



## Initiation and Quit of Smoking Among University Students in Bangladesh

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### Abstract

The purpose of this cross-sectional study was to find out initiation and quit of smoking habit among the university level students of Bangladesh. A total of 374 Bangladeshi university students, aged 18-26, enrolled in this study. Among the students' females were 191 who were never smoker, out of 183 male students 107 (58.47%) were smoker. The majority (91.3%) of the smoker and ever smoker-initiated smoking under influence of their friends. The majority (62.9%) of the smoker and ever smoker-initiated smoking under the age of 18 years. Among the self-reported health problems by the smoker respondents, chest pain (59.6%), cough (57.7%), breathing problem (57.7%), asthma (38.5%), and loss of appetite (40.4%) were prominent. among the current smoker respondents 22.3% showed their willingness to quit smoking and 77.7% yet not decided. Among the current smoker respondents 26.6% attempted to quit smoke and rest 73.4% not attempted. Among the smoker respondents it was reported that 39.4% smoke up to 10 times per day and 60.6% smoke more than 10 times per day. Health education programs is an effective tool for reducing the initiation and giving up this bad habit smoking among university students

**Keywords:** Cigarette; Smoking; Asthma

### Introduction

Cigarette smoking has been shown to negatively affect health and quality of life in humans of all age groups<sup>1</sup>. Tobacco smoking has been associated with multiple health problems and is considered to be a preventable threat factor for six of the eight leading causes of morbidity and mortality at the global position [1]. Smoking is a serious and growing public health problem encyclopedically, with a large number of tobacco-associated deaths being in low- and middle-income countries [2]. Unborn protrusions suggest that tobacco smoking will kill further than 8 million people each time worldwide by the time 2030, with 80 of these unseasonable deaths being in low- and middle-income countries [3]. According to the World Health Organization, there are about 1 billion smokers in the world, 80 of whom are in developing countries

[4]. Tobacco smoking has numerous mischievous goods on health in general and it's has been estimated that tobacco smokers die 10 times before than non-smokers Tobacco smoking leads to lung cancer, habitual obstructive lung complaint, atherosclerotic cardiovascular conditions, peptic ulcer complaint, intrauterine growth deceleration, robotic revocation, antepartum hemorrhage, womanish gravidity, sexual dysfunction in men, and numerous other conditions [5,6]. It has been calculated that nearly a third of the world's population, aged 15 times over, are smokers [7] and smoking frequency is on the rise, especially in the developing countries [8]. Large number of youthful people are initiating smoking at earlier periods, which is a major public health concern [9]. In Bangladesh, the figures of tobacco smokers are adding fleetly because of the vacuity of cheap tobacco products, lack of strong tobacco control regulations, and weak enforcement of being

regulations. The Global Adult Tobacco Survey conducted by WHO reported that Bangladesh is one of the top ten countries in the world with high tobacco use (both smoking and smokeless forms) with a frequency of 43.3 among grown-ups (41.3 million), with 44.7 of men and 1.5 of women engaging in tobacco smoking [10]. A study grounded on demographic and health check data reported that the frequency of tobacco smoking among men in Bangladesh is 60.23. Another study among manly university scholars in 2009 stated that 36.1 scholars smoked tobacco [11]. Among fourth-time dental scholars, the frequency of cigarette smoking was reported to be 49.5 and 1.7 in males and ladies, independently [12]. An adding trend of tobacco smoking is anticipated to do among university scholars and this could be related to perceived relief of stress, life problems, peer pressure, social acceptance, class history of smoking, lower educational position of parents, and the desire to attain advanced societal class [13-15]. Smoking among scholars in Bangladesh has been inadequately delved and our original thesis was that it's possible that university scholars may be lacking knowledge on the link between smoking and adverse health goods. This study was an attempt to find out initiation and quit of smoking habit among the university level students of Bangladesh.

### Materials and Methodology

This was a cross sectional descriptive study conducted to find out among initiation and quit of smoking in different first year to fourth year students of computer science and engineering university students of ZHS university of sciences and technology, shariatpur districts Dhaka, Bangladesh. All the students of both sexes who were present at the time and date of data collection and were willing to participate in the study. The study was conducted in December 2017. The sample size of the study would be 369, but lastly, we collect 374 data. For collection data to find out initiation and quit of smoking, a structured questionnaire was developed based on the research objectives and the research question. Data were collected by giving questionnaire in each classroom to fill up the questions. The complete questionnaires were collected, checked for completeness and clarity then compiled it. The data from the complete questionnaires were entered and analyzed by means of SPSS (statistical packages for social sciences) software. The descriptive statistics were included the frequencies, percentages, mean, standard deviation of the findings. Data were presented in the form of tables. Descriptive statistics were presented with frequencies table.

