

Smoking Habit Among the Students of Universities in Dhaka

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ABSTRACT

The present study is based on the prevalence of smoking behaviors among university students in Dhaka city (n = 151), which was conducted through a cross-sectional descriptive design using self-administered questionnaires to explore smoking habits, attitudes, as well as factors causing smoking. 37.1% of the respondents were current smokers, with the highest cases being found among males (68.9%) and young people in higher years of study (p-value < 0.05). Friends' influence (29.8%) and stress relief (27.8%) were reportedly the most widespread motives for starting to smoke. Even though the majority of participants have awareness about the health risks associated with smoking, it shows that most are interested in quitting (75.2%), and a significant percentage tried quitting (30.5%). In summary, this investigation reveals that societal norms, peer pressure, and stress contribute significantly towards the initiation of smoking habits by collegegoers. Thus, various strategies, such as public health education campaigns, raising taxes on tobacco products, and banning public places where people can smoke, should be implemented to discourage youth from engaging in smoking activities.

Keywords: Smoking Habits; Students; Private Universities; Male and Female

Introduction

Tobacco smoking is the biggest modifiable risk for the development of life-threatening illnesses in humans. Cancer, high blood pressure, heart disease, chronic obstructive lung diseases, nicotine addiction, and even anxiety disorders and depression are all possible outcomes of smoking. [WHO fact sheet [1] Tobacco fact sheet 2018]. In 2015, the Global Health Observatory discovered that more than 1.1 billion individuals smoked tobacco. According to a 2013 survey, of Bangladesh's 21.9 million smokers, 21.2% were female and 7.4% were male [WHO (ii) Global Health Observatory Data, [2]. One person dies every six seconds and develops Crohn's disease and bladder cancer from a tobacco-related illness [Action on Smoking and Health, [3]. Tobacco smoke has carcinogenic effects on bodily tissues exposed to the smoke (Talhout, et al. [4]). In order to reduce the number of young people who smoke cigarettes, schools and colleges must implement more effective policies and programs (Ahsan, et al. [5]). Danish medical students were cautious to disclose the adverse consequences of smoking with patients in the absence of a solid explanation. (Hilberg,

et al. [6]). Young men in low-income nations such as India (16.8%), Nepal (13%), Sri Lanka (12.4%), the Maldives (8.5%), Pakistan (12.4%), and Myanmar (22.5%) have a high rate of smoking (Kabir, et al. [7]). In the year 2000, smoking was responsible for around 4.83 million premature deaths, of which over half occurred in developing nations (Ezzati, et al. [8]).

Nicotine Replacement Therapy (NRT)

Nicotine replacement therapy (NRT) is a medically-approved way to take nicotine by means other than tobacco. It raises the chance of quitting smoking by 50% to 70% (Stead, et al. [9]). The use of more than one type of NRT at a time may increase effectiveness (McDonough [10]). Nicotine gum falls under a class of medications called smoking cessation aids; nicotine skin patches aid people to quit smoking cigarettes. [US National Library of Medicine, [11,12].

An e-cigarette: An e-cigarette is an electronic handheld device that generates the feeling of tobacco smoking. The e-cigarette liquid (e-liquid) is usually composed of nicotine, propylene glycol, glycerin,

and flavorings. Tobacco smoke consists of nicotine, which is addictive. Nicotine withdrawal makes quitting smoking often challenging and prolonged (American Cancer Society, [13]).

Smoking Prevalence and Awareness Among Undergraduate and Health Care Students

College students frequently engage in social smoking, a particular pattern of tobacco use that may be a stage in the progression toward smoking (Moran, et al. [14]).

Influence of Parental Smoking on Smoking Habit of Bangladeshi Adult Population in Rural and Urban Areas

In 2007, data from cross-sectional research including 35,446 people in urban and rural Bangladesh (16,196 men and 19,250 females) were evaluated. Mean (SD) age at initiation of smoking was 17.8 (5.0) years (Flora, et al. [15]). To control the smoking problem, there needs to be a family, community, and institutional campaign (Elamin, et al. [16]). Each cigarette is harmful, and anti-smoking campaigns aimed at young adults should make that point clearer (Murphy-Hoefer, et al. [17]).

Prevalence and Attitudes

This necessitates improved education of our future physicians on smoking cessation to reduce the burden of smoking on the Lebanese and global communities (Chidiac, et al. [18]). Nonsmokers were almost three times as likely as smokers to indicate that smoking one to five cigarettes per day was hazardous (Aryal, et al. [19]). Although our study indicated a low rate of smoking, universities should create effective tobacco prevention programs that focus on issues including age, male sex, and peer pressure. Future research is required to assess how effective these interventions were (Ngahane, et al. [20]).

General Objective

- i) To investigate tobacco smoking practices among students in universities in Dhaka city;
- ii) To estimate the prevalence of smoking habits among students;
- iii) To describe the attitudes, habits, and practices related to smoking habits; and
- iv) To investigate the association of socio-demographic factors with smoking habits among students.

Methods and Materials

Study Design

This is a descriptive cross-sectional study. The study was conducted in various universities located across Dhaka city. The study population consisted of students attending universities aged 18 and above.

Sampling Technique

A simple random sampling technique (probability sampling) will be applied for determining sample size and data collection. Sample size was 151. Data was collected by a self-administered questionnaire, which was pre-tested, revised, and adjusted accordingly. The questionnaire was filled out by students and was distributed to 151 students randomly, consisting of 104 males and 47 females. Data was processed and analyzed using Microsoft Excel and SPSS version 21.00.

Ethical Considerations

The approval letter for conducting research was taken from American International University-Bangladesh (AIUB). Consent of the participant was sought before participation in the study. Confidentiality and privacy of the information provided by the participants were maintained.

