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Cigarette Selling and Buying by the Minor and Adolescents in Bangladesh: Prevalence, Perceptions and Awareness

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Abstract

Though there is a tendency among teenagers to not care about the adverse effect of tobacco but long-term smoking causes a serious problem in health. The objective of this study is to explore the prevalence, perception and awareness of minors and adolescents on cigarette selling and buying in Bangladesh. In this study, a quantitative oriented qualitative method has been used. The study reveals that overall 63% of the respondents are currently smoking. The proportion of smoking among the buyers is significantly higher (p<0.001) than sellers. A higher majority of the participants (93%) perceived that selling cigarette to minors is not good practice. A majority of the buyers (79%) and sellers (85%) have never been prevented from buying and selling cigarettes in the respective areas by any authorized personnel or even the general public. Majority of the respondents (86%) have no knowledge about any law on tobacco control in the country. About one quarter of the respondents (24%) perceived that the main causes of non-implementation of the law are the citizens' reluctance to obey and negligence of the concerned authority to implement the law. It also explores that a tendency to get rid of from frustration is the main reason to smoke tobacco. The findings suggest that an awareness building program should be launched by the government including NGOs, academic institutes and voluntary organizations to raise awareness on the bad effects of tobacco.

Keywords: Cigarette smoking; Addiction; Adolescents; Tobacco use; Bangladesh.



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1. Introduction

Bangladesh is a country with heavy burden of tobacco related ill-health. The country is implementing the MPOWER policy to reduce the tobacco use (WHO, 2015). Government has endorsed the WHO Framework Convention on Tobacco Control (FCTC) and taken many attempts to control the tobacco use among the citizens. According to Smoking and Tobacco Products Usage Act 2013, selling cigarette to and by the minors is strictly prohibited (Bangladesh, 2013). There is prescribed the punishment criterion for violation of the law. In reality, it is obvious to us that law is not being implemented properly. The Minors are still engaged and using the cigarette. The Article no 6(A) of the amended Act is being violated by any means which was billed for the citizens' well-being. The authority and administration responsible for implementing the law are not capable enough and lacking the proper institutional capacity are causes of this non-implementation (Genilo and Sharif, 2015). Though there are found some of the loopholes of the law and challenges in implementing the Act, taking some measures in respect to concentrating the minor issues, raising awareness among the citizens, monitoring by the stakeholders and proper delegation of power to the concerned authority to execute the law can definitely have the law implemented in accordance. The country has been experiencing a good number of tobacco control initiatives from very first of the British Period to date. The Act naming "Cigarette and Tobacco Products Usage (Control), (Amendment) Act, 2013 has many sub-sections. One of the important sub-sections is ban on selling cigarette to and by the minors. For the implementation of the proposition, there is a well-equipped institutional arrangement in the country. The Ministry of Health and Family Welfare is the ultimate body to execute the law regarding tobacco control. For having a proper implementation of the laws, government has introduced the "National Tobacco Control Cell" (NTCC) under the direct supervision of the said ministry. There is a coordinator and some program officers being deployed for administering the cell. For smooth functioning of the tobacco control all around the country, there are designed for three-tiered taskforce committee like National Taskforce Committee, District Taskforce Committee and Upazila Taskforce Committee. The Law prescribed for some authorized officers who will be responsible for the proper

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execution of the Act and its propositions. The demerits of smoking for the people include the respiratory and nonrespiratory diseases, addiction to nicotine, and the associated risk of another drug use (Hossain J. et al., 2018). It is proved evidence from prior research that smoking habits from young age makes people to be accustomed to smoking in their next lives. Tobacco smoking has the physical, economical, socio-psychological as well as mental problems also. Smokers are more likely to addict to the drugs and social unrest (Jenssen and Wilson, 2017). Considering the negative effects of the tobacco, government of Bangladesh has been discouraging the productions, use and selling of the tobacco products like cigarettes, bidi, chew hookah etc (Driezen et al., 2016b). Sometimes, they control by rules and law enforcements. From these discouraging activities, Government of Bangladesh took an Act named Smoking and Tobacco Products Usage (Control) Act, 2005. In 2013, government amended the Act and added a subsection 6A banning on selling tobacco products to a minor, here minor means the person under 18 aged. But it is seen that no act is performing at all, cigarettes are selling to the minors as it was before the law. This is more alarming sign for our upcoming future generations (Farrelly et al., 2014). When they will be addicted to the smoking and get engaged to various physical injuries, they can't serve the nation, they can't provide the best outcome for the human being of this universe (Hakim et al., 2018). In addition, the provision of the Act taken by the government of Bangladesh banning the selling and marketing of the tobacco products to the minor people, has not clearly described the implementation strategies. Hence, the Act is supposed to be Act in paper only, not for execution. The lack of proper guidelines and channel of monitoring cell are the main flaws of implementation of the Act. The ultimate argument of this research is how the young adolescents get the cigarettes for smoking in Bangladesh when there is a prohibition? Simply, if we think about a license for the cigarette retailer and that of a wholesaler and ask for not selling it to the minor, it can be controlled in some extents. After taking additional clause 6A to the Act of 2005, there was no research or research evaluation made which could collaborate the policy makers to think about the matter to control the smoking of the

