

## PATTERN OF SMOKING BEHAVIOR AMONG JAGANNATH UNIVERSITY STUDENTS

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### Abstract

The present study was attempted to assess the patterns of smoking behavior (using more smoking product, smoking time, smoking place, smoking environment, smoking reason, influence of peer, influence of mass media, caused to smoking where legal awareness of law and price increase of smoking product can reduce smoking behavior) among the students of Jagannath University. For that purpose, 141 student participants who involved in smoking were selected purposively. For data collection, the pattern of smoking behavior questionnaire and personal information form were used. To analyze the data descriptive- frequency and percentage analysis were done. The result of the pattern of smoking behavior among smokers of Jagannath University students illustrates that they smoked first time in friends meeting and for curiosity. This study also found that a majority of the smoker students purchase their own cigarettes from tea stalls or local vendors. Further, the study also found that the key reasons for smoking are in stressing situations and having family problems. This study established that peer and media influences are the factors that lead to smoking initiation among students. According to the data, it also emerged that smoker students will decrease the use of smoking if the price of cigarettes will increase. So, it is recommended that authority of Jagannath University should set up regular guidance and counseling talks that will encourage students to keep away from experimenting with cigarettes or tobacco products and also to encourage students who smoke to cease the behavior. Finally, the government should increase the tax on cigarettes and other tobacco products to ensure that the price of cigarettes is increased and are not easily affordable to students.

**Key word:** *Behavior, smoking, pattern, students, university*

### Introduction

Smoking is the most general form of entertaining drug used in developing countries and globally more than one billion natives consume it (WHO, 2015). Smoke inhalation creates various physiologic process disputes such as respiration problems which ensure negative health effects of a person. Cause "Cigarette" is made from dried leaves which is burned, vaporizes, and resulting the smoke to be feel by breathed into the lungs which absorbed into the bloodstream (Wikipedia, 2019). Smoking cigarettes troubles nearly every organ of the body, causes many diseases like heart disease, stroke, lung cancer,

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damaging airways and the small air sacs (alveoli) in the lungs, and decreases the health of smokers in general (Health & Services, 2014). Smoking is one of the reasons for both health problems and economic costs (Nargis *et al.*, 2014; Wu *et al.*, 2013). It causes adverse effects on an individual smoker, his/her family and society as a whole. Around half of the long-term smokers' lives are taken away by diseases coupled to tobacco smoking.

Bangladesh is one of the high smoking consuming countries in the world. The prevalence of tobacco smokers in Bangladesh is 23.19% and the prevalence of current daily tobacco smokers is 21.16% (Sultana, Akter, Rahman, & Alam, 2015). This study also revealed that approximately 48.3% of men and 1.5% of women have smoke or some form of smoking product on a daily or occasional basis in Bangladesh. Another study revealed that among a total prevalence of 21.2% are daily smokers, 24.3% are consuming smokeless tobacco products, and 36.3% are adults passive smokers (Rahman, Roy, & Sultana, 2016). In previous study, it was found smoking is the reasons for 25% of all fatality of Bangladeshi men age ranging from 25 to 69 years (Alam *et al.*, 2013). Smoking caused over five million deaths a year from 1990 to 2015 (Reitsma *et al.*, 2017). So, the situation is alarming. But refrain from smoking have poorer risks for smoking-related syndrome and can add years to life (Health & Services, 2014). Following this to minimize the smoking-related problem the tobacco control law is introduce with understanding the pattern of smoking behavior.

Researchers believe that smoking behavior is associated with students' personal acts (familiarity of smoking product, smoking time, smoking place, smoking environment, reasons for smoking), social aspect (peer influence, influence of mass –media), and environmental aspect (the tobacco control act). Smoking behavior is influenced greatly by peers. Adolescent students who have smoker friends are more likely to engage in smoking eventually than adolescents whose peers do not smoke (Kwamanga *et al.*, 2003; Oteyo & Kariuki, 2009 and Siziba *et al.*, 2007). Studies describe teenagers act so while in the company of their peers (Khor *et al.*, 2005 and Kwamanga *et al.*, 2003). Mass media is another influential socialization agent. Exposure to both anti-smoking messages and pro-cigarette advertisements on billboards, magazines, and other media (GYTS, 2007) is common and it influences the smoking behavior of individuals. A study found that students who observe pro-tobacco commercials were more likely to be smokers than those. Environment factors allied to the Tobacco Control Act (2007) intended to deal with exposure of tobacco, ban of sales to minors, ban of cigarette trade in single sticks, protection from second-hand smoke. A global study found that the majority of youth between the ages of 13–15, purchased their cigarettes from local shops and are not denied sale by the vendors (GYTS, 2002). In Kenya, a study found that one out of three students who smoke, buy their own cigarettes directly from shops and very few shops are denied to sale (Kwamanga *et al.*, 2003). The sale of cigarettes in single sticks is therefore another important factor that encourages smoking among students. This is because single