Results and Findings

This chapter discusses the results and findings of the study. The survey was conducted upon 151 students in private universities in the Kuril-Bashundhara area (AIUB, NSU, IUB) who willingly participated and completed a questionnaire and gave valuable information that has been instrumental in understanding ground realities necessary for the study. The questionnaire and findings are based on the objectives and variables that are reflected in the following tables, pie charts, bar diagrams, and statistical inferences. All respondents gave responses to all questions, and therefore there is no missing data.

It reveals that, 21.9 percent of the participants are 18-20 year olds, and 27.2 percent of the participants were 21-22 year olds. 35.1 percent were 22-24 year olds. 15.9 percent were 25 years and older. While 68.9 percent of the participants were males and 31.1 percent were females. Table 1 shows 12.6 percent study life sciences, 57 percent study engineering, 23.8 percent study business, 7 percent study economics, and 6 percent study other subjects (Table 2). It shows that 2 percent were below SSC, 2.6 percent passed SSC, and 12.6 percent passed HSC. 5 percent passed diplomas, 55 percent passed bachelors, 57 percent passed masters, 7 percent were doctorate degree holders, and 0.7 percent was professional (Figure 1). Figure 2 shows that 44.4 percent were involved in business, 31.1 percent were in jobs, 15.9 percent were retired, 4 percent were employed in other capacities, 0.7 percent was in contractual employment, and 4 percent answered as not applicable and shows 9.9 percent were below SSC. 6.6 percent passed SSC, 26.5 percent passed HSC. 2 percent passed diplomas, 31.1 percent passed bachelors, 22.5 percent passed masters, and 1.3 percent passed doctorate (Figure 3). It shows that 3.3 percent were in business, 13.9 percent were in jobholders, 1.3 percent were retired, 2 percent were listed as employed in other capacities, 78.1 percent were employed as housewives, 0.7 percent was in contractual employment, and 0.7 percent answered as not applicable (Figure 4).

Table 1: Distribution of participants by the major/subject they are studying.

	Frequency	Percent
Life Sciences	19	12.6
Engineering	86	57
Business	36	23.8
Economics	1	0.7
Others	9	6
Total	151	100.0

Table 2: Distribution of age group of the participants.

	Frequency	Percent
18-20 years	33	21.9
21-22 years	41	27.2
22-24 years	53	35.1
25 years and older	24	15.9
Total	151	100.0

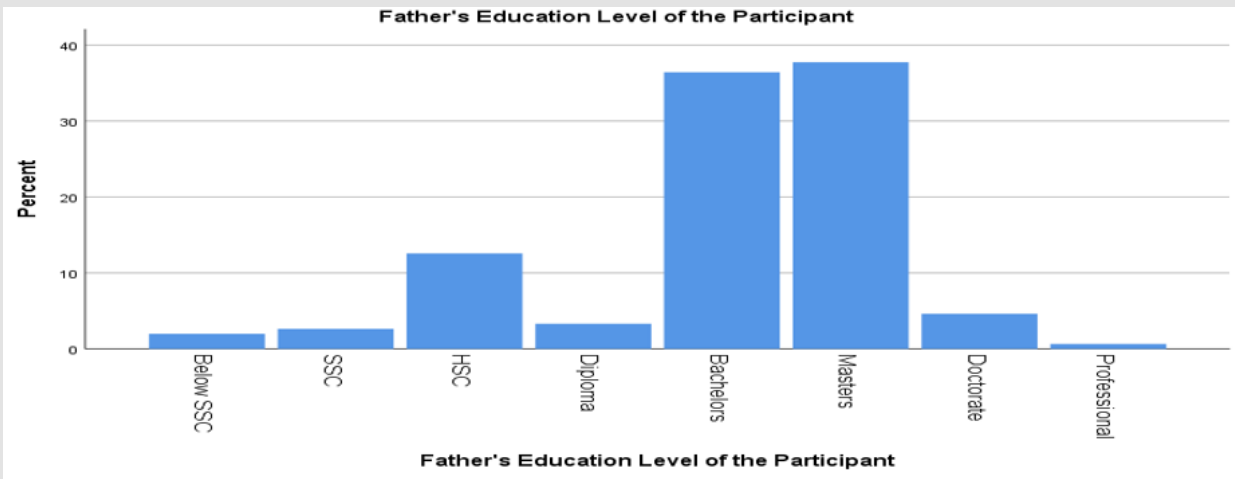


Figure 1: Distribution of Father's education level of the participant.

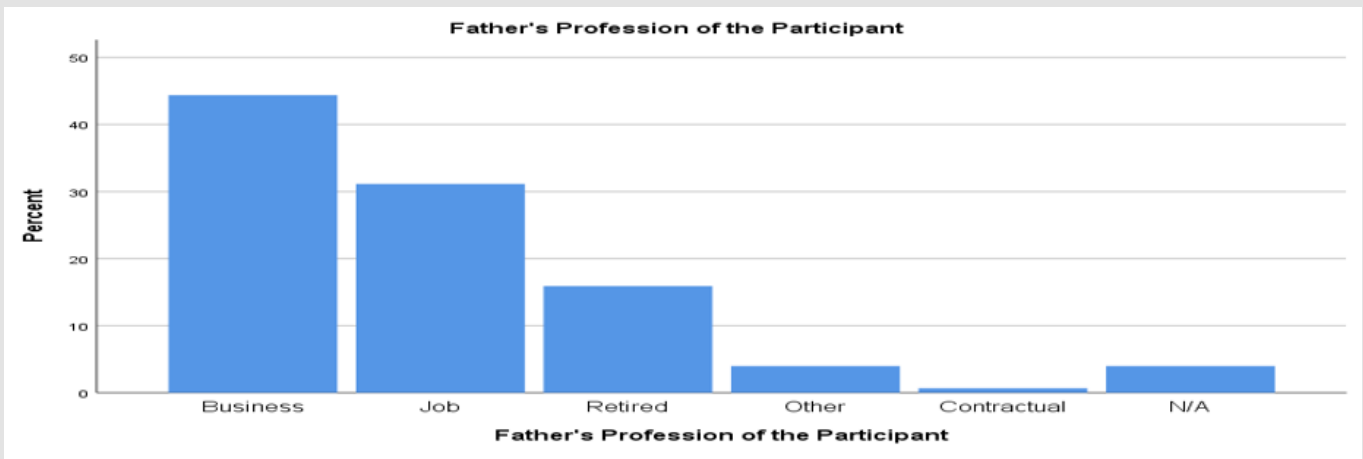


Figure 2: Distribution of Father's profession of the participant.