Several studies showed that the various aspects of tobacco use of adults (Hakim *et al.*, 2018); (McCabe *et al.*, 2017); (Rahman *et al.*, 2017); (Tarafdar *et al.*, 2009) and some studies relates with other factors (Schreuders *et al.*, 2017); (Sargent *et al.*, 2017); (Pervin, 2016); (Mowafy *et al.*, 2015); (Hakim *et al.*, 2018). According to Flora *et al.* (2016), there is a significant relationship among age, gender, place and smoking. A minor part of women, slum dwellers, illiterate and low-income people are not aware about the adverse effect of tobacco. The main vulnerable groups are the minors and adolescents. Because it is their vulnerable stage due to age, education and awareness. So, this piece of research is intended to explore the prevalence, perception and awareness of minors and adolescents on cigarette selling and buying in Bangladesh.

The remainder of the article is organized as: the second section deals with review of related literature; the third and fourth section describes the methodology and result and discussion; and the final section concludes the article with some recommendations.

2. Review of Related Literature

Tobacco is one of the major causes of serious health hazards and disability. Sometimes tobacco causes major diseases like cancer, lung and cardiovascular diseases. Cigarette smoking is very popular in Bangladesh which ultimately caused serious health problem. According to WHO (2004), about 57000 people died and about 382000 people disabled in every year. But recently about 5 million people died every year which will be about 8.3 million by 2030 globally (WHO, 2015). The rate of death and disability are increasing in low and middle-income countries but decreasing in developed countries. Tobacco addiction is one of the top addictions in the world which causes premature death. It is highly affected for minors and adolescents. Cigarette smoking is a serious addiction especially for teenagers. Addiction is actually a strong and passionate liking which is not permissible by society and destructive for health. The prevalence of smoking is gradually increasing among the students in Bangladesh (Pervin, 2016). The long-term smoking poses many health hazards that most of the teenagers know, but many do not care. Once they start smoking, struggle to cease throughout the lifespan. In 2005, the government of Bangladesh passed a comprehensive tobacco control law in line with FCTC and in 2006 passed rules to facilitate the enforcement of the law. The National Strategic Plan of Action for Tobacco Control (2007-2010) was currently being implemented (Zulfigar et al., 2003). The control of tobacco may be addressed properly to create awareness among them and proper measures should be taken to prevent smoking among the young population. About the minors' cigarette buying pattern that though the sale of tobacco products to youth is prohibited by the law (Barkat, 2012). However, minors have little trouble purchasing cigarettes, with more than one third (38.3%) of age (13-15) year old reporting they are buying cigarettes in stores. Moreover, World Health Organization reported in 2008 that tobacco control is difficult to compile accurate data about tobacco consumption in the developing world as two in three of these countries do not have even minimal information about youth and adult tobacco use. Two-thirds of smokers in Bangladesh start of smoking habit prior to their 17 years. Youth smoker believes that they will look more attractive and have more friends. When accomplished the study by the Pradhan et al. (2013), they identified the young students' tobacco using pattern and behavior as they reported that majority of the students were stated that they start tobacco out of curiosity 41.1%, to relieve tension 26.7% and owing to peer pressure 25.5%. More than half of the smokers were (51.9%) favored to smoking in public places followed by friend's house 14% (Tarafdar et al., 2009).

