

Original Research Article

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Smoking behaviour and its influencing factors among adult population in selected communities of rural Bangladesh

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ABSTRACT

Background: Tobacco is a leading cause of preventable mortality and morbidity in the majority of high-income countries, and it is becoming increasingly prevalent in low-income countries. This study aims to assess the smoking behavior among adult population in a selected community of Mymensingh district.

Methods: This descriptive type of cross sectional study was conducted to assess the smoking behavior among the adult population in a selected community of Mymensingh district. The study period was four months starting from June 2018 to September 2018. One hundred and eighty two (182) people were selected considering the inclusion and exclusion criteria. The study taken informed written consent from all the participants. All the data were entered and analyzed by using statistical packages for social science (SPSS) software version 16.0 (Chicago).

Results: This study revealed that the highest 53.3% of the respondents were smoking daily 11-15 cigarette/day. The highest 45.6% of the respondents were smoking for 6-10 years. 52.2% of the respondents were thinking depression influence on smoking. 66.5% of the respondents were thinking personal life problem influence on smoking. 42% start and continue smoking due to friends followed by 27% were due to stress and anxiety, 12% were for relaxation, 10% were personal life problem and 4% were start and continue smoke for pleasure and fun.

Conclusions: It was observed that all of the respondents have given positive comment about the influence of television (TV)/media on cessation of tobacco use.

Keywords: Tobacco, Smoking behavior, TV/media on cessation of tobacco use

INTRODUCTION

Tobacco is a leading cause of preventable mortality and morbidity in the majority of high-income countries, and it is becoming increasingly prevalent in low-income countries. Use of tobacco has been generally acknowledged as one of the biggest public health threats ever faced, with more than one billion smokers worldwide. According to the World Health Organization (WHO),

smoking kills nearly 6 million people annually, an average of one person every six seconds, and accounts for 6 and 12% of all female and male deaths respectively.¹ In addition, in 2014, WHO after the revision of relevant data regarding smoking, reports that tobacco use is the direct cause of more than five million deaths, while more than 600,000 deaths are attributable to second-hand smoking.² Almost 1 billion men and about 250 million women in the world are daily smokers; in particular, 35% and 50% of

men and 22% and 9% of women in developed and developing countries, respectively, smoke.¹ While cigarette consumption has been declining in high income countries, it is rising in low-income and middle-income countries. A national survey in the Lao People's Democratic Republic (PDR) in 2003 reported that males were over four times more likely females (67.7% versus 16%) to smoke. Greece, Flemish speaking Belgium and Portugal have the lowest rates of experimentation at the age of 11 year and at age 13 year. On the other hand, Greenland and the Slovak Republic have the two highest rates at age 11 (39% and 38%), and they are both in the top three at age 13 (73% and 58%) and 15 (86% and 75%).³ If current trends continue and drastic measures are not taken to control tobacco use, annual tobacco deaths are expected to rise to 10 million worldwide by 2030. The biggest impact of smoking is through non communicable diseases, although it may also increase the risk of communicable diseases such as tuberculosis and lower tract respiratory infections.⁴

Objectives

General objective was to assess the smoking behavior among adult population in a selected community of Mymensingh district.

Specific objectives were to determine the socio-demographic characteristics of the respondents; to identify the mental health related factors associated with smoking behavior; to assess the influencing factors associated with smoking behavior; and to observe the information, education and communication related factors of the respondents.

METHODS

This descriptive type of cross sectional study was conducted to assess the smoking behavior among the adult population in a selected community of Mymensingh district. The study period was four months starting from June 2018 to September 2018. One hundred and eighty two (182) people were selected considering the inclusion and exclusion criteria. A pre-tested, modified interviewer administrated and semi-structured questionnaire was used to collect the information. Purposive sampling technique were used for this study. All the data were entered and analyzed by using statistical packages for social science (SPSS) software version 16.0 (Chicago). Proportion was presented by frequency and analyzed data was presented according to the variables of the study showing percentage relationship between variables by appropriate statistical method.

Inclusion criteria

Adult people of kofikhet and tarakanda community of Mymensingh sadar willing to participate in the study were included.

Exclusion criteria

Participants who were unwilling to participate in the study and women physically or mentally handicapped were excluded.

RESULTS

Socio-demographic characteristics of the study participants

Table 1 shows that 44% and 29.1% of the respondents were respectively the in the age 30-39 years and 40-49 years, followed by 19.8% was in 20-29 years and 7.1% were in the 50-59 years with the mean age 36.18 ± 8.129 .

Table 1: Distribution of the respondents by age (n=182).

Age	Frequency	Percent
20-29	36	19.8
30-39	80	44.0
40-49	53	29.1
50-59	13	7.1
Total	182	100.0
Mean\pmSD=36.18\pm8.129		

Figure 1 shows that 54.4% were female and 45.6% were male in gender.