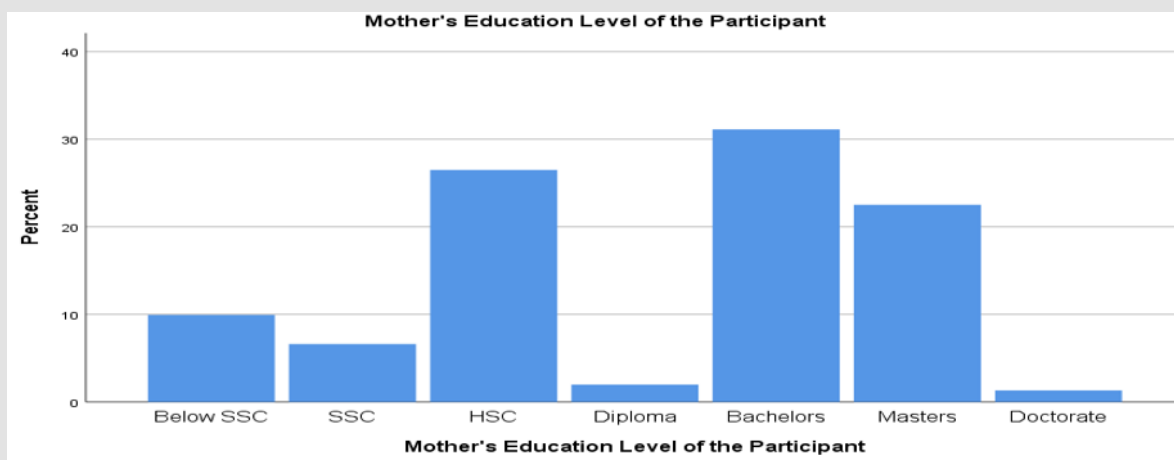


Figure 3: Distribution of the Mother's education level of the participant.

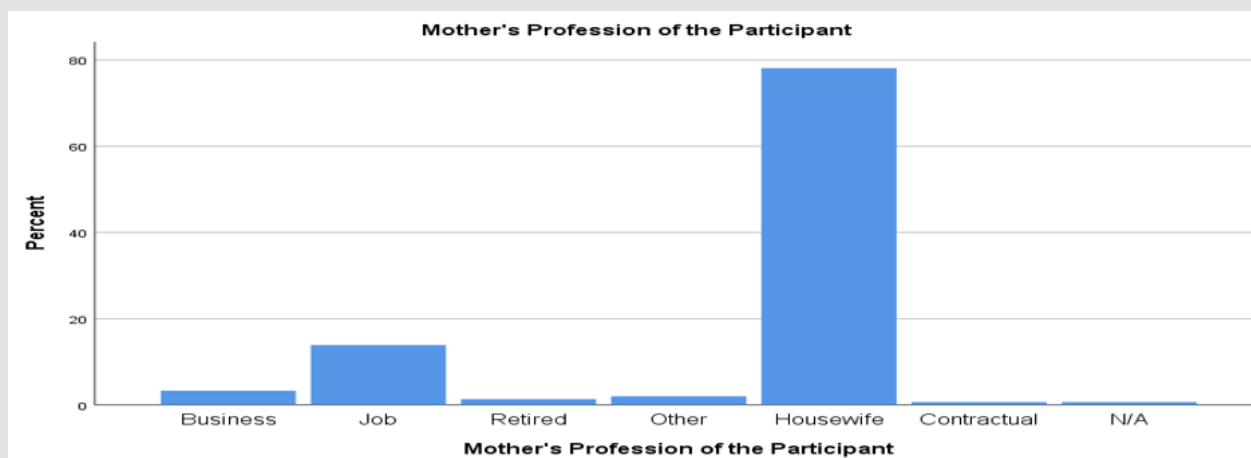


Figure 4: Distribution of the Mother's profession of the participant.

In the present study, 0.7 percent had an income of less than \$20,000. 9.3 percent had an income between \$20,000 and \$40,000. 11.9 percent had an income between \$40,000 and \$60,000. 23.8 percent had an income between \$60,000 and \$80,000. 24.5 percent had an income between \$80,000 and \$100,000. 29.8 percent had an income greater than \$100,000. About 37.1 percent of the participants smoked cigarettes, while 62.9 percent did not smoke cigarettes. Figure 5 shows that 53 males were smokers, accounting for 94.6

percent of respondents who smoked, while 3 females were smokers and accounted for 5.4 percent of the respondents who were smokers. The study shows that 14.3 percent of smokers are life science students, 50 percent of smokers are engineering students, and 26.8 percent of smokers are business students. 1.8 percent of smokers are economics students, while 7.1 percent study other majors or subjects (Figure 6).