According to Hair *et al.* (2017), age, gender, and parents smoking status, family awareness independently associated with the adolescents' smoking. The association between smoking and emotional and behavioral problems among the adolescents, thus addressing adolescents' needs regarding their mental health could be helpful in designing and implementing any effective effort in the school environment and elsewhere for preventing or combating adolescents' cigarette smoking during this critical period. The related factors like age, gender, father's

smoking status, family awareness activities and SDO total difficulties score were independently associated with adolescent's smoking. Adolescents aged from fifteen years had 6.82 times greater odds (OR=6.82, 95% CI: 2.96-15.72) for smoking compared to those aged from 10 to 14 years. The risk for smoking was more than threefold (OR= 3.67, 95% CI: 1.77-7.63) for those whose father was a smoker. Greater scores on SDQ total scores were associated with a greater likelihood for smoking with odds ratio equal to 1.09 (95% CI: 1.02-1.18). The children selling the tobacco products were found to be three times more likely to consume tobacco products than those who did not sell tobacco products as a result of their tobacco trading exposure (p<0.05) in Dhaka, Bangladesh. When the scoring criteria were imposed, tobacco selling children's mean score was significantly higher than the non-tobacco selling children in both attitudes (p<0.01) and practice (p<0.001) which implies that tobacco trading children practice and favor tobacco use more than other vendors (Pervin, 2016). Starting daily or occasional consumption of both smoking and smokeless tobacco after becoming a vendor was only seen among the tobacco selling children. Other factors those were found independently associated with child vendor's tobacco consumption status were, availing institutional education (p<0.05) and having tobacco consumer close friends (p<0.001). Tobacco consumption practice in tobacco sellers was also diverse as they found to be consuming cigarette, bidi, Huka, shisha, pan-masala, jarda, gul and khoini, whereas, the others sellers consumed cigarette, jarda and pan-masala (Mowafy et al., 2015). Now the issue regarding cigarette use by the minors or adolescents are mostly showed the behavioral aspects and tobacco products using and consumption pattern (Genilo and Sharif, 2015). Some of the studies identified the health effect of tobacco consumption and some found the lack of awareness. The association of selling cigarette with its consumption by the minors in Dhaka city only. In addition, the association of tobacco use of the minors with the parent's tobacco use behavior (Rahman et al., 2017). Few studies showed the causes and consequences of the minors' tobacco consumptions (Hossain J. et al., 2018); (Masud, 2015); (Genilo and Sharif, 2015); (Hossain A. et al., 2015); (Pervin, 2016) but this study focuses the prevalence, perception and awareness of minors and adolescents on cigarette selling and buying in Bangladesh.

3. Methodology

3.1. Study Design, Period and Area

This is a cross-sectional study designed for having a snapshot of the variables used in the study at the given period of time. Mixed method of research was used in this study which includes qualitative approach and quantitative approach. The study was conducted from March, 2017 to November, 2017. An intensive nine months were required to accomplish the work. The study area of this research covered the country as a whole as it was a policy research taken for the whole Bangladesh. As a result, the geographical coverage of the research explored a generalized outcome of the cigarettes selling to and by the minors of Bangladesh. In addition, the study area covered both rural and urban area of the country for survey questionnaire and interview as well. According to purposive sampling, we took three districts of Bangladesh named Dhaka, Chandpur and Rangpur. Dhaka city was selected as urban. Dhaka was chosen as it is the capital city of the country where most people from various walks of life live and come for different purposes. The rural area was studied by taking two districts named Chandpur and Rangpur. Rangpur is from the northern part and Chandpur is from southern part of the country.

3.2. Study Population and Sample

Target population for this study is the minors who are below the age of 19 in Bangladesh. All of the minors either boys or girls in this age group from the three districts namely Dhaka, Rangpur and Chandpur are the population of our study. The sample selection criteria are like subject to the age below 19, selling the cigarette and/or buying the cigarette not necessarily consuming the cigarette and who are willingly agree to respond or participate to the study (Table 1). Sample size for the study is determined by the following formula: $n = \frac{P(1-P) \times Z^2}{d^2}$

$$n = \frac{P(1-P) \times Z^2}{d^2}$$

Where,

Z= 1.96 for 5% level of significance

p= Expected proportion in the population =50%

d = Margin of error = 0.05 (considered)

So, $n = 384.16 \approx 384$

A total of 384 respondents were covered in the study for questionnaire survey among the minors. Moreover, a total of 10 KIIs and 50 IDIs have been conducted for qualitative study.

