest 6% had no idea about the ill effects.

Table-2: Frequency of tobacco consumption (n=426)

Variables	n	%
Smoking (sticks per day)		
6	80	31.3
6-20	107	41.8
>20	69	27.0
Chewing (times per day)		
1-5	173	58.6
6-10	66	22.4
>10	56	19.0

Discussion

This cross sectional study was done in a rural community of Sreepur thana with an attempt to determine the prevalence and pattern of tobacco consumption, and to know whether the respondents had any knowledge regarding the bad health effects of this habit. A total of 550 respondents were interviewed, out of whom 426 were found to be consumers of tobacco.

Most of the people residing in the study areas were found to be illiterate (35%) with only 22% having primary or secondary level education. Forty four percent of the households had a monthly expenditure of Tk.3001-6000. Majority of the houses were tin roofed (61.6%) and sanitary latrine was present in 87% of them.

Prevalence of tobacco consumption found among the 15 years and above age group was 77.5%. Smokers constituted 59.1% and chewers 41%. The Bangladesh Demographic and Health Survey (BDHS) 2004 found the overall prevalence of tobacco consumption to be 59%.⁶ In another study conducted in 1995 to estimate the global prevalence, it was seen that smoking habit was highest in persons aged 30 to 49 years. Low- and middle-income countries accounted for 82% of the world's smokers. In East Asia and the Pacific, 32% of the population aged 15 years and older were tobacco consumers.¹

This study found that 69.1% of the smokers preferred cigarettes and the rest bidi. Jarda was the most popular form of chewing found among the chewers (94.6%). BDHS 2004 concluded bidi smoking to be 29.6%, cigarette smoking 27.8% and chewing betel quid with tobacco/jarda 17.5% respectively. A study conducted in India found 50 to 80% of the smokers smoke bidis, and the remainder smoke cigarettes.⁷

Forty two percent smokers consumed 6-20 sticks daily as estimated in this study while frequency of chewing was 1-5 times a day in about 59% of chewers. Surprisingly it was seen that majority of the respondents (94%) knew about the adverse health effects of tobacco consumption although they made no efforts to quit the habit. This figure was found to be 80% in another study conducted among the population of some developing counties.⁸

Conclusion and Recommendation

This cross sectional study was a limited attempt in a rural community of Bangladesh to estimate the

prevalence of tobacco consumption and some other associated variables. The calculated prevalence was 77.5% which is quite alarming compared to some previous data. It indicates that both communicable and non communicable disease burden will rise in the future. Although majority of the consumers knew about the adverse health effects of smoking and chewing tobacco, they were reluctant to give up the habit. This study suggests that planning anti-smoking campaigns and health education programs for the general mass needs to be geared up. Further in-depth studies to find out the factors related to tobacco consumption and inability to quit, along with the health hazards present among the consumers will be of great value.

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Editor's Note: In continuation of our interest in publishing articles resulting from our Residential Field Site Training (RFST) Programme for the 4th year MBBS students, we are publishing this article. Articles resulting from RFST Programme were published in our previous issues.