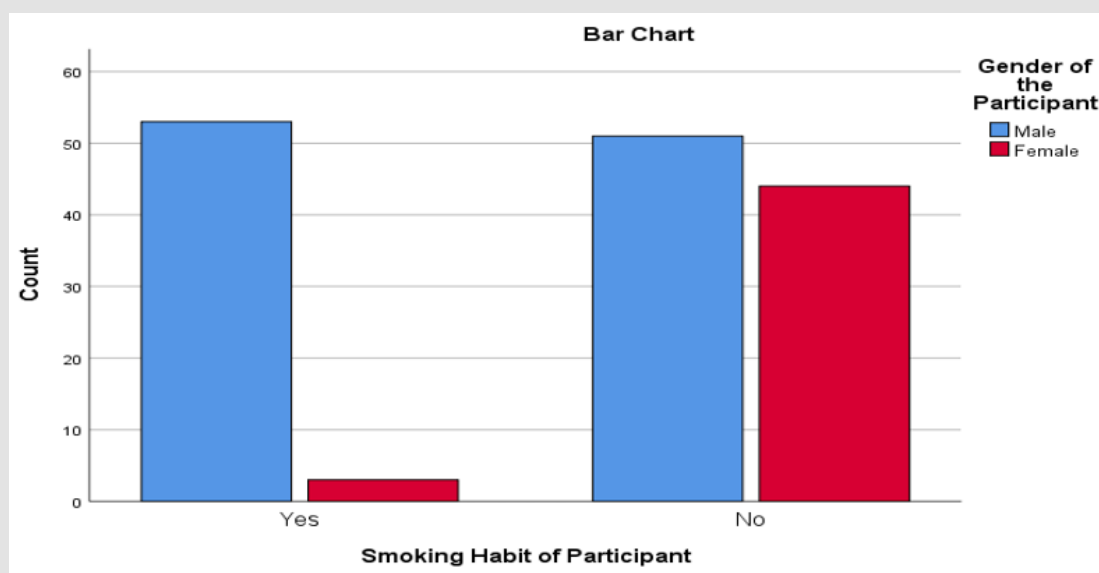


Figure 5: Distribution of smoking habit of the participants by gender.

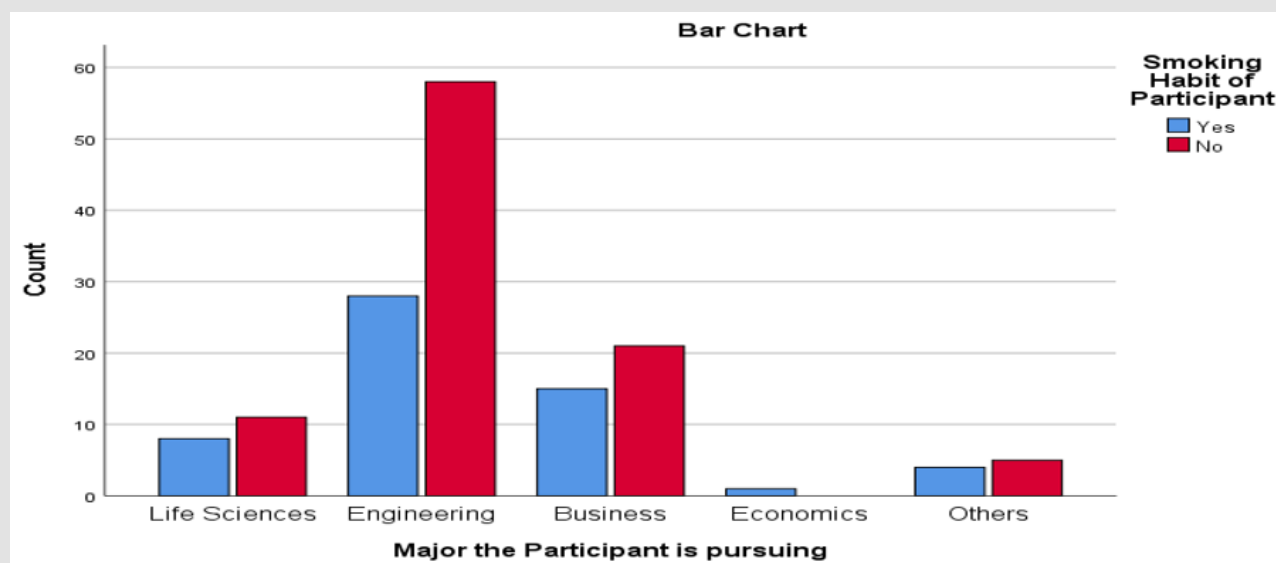


Figure 6: Distribution of smoking habit of respondents by major/subject they are studying.

Figure 7 shows that 23.8 percent responded only their father smoked, 0.7 percent responded only mother smoked, 49.7 percent responded neither father nor mother smoked, and 25.8 percent responded as not applicable. Table shows an association exists between the smoking habit of the parents of the participant and the smoking habit of the participant (P-value 0.007). The study showed that smoking habit is strongly associated with age group, as more smokers are

found to be 23 years and older (P value 0.004). It is seen to be more prevalent in participants who are in their advanced years of study. There is a significant association between the total income of the participant's family and the smoking habit of the participant. More smokers were found to be in households with higher income (P-value 0.024).