Table-1. Sample Distribution

Method	Salastad Cuanna	Study Area	Tatal			
Method	Selected Groups	Dhaka	Rangpur	Chandpur	Total	
	7-14 Years	63	26	22	111	
Personal Interview	15-16 Years	41	27	28	96	
reisonal interview	17-18 Years	92	52	47	191	
	Total	196	105	97	398	
Voy Informanta	Law Enforcers	3			3	
Key Informants Interview	Tobacco Control Activists	5			5	
THICH VIEW	Civil Society	2			2	
	Wholesaler	5	2	2	9	
	Retailer	10	3	3	16	
In-depth Interview	Hawker	15	5	5	25	
	Total	60			60	

Source: Field survey

3.3. Data Collection

It is a primary data-based study. There have been applied three most crucial data collection methods to explore the authenticity of the study. A semi-structured interviewer-administered questionnaire was set for the survey from the minor category. There were placed mostly closed ended questions and some open-ended questions in the questionnaire including any demographic and socio-economic information related questions. For survey questionnaire, there were deployed five research assistant all of them the university graduates and having prior experiences in data collection. They were chosen by the PI purposively. Prior to that, the questionnaire was mostly finalized. Then it was translated into Bengali as the respondents' mother tongue is also Bengali. The data collectors were given a rigorous two day-long training on data collection techniques, processes as well to make them familiar with every single questions in the questionnaire. They were made feel of the research objective and the program aims. For smooth conduction of the study, a questionnaire was developed consisting of several parts. The first part of the interview schedule was consisting of socio-demographic status related questions and the second part consisted of use of cigarettes, measurement on the level of awareness on tobacco control law and some specific questions for under aged sellers and buyers. An in-depth interviewed was done to collect the information from some adult cigarette sellers. A Key Informants Interview was done to grasp the real situations and explored the perspectives of this particular area. There were arranged KII with some government officials and civil society persons as well as the tobacco control activists. The KII respondents were chosen purposively. A pre-determined guideline was utilized for collecting information from the key informants. A pilot study was conducted to test reliability and validity of the instruments. First of all, three districts of the country were selected purposively. Dhaka is selected as the capital city and where the citizens from every corner of the country dwell. Rangpur was selected from the northern part and Chandpur was selected from the southern part of the country. Secondly, individual respondents were reached from the selected districts, then the districts were divided into some sub areas. The buyers and sellers within the age of eighteen were purposively selected as the sample of the study. Those who were buying or selling the cigarette in spots within 18 age, were purposively selected for the survey. As this study was conducted having the responses of three different types participants. So, there were used different sampling techniques. For the survey questionnaire among the minor respondents, in a spot, participants were purposively obtained. Those who were smoking the cigarette and buying the cigarette found in spots as well as the sellers with this age limit were selected for the questionnaire survey. For the case of adult sellers with whom the In-depth Interviews (IDI) were conducted and reached through the simple random sampling technique. The key informants of the study were obtained by using the purposive sampling technique.

3.4. Data Analysis

After having the data collected from various sources, the raw data was gathered, cleaned and maintained. The data identified and defined by the specific indicators were systematically utilized and categorized. Collected data was categorized and examined in the light of theory and knowledge about the data context. Analysis-inferences and conclusions were drawn based on the broad questions what, how and why affects. Analysis is an important part of any research study. Collected data was checked and cross-checked before entering into software and was analyzed with the help of SPSS Windows Software Program (version 20). Analysis for comparison, dividing respondents into different groups will be done to meet the objective of the study. Descriptive analysis has been performed to know the characteristics of the study subjects. A comparison of socio-demographic and economic characteristics of study subjects to current tobacco smokers has been performed. Cross tabulation and Bivariate analysis were done to find any association between two variables and for testing by Chi-square. The data was mostly presented in simple frequency tables and also presented in diagram. Then it has to made different types of tables, diagrams and Pie chart to make a decision. The qualitative data was analyzed in the light of contextual and thematic analysis. Then, these qualitative data were presented as supplementary information to the relevant segment of the study.

4. Results and Discussion

4.1. Demographic and Socio-Economic Characteristics

Distribution of respondents into two basic categories was described in Figure 1. The total number of respondents was 398. The gap between the percentage of the ratio of buyers and sellers is very small. The percentages of buyers and sellers are 52.0% and 48.0% respectively (Figure 1).