stick cigarettes are cheaper to purchase than a whole packet. As reported by WHO, a 10% price raise on cigarettes may reason for 8% fall in tobacco use in low- and middle-income countries (WHO, 2008). This study, therefore, expected that the idea of a total prohibition of the sale of single sticks cigarettes, to attract smoking students to consider cessation. This study therefore sought to explore this line of thinking that students are less likely to buy cigarettes in packet quantities. And further that raise the price of one cigarette will encourage smokers to give up.

To control smoking consumption, policy and environmental strategies should be taken involving regulating access and limiting demand through restrictions on advertising, marketing, promotion, and through price and taxation. But smoking control could not be ensuing. After understanding the pattern of smoking consumption it will be easier to plan any action. In that case, it is necessary to assess and understand the pattern of smoking behavior for making a plan to control smoking consumption. If it could be identified then the necessary steps could be taken to control smoking consumption. Numerous studies have been carried out on tobacco or smoking in Bangladesh (Alam *et al.*, 2013; Rahman *et al.*, 2016 and Sultana *et al.*, 2015). But a large amount of these previous studies focus on the prevalence and predictors of tobacco or smoking use and few studies address the economic issue of tobacco use (Nargis *et al.*, 2014). For this, the present study was attempted to consider finding out the pattern of smoking behavior among Jagannath university students.

Such research would also contribute to the field's understanding of the pattern of smoking behavior of smokers among Jagannath university students. The outcome of this study could have important implications for policymakers. The current study findings will facilitate the researchers and policymakers to develop awareness about smoking behavior and adverse effect on health moreover detrimental effects on their psychological health. It will help them to apply appropriate interventions with counseling programs on how to intervene on them. Findings also helps the students to reduce the smoking problem, contribute to conduct new research, help to take specific steps to meet challenges, and boost to make new policy for well-being of a students. So, the main aim of the present investigation is to assess the pattern of smoking behavior among Jagannath University students. To achieve the above objective the study required to investigate the following specific objectives: a) to see the first smoking cessation environment, b) to assess the severity level of smoking behavior, c) to see the preferred smoking time, d) to assess the preferred place to buy cigarettes, e) to assess preferred environment for smoking, f) to assess perceived key reasons for smoking, g) to see the influence of peers on smoking, h) to see the influence of mass media, i) to assess the legal awareness about the law of smoking, and j) to see the effect of price increase on smoking consumption

## **Material and Methods**

### **Participants**

The population of the study was the students of Jagannath University who are smoked and the data of the present study were collect from university campus. The data have collected from a total of 141 student participants who are smoked. Among them, 96.5% of participants were male and 3.5% of participants were female. Among 141 participants, 2.1% were lower class, 13.5% were lower middle class, 83% were middle class and 1.4% was upper class. The age range of the participants was 19 years to 30 years and the mean age of the participants was 23 years.

### **Study design and Sampling Technique**

A survey research design was used for the data collection of the study. On basis of some characteristics of participant's, researcher selected the participants by purposive sampling technique for data collection.

### **Measuring Instruments**

For data collection, the pattern of smoking behavior Questionnaire along with consent and personal informational form instruments were used in the present study.

#### *Consent form*

Written permission of the participants was taken to participate in the study and informed them that information will be kept confidential and use only for research purposes.

#### *Personal Information Form*

Personal information in this study was included as participant's sex, age, educational level, socio-economical level.