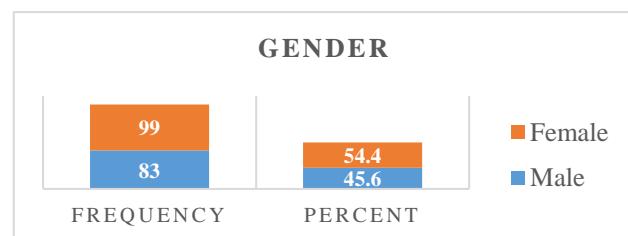


Figure 1: Distribution of the respondents by gender (n=182).

Table 2 shows that 31.3% of the respondents were educated up to primary, 30.8% had higher secondary certificate (HSC) followed by 29.7% had secondary school certificate (SSC), 4.9% were illiterate and 3.3% were graduate and above.

Table 2: Distribution of the respondents by education (n=182).

Educational qualification	Frequency	Percent
Illiterate	9	4.9
Primary	57	31.3
S.S.C	54	29.7
H.S.C	56	30.8
Graduate and above	6	3.3
Total	182	100.0

Figure 3 reveals that 34.6% of the respondents were in service, 32.4% were in business, 22% of the respondents were day laborer and 11% were housewife.

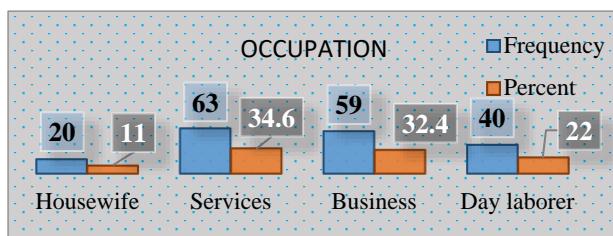


Figure 3: Distribution of the respondents by occupation (n=182).

Table 3 reveals that 53.3% of the respondents were smoke daily 11-15 cigarettes/day followed by 34.6% were 1-10 cigarettes/day, 7.7% were more than 20/day and 4.4% were 16-20 cigarettes/day. Study also explore that 45.6% of the respondents were smoke for 6-10 years followed by 35.7% were below 5 years, 17.6% were 11-20 years and 1.1% were above 20 years.

Table 3: Distribution of the respondents by number of cigarettes/day (n=182).

No. of smoking cigarette/day	Frequency	Percent
1-10	63	34.6
11-15	97	53.3
16-20	8	4.4
More than 20	14	7.7
Total	182	100.0
Duration of smoking (years)		
<5	65	35.7
6-10	83	45.6
11-20	32	17.6
>20	2	1.1
Total	182	100.0

Mental health status of the study participants

Table 4 explore that 52.2% of the respondents were think depression influence on smoking and 47.8% were think depression did not influence on smoking. Table reveals that 66.5% of the respondents were think personal life problem influence on smoking and 33.5% were think personal life problem did not influence on smoking. Table also shows that 74.7% of the respondents were think distress and anxiety influence on smoking and 25.3% were think distress and anxiety did not influence on smoking.

Factors influencing the habit of smoking

Figure 4 shows that 42% were start and continue smoking due to friends followed by 27% were due to stress and anxiety, 12% were for relaxation, 10% were personal life

problem and 4% were start and continue smoke for pleasure and fun.

Table 4: Distribution of the respondents by depression (n=182).

Do you think depression can influence on smoking	Frequency	Percent
Yes	95	52.2
No	87	47.8
Total	182	100.0
Smoking due to personal life problem		
Yes	121	66.5
No	61	33.5
Total	182	100.0
Distress and anxiety		
Yes	136	74.7
No	46	25.3
Total	182	100.0

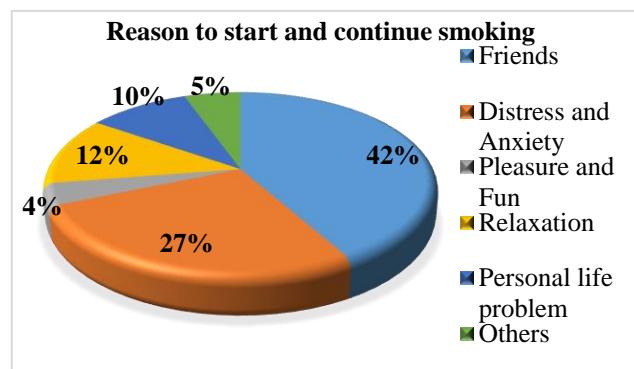


Figure 4: Distribution of the respondents by reason to start and continue smoking (n=182).

Table 5 explore that 63.2% of the respondents were did not think media & celebrities promote tobacco and 36.8% were think media and celebrities promote tobacco. Table also shows that 100% of the respondents were give positive comment on TV/media can influence on cessation of tobacco successfully.

Table 5: Distribution of the respondents by media and celebrities (n=182).