Minor cigarette Minor cigarette seller buyer 48.0% 52.0%

Figure-1. Category of the Respondents

4.1.1. Age of the Respondents

The age of the respondents, both sellers and buyers, was articulated in Table 2 through three broad categories. The highest number of respondents was found in 17-18 years age group among both sellers (40.3%) and buyers (55.1%). The second highest number of respondents among sellers (30.4%) and buyers (25.6%) was found in less than 15 years age group. 15-16 years age group covered 29.3% (sellers) and 19.3% (buyers) among the respondents (Table 2).

Table-2. Age of the Respondents

A co Choun	Seller		Buyer		
Age Group	Respondents	Percent	Respondents	Percent	
Less than 15 Years	58	30.4	53	25.6	
15-16 Years	56	29.3	40	19.3	
17-18 Years	77	40.3	114	55.1	
Total	191	100.0	207	100.0	

Source: Field survey

4.1.2. Place of Living

The places of living were explained in Table 3 and those places were classified into four categories. Higher proportion of the respondents from both sellers (51.3%) and buyers (44.0%) live in rented houses. More than a quarter seller (27.2%) and nearly fifty percent buyers (43.0%) live in their own houses. Rented house and own house covered jointly more than three quarters sellers (78.5%) and more than four fifth buyers (87.0%). Respondents living in slum are less than 10% among sellers (9.4%) and less than five percent among buyers (3.9%) as well. Less than ten percent buyers (9.2%) live in other place where 12.0% sellers live in other places (Parisod et al., 2016).

Table-3. Respondents' Place of living

	Seller		Buyer		
Place of Living	Respon dents	Percent	Responden ts	Percent	
Rented House	98	51.3	91	44.0	
Own House	52	27.2	89	43.0	
Slum	18	9.4	8	3.9	
Other Place of Living	23	12.0	19	9.2	
Total	191	100.0	207	100.0	

Source: Field survey

4.1.3. Respondents Living Pattern

With whom respondents are living was articulated in Table 4 and those were categorized into four sections. Nearly three quarter of sellers (74.9%) and more than three quarter of buyers (85.5%) live either with family or with their relatives. Less than ten percent respondents live with friends where sellers are 8.4% and buyers are 8.2%. No buyer lives with other vendors while more than ten percent sellers (12.0%) live with other vendors. Less than five percent sellers (4.7%) and more than five percent buyers (6.3%) live along (Masud, 2015).

Table-4. Respondents Living Pattern

Living nottons	Seller		Buyer		
Living pattern	Respondents	Percent	Respondents	Percent	
With family/Relative	143	74.9	177	85.5	
with friends	16	8.4	17	8.2	
with other vendors	23	12.0	0	0.0	
alone	9	4.7	13	6.3	
Total	191	100.0	207	100.0	

Source: Field survey

4.1.4. Educational Attainment

The educational status of the respondents was described in Table 5. In this table educational levels are classified into five sections. More than one-third of the sellers (35.1%) didn't complete primary level while more than one-third of the buyers (34.3%) completed their SSC/HSC. More than ten percent sellers (11.5%) and less than ten percent buyers (7.7%) are totally illiterate. More than a quarter of sellers (29.8%) completed primary level and 13.1% completed JSC level. More than ten percent sellers (10.5%) completed SSC/HSC. 21.3% buyers completed JSC level which is the second highest portion of the buyers (Hossain A. *et al.*, 2015).

Table-5. Educational Attainment of the Respondents

Education Lavel	Seller		Buyer		
Education Level	Respondents	Percent	Respondents	Percent	
Illiterate	22	11.5	16	7.7	
Less than primary	67	35.1	40	19.3	
Primary completed	57	29.8	36	17.4	
JSC Completed	25	13.1	44	21.3	
SSC/HSC completed	20	10.5	71	34.3	
Total	191	100.0	207	100.0	

Source: Field survey

4.1.5. Estimated Family Income

Family income of the respondents was described in Table 6 and the income range is categorized into three groups. Less than two-fifths of the sellers' (38.2%) family income is 5000 to 10000 Taka where most of the buyers' (63.8%) family income is more than 10000 Taka. More than a quarter of sellers' (29.8%) family income is less than 5000 where less than ten percent of buyers' (9.2%) family income is less than 5000. More than a quarter of buyers' family income (27.1%) is 5000 to 10000 where 31.8% sellers' family income is more than 10000. The differences among family income distribution of sellers are not more than 10% where the differences among family income distribution of buyers are more than 35% (Driezen *et al.*, 2016a).