#### *Pattern of smoking behavior Questionnaire for smoker*

The pattern of smoking behavior questionnaire was prepared in Bengali by researchers used to measure the smoker respondent's smoking pattern. This questionnaire has 9 items to know the pattern of smoking behavior among smokers which is selected by literature review and different previous studies. The content of the questionnaire was judge evaluated. These different types of items represent -9 patterns of smoking behavior such as the severity level of smoking, the preferred smoking time, preferred place to buy cigarettes, preferred environment for smoking, perceived key reason for smoking, influence of peers on smoking, influence of mass media, legal awareness about the law of smoking, effect of price increase on smoking cessation among the university students which are under the objective about social and environmental factors that make students

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smoke. Participants had to choose one option which he preferred as suitable. To assure the content validity of the questionnaire it was given to the Subject Matter Expert (SME) on basis of their essential remarks the items of this questionnaire is formed.

### **Procedure**

For the data collection, all the participants of the research were provided detailed information about the purpose of the research, the amount of time likely to be required and confidentiality. A written consent form was taken from participants. In this research confidentiality of participants was given high priority and aware of their privacy issues. The identity of the participants was kept confidential using a code number of each participant. After agreement, they were providing personal information form and pattern of smoking behavior instrument to fill up. They are requested to read the printed instructions on the questionnaires and answered all the questionnaires on basis of how they experience the items in questionnaire. After the end of the task, the questionnaire was collected from them with giving thanks.

### **Results and Discussion**

The objectives of the present study were to see the patterns of smoking behavior among the students of Jagannath University. To analyze the data descriptive-frequency and percentage analysis was done. The result of the pattern of smoking behavior among smoker of Jagannath University students (using more smoking product, smoking time, smoking place, smoking environment, smoking reason, influence of peer, influence of mass media, caused to smoking where legal awareness of law and price increase of smoking product can reduce smoking behavior) is presented in the following table from 1 to 10.

Table 1. First smoking cessation environment among the students of Jagannath University (N=141)

First Smoking Cessation	Frequency	Percent (%)
religious function	1	0.7
university	3	2.1
friends meeting	81	57.4
roadside	2	1.4
happiness moment	7	5
curiosity	38	27
others	9	6.4
Total	141	100

Table 1 showed that 57.4% of students were initiating their first smoking with friends meeting mean by influence by peer and 27% is for curiosity.

Table 2. The severity level of smoking among the Jagannath university students (N=141)

Cigarette smoking	Frequency	Percent (%)
Less than 5	41	29.1
5-10 Stick	60	42.6
11-15 Stick	34	24.1
16-20 Stick	6	4.3
Total	141	100

According to the data collected it was evident that the highest frequency 60 about 42.6% of smokers smoked 5 to 10 sticks of cigarette in a day as shown in Table 2 above.

Table 3. The preferred smoking time among the Jagannath university students (N=141)

smoking time	Frequency	Percent (%)
Morning	2	1.4
Afternoon	15	10.6
Evening	3	3.5
Night	31	22
Often	88	64.4
Total	141	100

Concerning the smoking time, the data showed that the highest frequency 88 (64.4%) preferred to smoke usually at often time and very few were smoke in the morning 1.4% as illustrated in Table 3.

Table 4. Preferred place to buy cigarettes among the Jagannath university students (N=141)

Preferences place	Frequency	Percent (%)
Supermarket	11	7.8
Tea stall	128	90.8
Club	2	1.4
Total	141	100

From Table 4, we can see that tea stalls were the most preferred smoking places by students, about 90.8% of students are use this place. And here the lowest numbers of student 1.4 % were selected club for a smoking place.

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**Table 5.** Preferred environment for smoking among the Jagannath university students (N=141)

Preferences environment	Frequency	Percent (%)
Religious function	1	0.7
Friends meeting	84	59.6
Happiness moment	9	6.4
Mental relaxation before the exam	10	7.1
Sports time	1	0.7
Anxiety	36	25.5
Total	141	100

In table 5 showed that meeting with friends were the most preferred smoking environment and the percentage is about 59.6%. In contrast, less are preferred religious and sports time as the smoking environment and the percentage of both are same 0.7%.