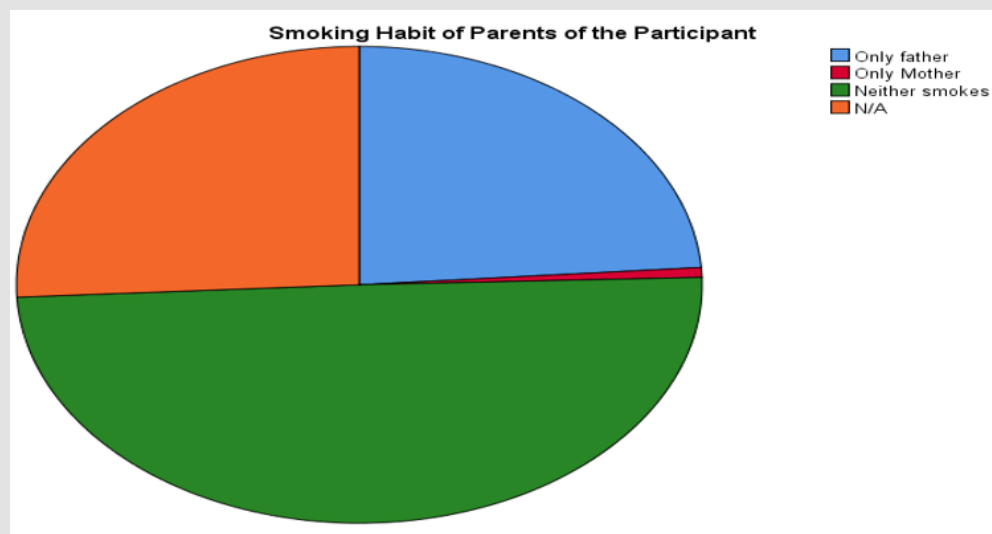


Figure 7: Distribution of smoking habits of parents of the participant.

Figure 8 shows that 21.9 percent have been smoking for 0-5 years. 14.6 percent have been smoking for 5-10 years. 1.3 percent have been smoking for 10-15 years, and the rest 62.3 percent were nonsmokers. While, shows that 3.3 percent started smoking from peer pressure. 1.3 percent started smoking from a parental habit. 29.8 percent started smoking from friends' influence. 1.3 percent started smoking from media, TV, or celebrity influence. 4 percent started from other sources. 60.3 percent didn't smoke (Figure 9). Figure 10 shows that 1.3 percent smoked due to peer pressure. 27.8 percent smoked for stress relief. 7.9 percent smoked for other reasons. 62.9 percent did not smoke. The study shows that 31.1 percent smoked 0-10 sticks.

5.3 percent smoked 10-20 sticks. 0.7 percent smoked 20-30 sticks, while 62.9 percent didn't smoke (Figure 11). The study shows that 12.6 percent spend between 1000 and 2000. 13.2 percent spend between 2000 and 3000. 11.3 percent spend over \$3000. 62.9 percent did not smoke. The study shows 96.7 percent of the participants were aware of the health hazards caused by smoking, while 5 percent didn't (Figure 12). It was observed that 30.5 percent responded that they tried to quit but still smoked. 6 percent did not try to quit smoking. 4 percent attempted to quit and successfully quit smoking. 59.6 percent responded as not applicable.

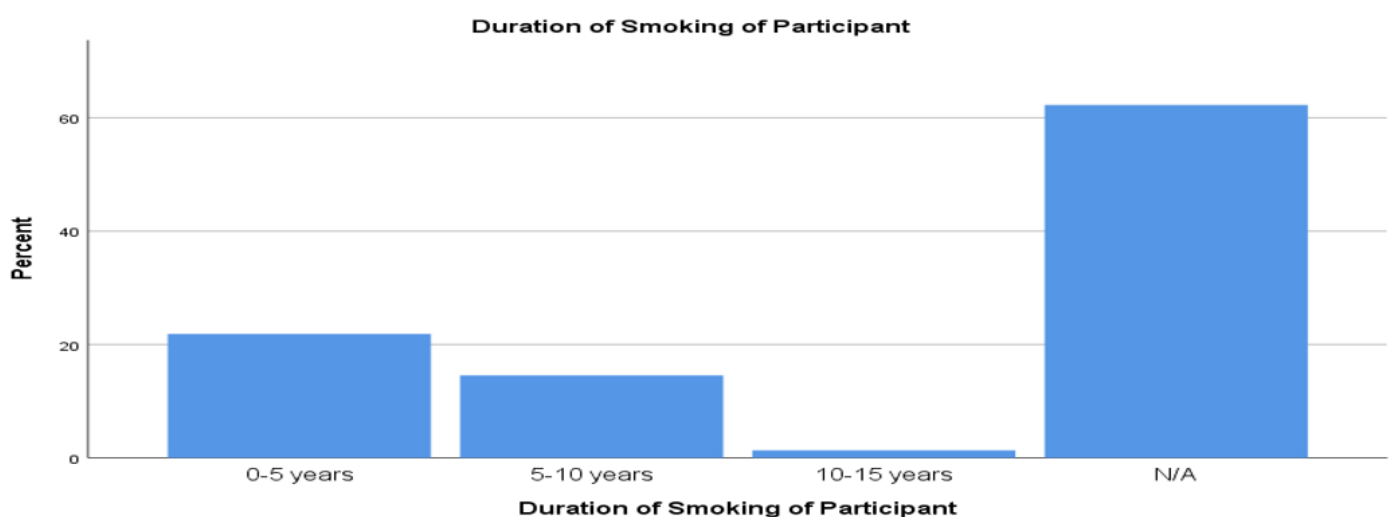


Figure 8: Distribution of the length of time of participant's smoking habit.