Media and celebrities promote tobacco	Frequency	Percent
Yes	67	36.8
No	115	63.2
Total	182	100.0
TV/media can influence on tobacco cessation		
Yes	182	100.0
No	0	0.0

Table 6 reveals that 100% of the respondents were think tobacco education is necessary in the community.

Table 6: Distribution of the respondents by introducing of tobacco education (n=182).

Introducing of tobacco education is necessary in the community	Frequency	Percent
Yes	182	100.0
No	0	0.0

DISCUSSION

Adolescents and young adults of colleges are often targeted by the tobacco industry for marketing. Moreover, college age is a transition period and students are vulnerable to tobacco addiction. Like high schools even colleges can be targeted for tobacco control interventions. A study from India reported that the prevalence of tobacco use is high and popular perceptions exist about tobacco products among students.⁵ Studies about tobacco use and its correlates among college students in Nepal are lacking. Studies about awareness/knowledge of the risks of smoking are also lacking. Moreover, the previous studies including GYTS, Nepal have not explored the factors determining tobacco use behavior among college students. A World Bank study from Indonesia identified various predisposing, enabling and reinforcing factors which determined tobacco use among the Indonesian youth in high schools. These factors may be specific to culture, traditions and other characteristics of a country.⁶

The study showed that 44% and 29.1% of the respondents were respectively in the age 30-39 years and 40-49 years, followed by 19.8% was in 20-29 years and 7.1% were in the 50-59 years with the mean age 36.18 ± 8.129 . Among them 54.4% of the respondent's gender head were female and 45.6% gender head were male. This study finding is very close to the findings of a study carried out in Karachi, Pakistan in 2012.⁷

So far, the educational state of the respondents was concerned 31.3% of the respondents were primary, 30.8% had HSC followed by 29.7% had SSC, 4.9% were illiterate and 3.3% were graduate and above. Again, in the case of occupational status, 34.6% of the respondents were in service, 32.4% were in business, 22% of the respondents were day laborer and 11% were housewife. These findings are almost similar to the findings of a study carried out in Bangladesh in 2009.⁸

Furthermore, in the case of starting reason of smoking study shows that 42% were start and continue smoking due to friends followed by 27% were due to stress and anxiety, 12% were for relaxation, 10% were personal life problem and 4% were start and continue smoke for pleasure and fun. 50.5% of the respondents were did not continue routine work in the absence of smoking and almost similar 49.5% were continuing routine work in the absence of smoking. Almost all of the (96.2%) respondents were anyone else smoke in the family and only 3.8% were did not anyone else smoke in family. 63.2% respondents were

did not use any chewing tobacco product whether as 36.8% were use chewing tobacco product. 73.1% of the respondents were said tobacco products are available and only 26.9% were said not available. These findings almost similar to a study carried out in the year of 2007 in Jardan probably due to attitudes and lack of knowledge.⁹

The study findings also revealed that 45.6% of the respondents were smoke for 6-10 years followed by 35.7% were below 5 years, 17.6% were 11-20 years and 1.1% were above 20 years. 74.7% of the respondents were think distress and anxiety influence on smoking and 25.3% were think distress and anxiety did not influence on smoking. 66.5% of the respondents were think personal life problem influence on smoking and 33.5% were think personal life problem did not influence on smoking. These findings are similar to a study carried out in Nepal in 2011.¹⁰

In Cyprus, smoking prevalence among the general population is 26.5%.¹¹ There is evidence that when physicians and nurses offer specific assistance and appropriate support, a large percentage of their patients who smoke will try to quit, even those with low motivation to quit.¹¹ Furthermore, the smoking status of healthcare professionals appears to be a critically important determinant of their ability to assist their patients to control tobacco use. Studies suggest that as smoking rates among physicians decline, a similar reduction will be observed in the general population as well.¹²

Limitations

As the sample collected purposively so it may differ from the actual parameter of the population. There is a question about the reliability of the answers given by the participants. Respondents might conceal the actual fact which may also affect the findings. Time was too short to conduct such a study. There is also fund crisis to conduct such a study.

CONCLUSION

From this study it was observed that, 100% of the respondents have given positive comment about the influence of TV/media on cessation of tobacco use. It was revealed from our study that 100% of the respondents think tobacco education is necessary for the community. Smoking cigarettes are common habits among the general male population in Bangladesh.

Tobacco related illnesses accounted for 16% of the total deaths among the general population of Bangladesh who are aged 30 years and above. Smoking is also positively linked with the illicit drug use in Bangladesh, which is another public health concern. The cost of tobacco consumption at the national level is found to be associated with the increased health-care costs, loss of productivity due to illnesses and early deaths and environmental damages.

Recommendations

Appropriate research could provide the foundation for developing effective policies and intervention strategies to address the smoking status in Bangladesh. The findings of this research work will help policy makers, administrations, physicians and community health worker to ensure proper influence on stop smoking all over the country from grass root level.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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