**Table 6.** Perceived key reasons for smoking among the Jagannath university students (N=141)

Perceived key reasons	Frequency	Percent (%)
Happiness	20	14.2
Work pressure	12	8.5
Stress time	37	26.2
Study pressure	10	7.1
Economical problem	1	0.7
Breakup	11	7.8
Family problem	15	10.6
Habitual	35	24.8
Total	141	100

Table 6 shows that different person are smoke for different reasons. Result represents that, 26.2% do smoke in a stressful situation, 24.8% in habitual reasons, and 14.2% is smoke when they are happy.

**Table 7.** Influence of peers on smoking among the Jagannath university students (N=141)

Influence of peers	Frequency	Percent (%)
Smoker friend	125	88.7
Non-smoker friend	16	11.3
Total	141	100

Table 7 shows the influence of peers on smoking which means a smoker is like to smoke with which type of peers. Here smoker friends are responsible for smoking at an alarming rate, and the percentage is 88.7 than when they are spending time with non-smoker friends the percentage is 11.3.

**Table 8. Influence of mass media among the Jagannath university students (N=141)**

Influence of mass media	Frequency	Percent (%)
Yes	115	81.6
No	26	18.4
Total	141	100

Table 8 shows that the mass media is another influencing factor on human behavior. In this research, it is found that 81.6% of the students were known about smoke-related information by mass media.

**Table 9. Legal awareness about the law of smoking among Jagannath university students (N=141).**

The law of smoking	Frequency	Percent (%)
Yes	33	23.4
No	108	76.6
Total	141	100

Table 9 shows that according to the data collection it was evident that the highest score is 76.6% students were not aware of the law of smoking. So, it can be assuming the highest percentage of smoker students is not aware of the smoking law.

**Table 10. Effect of price increase on smoking consumption among the Jagannath university students (N=141).**

Smoking Cessation	Frequency	Percent (%)
No use	3	2.1
Decrease the use of smoking	61	43.3
No change	53	37.6
Don't know	24	17.0
Total	141	100

Observing the distribution in Table 10, 43.3% of students will consider quitting smoking if the cost of cigarettes will increase. Therefore, the above observation suggests that an increase in the cost of cigarettes is likely to reduce the smoking prevalence among students as stated earlier on.

In relation to the practice of smoking, this study established that peer and media influences are the factors that lead to smoking initiation among students and it were found that they were smoked first time in friends meeting and for curiosity. The study also found that the key reasons for further smoking are in stressing situations and having family problems. These response patterns proposed that students need to sensitize about the harmful effects of smoking. Schools should develop regular guidance or counseling programs to develop skills for reducing the temptation of curiosity towards unsafe stuff that will encourage students to keep away from experimenting with tobacco products and also shore up students who smoke to stop the smoking behavior. Counseling talks is also

necessary to reduce family problems. Further, this study also found that a majority of the smoker students purchase their own cigarettes from tea stalls or local vendors. According to the data, it also emerged that students who smoke they will decrease the use of smoking if the price of cigarettes will increase. So, these findings recommend that to control the consumption of smoking policy maker can give concern on increase the price of tobacco products.

This study had a number of limitations. One of the limitations was the data were not collected from the wider region. This study had collect data only from the Jagannath University area; thereby the results of our study may not be effusive representative of other university students of other areas of our country. Moreover, the study topic (e.i, smoking behavior) is very sensitive for this data collection was very tough. Students tend to show an unwillingness to participate in this study. Finally, this study cannot be confirmed a causal association. It is recommended future studies should be addressed on these issues. In spite of that these findings proposed that to control smoking consumption in Jagannath university area the authority should develop an awareness program and established regular guidance and counseling program for managing stress related issues among students.

In conclusion, to reverse smoking behavior among this young generation all stakeholders including, the government through the ministry of education and the Ministry of Health, teachers, and parents should embark on joint sensitization sessions targeting all university in the country, to sensitize to the dangers of smoking to empower them to resist or to quit smoking. For this, based on the findings of this study, it is recommended that the government should increase the levies taxed on cigarettes and other tobacco products to ensure that they significantly increase in price and are not easily affordable to students. University should have regular guidance and counseling talks that will encourage students to keep away from experimenting with cigarettes or tobacco products and also to encourage students who smoke to cease the behavior. The recommendation is made for further research on the extent to which other forms of tobacco are being used by university students.

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