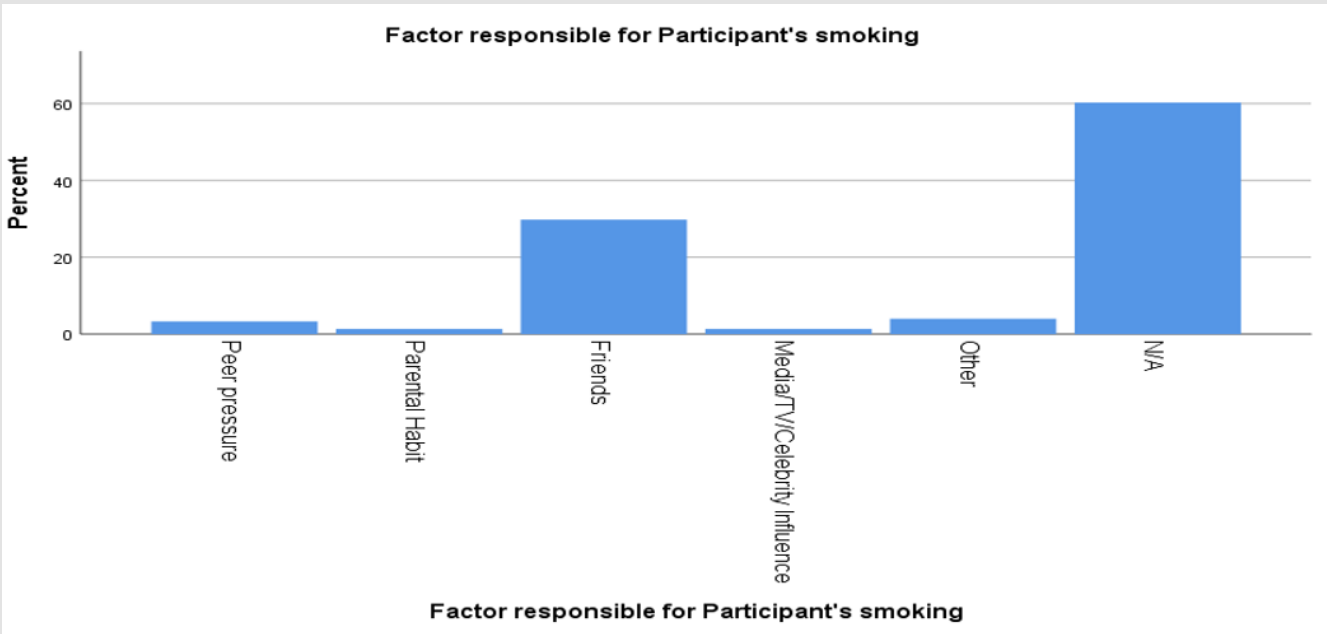


Figure 9: Distribution of the factors responsible for participants' smoking habit.

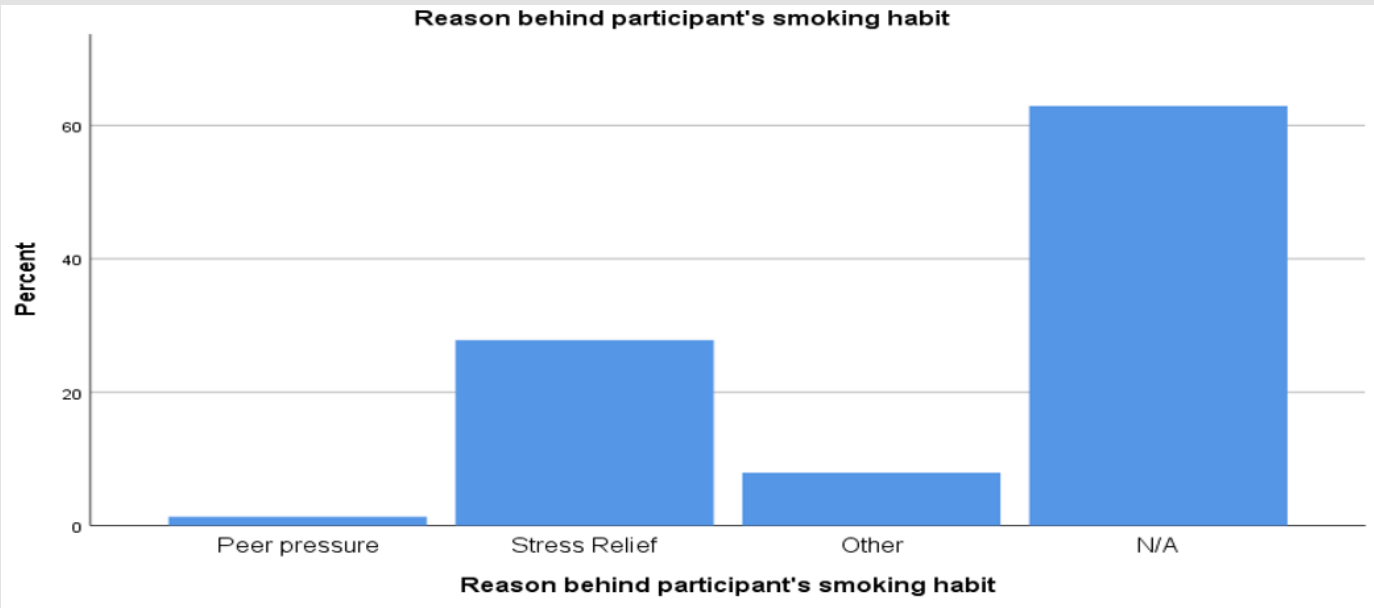


Figure 10: Distribution of the reasons behind participants' smoking habits.