## Results

### Socio-demographic Information

Variables	Frequency	Percentage
Sex		
Male	183	48.9
Female	191	51.1
Age category		
18 - 20 years	220	58.8
More than 21	154	41.2
Mean-21.13 ± 2.080 years		
Education level of students of computer science and engineering		
1 <sup>st</sup> year	136	36.4
2 <sup>nd</sup> year	58	15.2
3 <sup>rd</sup> year	85	22.5
4 <sup>th</sup> year	95	25.2
Father's Education		
Graduate	91	24.3
HSC	116	31.0
Illiterate	10	2.7
Masters	49	13.1
Primary	8	2.1
SSC	100	26.7
Father's occupation		
Business	218	58.3
Farmer	14	3.7
Lawyer	2	.5
Service	101	27.0
Teacher	37	9.9
Unemployed	2	.5
Family Size		
4- 5 members	300	80.2
more than 7 members	74	19.8
Family members	Mean-5.29 ± 1.316	
Family's monthly income		
Up to 20000 BDT	119	31.8
20001 - 40000 BDT	159	42.5
40001 - 60000 BDT	64	17.1
More than 60000 BDT	32	8.6
Monthly family income*	Mean 45339.57 ± 67096.86 BDT	

**Table 1:** Background characteristics of the respondents.

Among the respondents only 58.8% of participants were 18-21 years age. Mean age  $21.13 \pm 2.080$  years. Among them 36.4% were study in 1<sup>st</sup> year, 15.2% were study in 2<sup>nd</sup> year, 22.5% were study in 3<sup>rd</sup> year and 25.2% were study in 4<sup>th</sup> year. Among the respondents majority 58.3% father’s occupations were businessman, and majority 31.0% studied up to HSC, 26.7% 24.3% studied up to graduate and 13.1% studied up to masters level. Among the total respondents, 80.2% had 4 to 5 family members Mean family member were  $5.29 \pm 1.316$  and monthly family income Mean  $45339.57 \pm 67096.86$  BDT.

Smoking family member	Frequency	Percent
Yes	106	28.3
No	268	71.7
Family member smoking		
Father	74	50.7%
Mother	10	6.8%
Elder brother	43	29.5%
Other member	29	19.9%
Status of smokers		
current smoker	94	25.1
ever smoker	49	13.1
Non-smoker	231	61.8
Age of initiation of smoking		
Before 18 years	90	62.9
After 18 years	53	37.1
Frequency of smoking/day		
Up to 10 times	37	39.4
More than 10 times	57	60.6
Mean $12.31 \pm 5.742$		

**Table 2:** Smoking status of individual and family member.

History of smoking by family member shows that among the respondents 28.3% were smoker and 71.7% were non-smoker. Family association also has an influence on tobacco smoking; the smoking habits of family members 50.7% father were smoker and 6.8% mother were smoker, 29.5% elder brother were smoker. Among the respondents by history of smoking status 25.1% were current smoker, 13.1% were ever smoker and 61.8% were non-smoker. Among them by age of smoking initiation 62.6% had started before 18 years and 37.4% had started after 18 years.

Among the respondents by history of frequency of smoking 39.4% were smoke up to 10 times a day and 60.6% were smoke more than 10 times a day.

Influencing factors	Frequency	Percentage of Cases
Friend's influence	63	91.3%
Mental depression	10	14.5%
Educational problems	6	8.7%
Difficulties in relationship with girl/boyfriend	6	8.7%
Curiosity	5	7.2%

**Table 3:** Distribution of respondents by influencing factors.

Among the respondents by history of smoking 91.3% were influenced by their friends, 14.5% had started smoking due to mental depression, 8.7% had started smoking due to educational problems and 8.7% had started smoking due to difficulties in relation with girl/boyfriend 7.2% had started smoking due to curiosity.

Health Problems	Frequency	Percentage of Cases
Cough	30	57.7%
Breathing problem	30	57.7%
Asthma	20	38.5%
Chest pain	31	59.6%
Loss of appetite	21	40.4%

**Table 4:** Distribution of respondents by Self-Reported Health Problems of Smokers.

The table 4 shows that among the respondents by Self-Reported health problems of smoker 57.7% had cough, 57.7% had breathing problem, 38.5% had asthma, 59.6% had chest pain and 40.4% had loss of appetite.

Willingness	Frequency	Percent
Yes	21	22.3
Not decided	73	77.7
Total	94	100

**Table 5:** Distribution of respondents by willingness to quit smoking.

The table 5 shows that among the current smoker respondents 22.3% showed their willingness to quit smoking and 77.7% yet not decided.

Attempt	Frequency	Percent
Yes	25	26.6
No	69	73.4
Total	94	100

**Table 6:** Distribution of respondents by attempt to quit.

The table 6 shows that among the current smoker respondents 26.6% attempted to quit smoke and rest 73.4% not attempted.