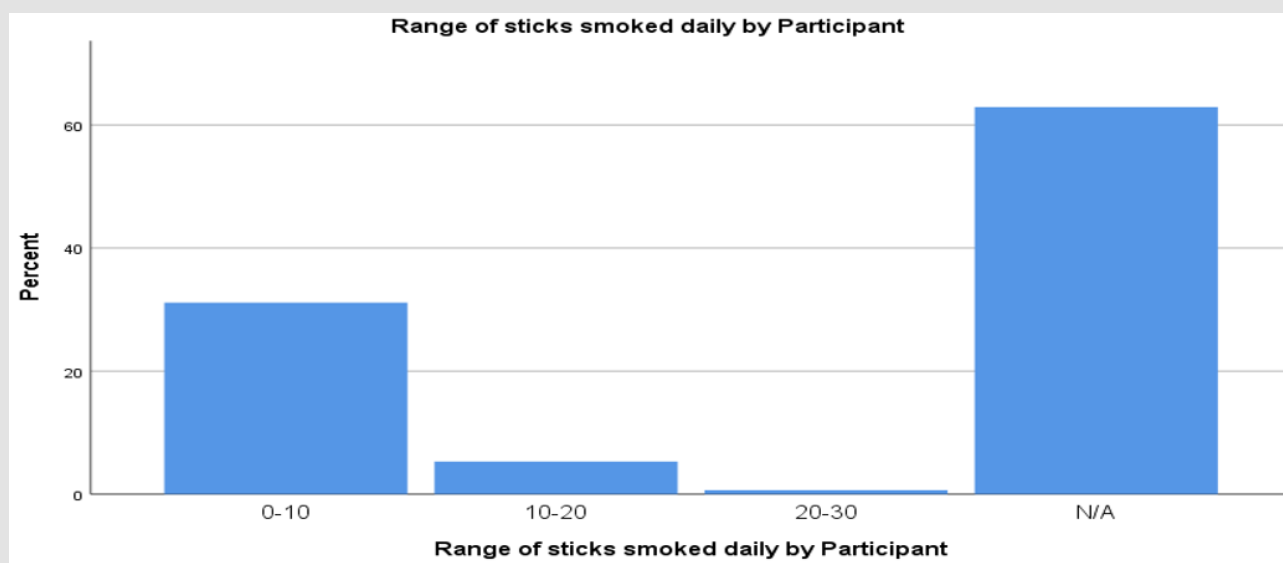


Figure 11: Distribution of range of sticks smoked by participants.

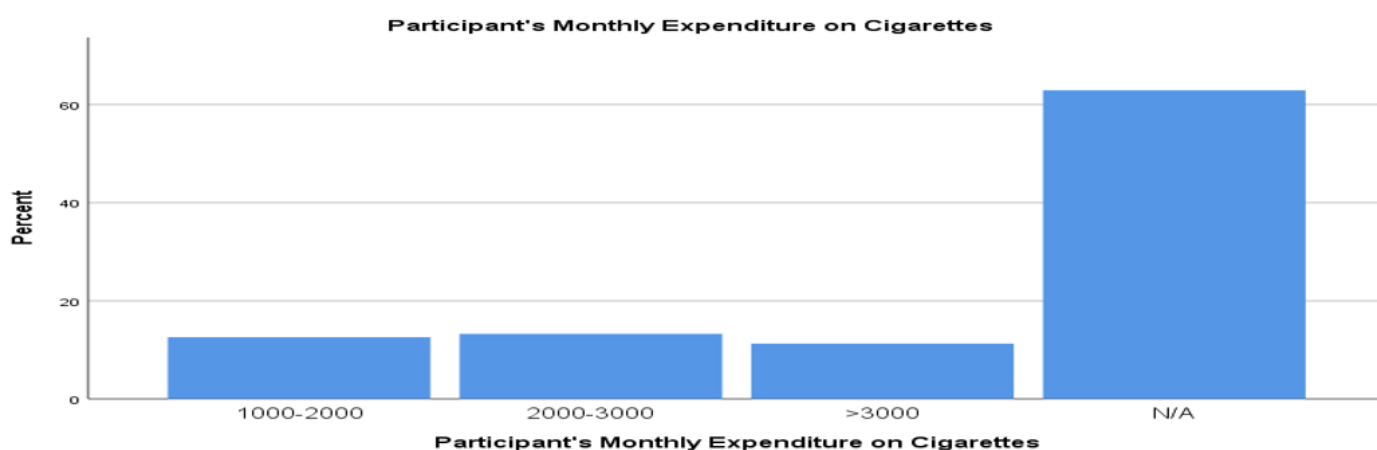


Figure 12: Distribution of participants' monthly expenditure on cigarettes.

The result of the present observation shows that 2 percent of the respondents tried nicotine gums, 1.3 percent tried nicotine patches, and 6.6 percent tried e-cigarettes. 29.1 percent had not tried any of these. 60.9 percent responded as not applicable. The present study shows that 33.1 percent responded that they would like to quit smoking altogether, while 4 percent did not want to quit altogether, and 62.9 percent responded as not applicable. Figure 13 shows that 4 per-

cent wanted to try nicotine replacement therapy. 9.3 percent wanted to try behavior modification therapy. 3.3 percent wanted to try out a smoking cessation program. 7.9 percent would try to stop immediately without trying any of these methods. 11.3 percent would try meditation. 64.2 percent responded as not applicable. Figure 14 shows that 31.1 percent smoked 0-10 sticks. 5.3 percent smoked 10-20 sticks. 0.7 percent smoked 20-30 sticks, while 62.9% did not smoke.

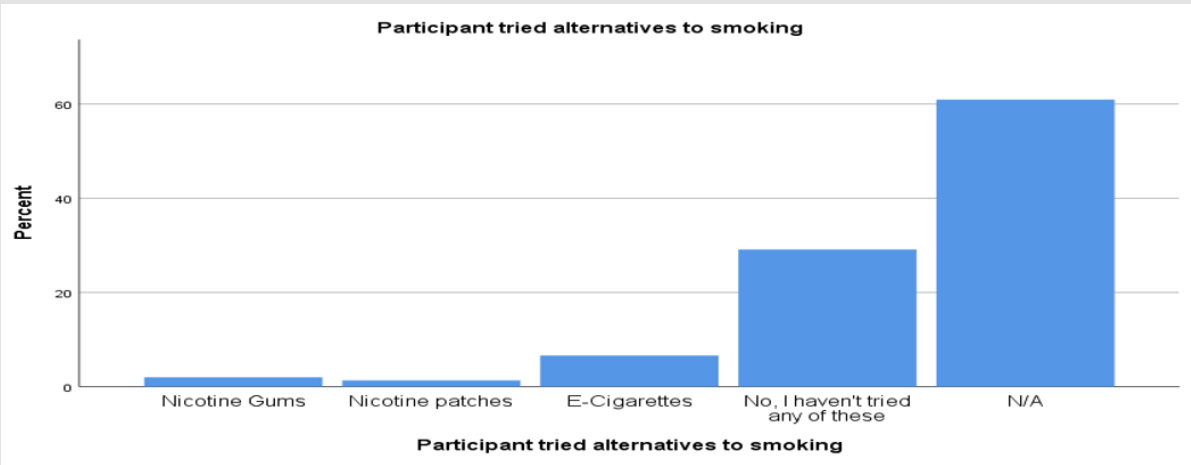


Figure 13: Distribution of the methods that the participants would like to try to quit smoking.