Reasons	Frequency	Percent
Hazardous to health	15	50.0
Loss of interest	15	50.0
Total	30	100.0

**Table 7:** Distribution of respondents by reasons for smoking cessation by ever smoker.

The table 7 shows that among the respondents by reasons for smoking cessation by ever smoker 50% thought smoking hazardous to health and 50% had lost interest.

**Discussion**

In this cross sectional study a total 374 subjects, Among them 51.1% were female and 48.9% were male and we found our study females were ever smoke. This finding is in agreement with previously published literature from the Kingdom of Saudi Arabia (KSA) and for Muslim countries where culture and norms play an important role in female behaviors and customs [16]. Among the respondents only 58.8% of participants were 18-21 years age. Mean age 21.13 ± 2.080 years. Among the respondents 36.4% were study in 1<sup>st</sup> year, 15.2% were study in 2<sup>nd</sup> year, 22.5% were study in 3<sup>rd</sup> year and 25.2% were study in 4<sup>th</sup> year. Among the respondent’s majority 58.3% father’s occupations were businessman, and majority 31.0% studied up to HSC, 26.7%,4.3% studied up to graduate and 13.1% studied up to masters level. Among the total respondents, 80.2% had 4 to 5 family members Mean family member were 5.29 ± 1.316. Among the respondents family income 42.7% had 20001-40000 BDT, by history of smoking by family member shows that among the respondents 28.3% were smoker and 71.7% were non-smoker.

Among the respondents by person family member smoking 50.7% father were smoker and 6.8% mother were smoker, 29.5% elder brother were smoker. Among the respondents by history of smoking status 25.1% were current smoker, 13.1% were ever smoker and 61.8% were non smoker. Among the respondents by age of smoking initiation 62.6% had started before 18 years and 37.4% had started after 18 years. According to the World Health Organization, most of the students start using tobacco early, often beginning in their high school years [17]. Among respondents, most of the students started tobacco smoking during adolescence. Among the respondents by history of frequency of smoking 39.4% were smoke up to 10 times a day and 60.6% were smoke more than 10 times a day. Among the respondents by history of smoking 91.3% were influenced by their friends, 14.5% had started smoking due to mental depression, 8.7% had started smoking due to educational problems and 8.7% had started smoking due to difficulties in relation with girl/boyfriend. The finding of our study is similar to that reported by the World Health Organization [18]. The majority of the students reported that they initiated tobacco smoking due to the influence of friends (62.26%) and by the imitation of family members. Smoking among friends and their influence may indicate a link between peer pressure and the development of smoking habits. Curiosity, peer pressure, and psychological stress were the main causes of initiating tobacco smoking, with family members of the tobacco smokers playing a vital role indirectly to initiate tobacco use Among the respondents by Self-Reported health problems of smoker 57.7% had cough, 57.7% had breathing problem, 38.5% had asthma, 59.6% had chest pain and 40.4% had loss of appetite. Among the respondents 8.0% had willingness to quit smoking and 6.1% not decided yet. Among the respondents 7.5% attempt to quit smoke and 6.1% not attempt to quit of smoking. Among the respondents by reasons for smoking cessation by ever smoker 50% thought smoking hazardous to health and 50% had lost interest. Another study found that Majority of the students who participated in this study (95.83%) were knowledgeable about the link between smoking cigarettes and chronic diseases, which is encouraging for future programs targeting smoking cessation. The findings of the present study are similar to that reported in the United States, Great Britain, and Australia among adults where the proportion of respondents knowledgeable on cigarette smoking as cause of heart disease and lung cancer were (85.8%, 94.4%), (92.3%, 98.2%), and (94%, 91%) respectively [19,20]. However, the proportion of adolescents in Denmark who were knowledgeable on lung and

heart diseases was lower, 46.3% and 49.3%, respectively [21,22]. In this study we found that initiation of smoking greater than quit of smoking, that means health education and dangerous effect of smoking negligible [23].

## Conclusion

The government of Bangladesh should take steps to eradicate tobacco smoking by giving Tobacco education should start at the school level to educate children about harmful effects of tobacco smoking because our study reveal that tobacco smoking is initiated by students during the adolescent years and continues throughout the university years. Public awareness measures, such as anti-smoking campaigns must be implemented to create awareness, reduce smoking levels, and avoid negative health consequences in Bangladesh. Smoking control laws and policies of Bangladesh should be strongly enforced by the tobacco control agencies [24]. These measures, along with the legislative control, will go a long way in creating a tobacco smoking free society in Bangladesh and globally. We suggest adopting WHO Framework Convention on Tobacco Control (FCTC) policies, especially for university students.

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