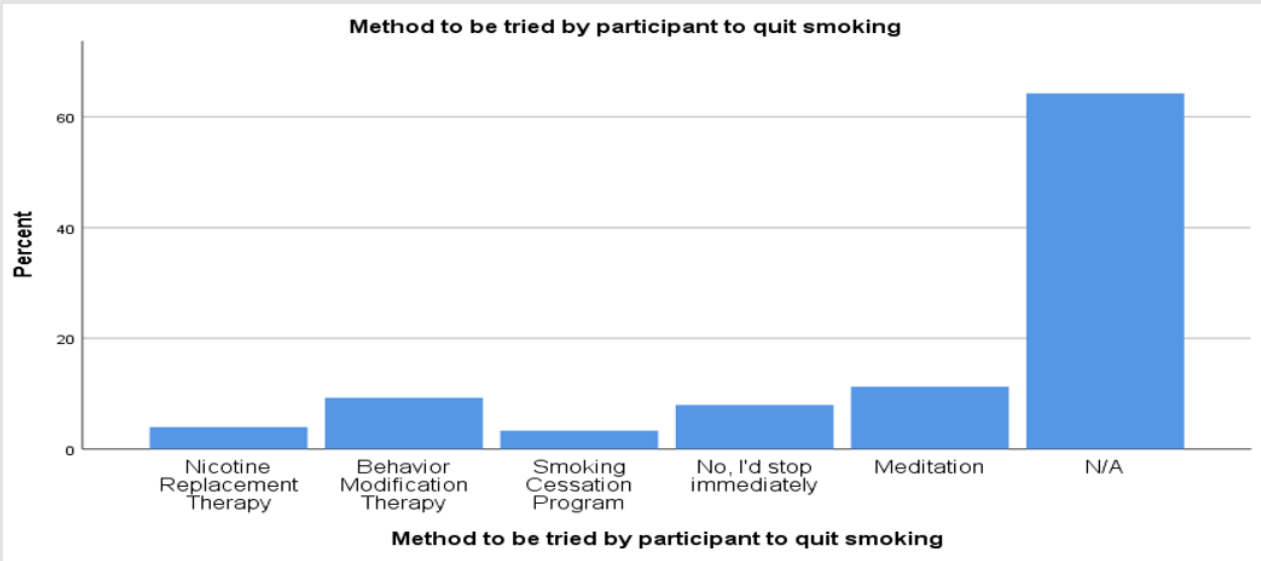


Figure 14: Distribution of participants that tried alternatives to smoking cigarettes.

Discussion

The purpose of this study was to determine the prevalence of smoking among and study the effects of some socio-demographic factors on the habit of smoking. Random sampling was done from students in private universities in the Kuril-Bashundhara region (AIUB, NSU, IUB) in Dhaka city. A strong association exists between the age group and smoking habit of respondents, with more respondents found to be smokers who were in their advanced years of study (p-value: 0.004<0.05). Another study conducted by (Aryal, et al. [19]) reported that many studies have indicated that the young adults (18-24 years) were not fully aware of the health consequences of cigarette

smoking. (Jafari, et al. [21]) reported in their studies that out of 400 students, 257 students (64.3%) were male and 143 of them were female (35.8%). The mean age of students was 21.70 ± 2.73 years. 368 students (92%) were single. 23.3 percent of them used to study in art, 25.3 percent in human sciences, 26.8 percent in mathematics and engineering fields, and 24.8 percent in sciences.

A study by (Metintas et al. [22]) reported that the prevalence of smoking among university students was 42.5%. The study by (Naggar et al. [23]) reported the prevalence of smoking was significantly higher among males and those in advanced semesters (p = 0.047). (Musmar [24]) reported that income (average and high income) and

age (> 20 years) were also statistically significant predictors of smoking ($P < 0.05$). (Taheri et al. [25]) reported that starting and continuing smoking was significantly correlated with family cigarette consumption habits. (Singh et al. [26]) reported in their findings that of the 92 smokers, 31 (33.7%) smoked less than 5 cigarettes, 26 (28.3%) smoked 5–9 cigarettes, 22 (23.9%) smoked 10–20 cigarettes, and 13 (14.1%) smoked more than 20 cigarettes a day. There was a significant association between the smoking habits of parents and those of their wards.

Conclusion

Cigarette smoking, a major risky behavior adversely affecting public health, has reached epidemic proportions. Years of research in developed countries has identified certain factors that commonly play a role in the initiation of tobacco use. These include exposure to tobacco marketing efforts, role modeling by parents/other adults, peer pressure, collateral addiction to other drugs, inadequate knowledge about injurious effects of tobacco use, etc. There is a need to initiate measures towards involvement of the government functionaries in motivating communities regarding smoking habits and their implications. So more research is needed to be done to include a wider range of participants to have a better grip of the smoking habit prevalent in a large-scale population.

Recommendations

The following steps could be taken to encourage the discontinuation of smoking habits and to prevent the initiation among people who have not already started to smoke. Effective use of mass media should be done to promote health education and preventive measures regarding smoking habits and their implications. The government can impose increased taxes on tobacco and tobacco products. This would lead to a decrease in the smoking habit. Smoking should be banned in public places, and measures should be taken to implement them. The health sector's involvement is essential to implementing all the above. The healthcare personnel should be more sensitized and trained to play an active role in the implementation of effective strategies.

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