Table-6. Estimated Family income of the respondents

Incomo Dongo	Seller		Buyer		
Income Range	Respondents	Percent	Respondents	Percent	
Less than 5000	57	29.8	19	9.2	
5000-10,000	73	38.2	56	27.1	
More than 10,000	61	31.9	132	63.8	
Total	191	29.8	207	100.0	

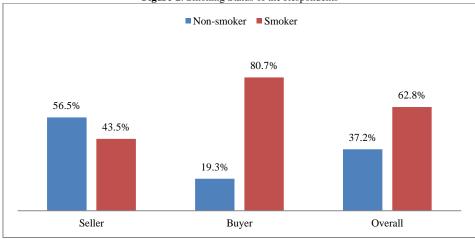
Source: Field survey

4.2. Tobacco Use in the Form of Cigarette

4.2.1. Smoking Status of the Respondents

Smoking status of the respondents both sellers and buyers were described in Figure 2. Both sellers and buyers may be smokers and non-smokers and the above figure articulates the situation. More than half of the sellers (56.5%) are non-smokers while a big portion of sellers (43.5%) are smokers. More than three quarters of buyers (80.7%) are smokers and less than a quarter of buyers (19.3%) are non-smokers. In case of overall situation, majority of the respondents (62.8%) are smokers.

Figure-2. Smoking Status of the Respondents



4.2.2. Frequency of Smoking of the Smokers

How often smokers are smoking was expressed in Figure 3. The smoking habit of both sellers and buyers are measured on daily and occasional basis. More than fifty percent buyers (53.9%) and nearly three-quarter sellers (71.1%) smoke daily. Nearly fifty percent buyers (46.1%) and more than a quarter of sellers (28.9 %) smoke occasionally.

Buyer

Seller

Figure-3. Frequency of smoking of the smokers

46.1%

53.9%

71.1%

4.2.3. Reasons of Smoking

Both sellers and buyers are addicted to smoking and there are multiple reasons behind the smoking. In table 7, table the causes of smoking are categorized into five sections. Less than half of the seller (45.8%) and most of the buyers (47.9%) smoke because of peer pressure. Interestingly, the second highest influential cause behind the smoking, among sellers and buyers, is just for fun. 32.5% sellers and 36.5% buyers smoke for doing fun. More than a quarter of sellers (30.1%) and less than a quarter of buyers (24.0%) smoke because of addiction. Fashion (8.4%) and frustration (10.8%) are the least important cause among sellers and buyers respectively. On the other hand, percentage of sellers (18.1%) and buyers (10.8%) smoke because of frustration.

Table-7. Causes of Smoking of the Smokers

	Seller	8					
	Seller		Buyer				
Causes	Respondent	Percent of	Respondent	D 4 - 6 C			
	number	Cases	number	Percent of Cases			
Frustration	15	18.1	18	10.8			
Peer-pressure	38	45.8	80	47.9			
Fashion	7	8.4	30	18.0			
Addiction	25	30.1	40	24.0			
Just for Fun	27	32.5	61	36.5			
Multiple response percentage base	Multiple response percentage based on causes						

Source: Field survey

4.2.4. Sources of Getting the Cigarette by the Respondents

From where a respondent gets cigarette was described in Table 8. The potential places are classified into four sections. Some of the sellers and buyers get cigarette from retail store where 40.2% sellers and 73.0% buyers get cigarette from this place. Same percentage of sellers (20.5%) and buyers (20.5%) get cigarette from friends. Sellers get cigarette from own shop (21.4%). The least portion of sellers (17.9%) and buyers (6.5%) get cigarette from hawker.

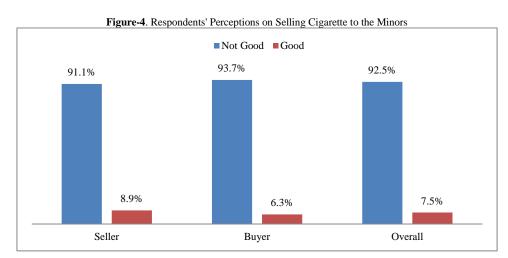
Table-8. Spots of getting the cigarette

	Seller		Buyer		
Spots	Respondent number		Respondent number	Percent of Cases	
From Retail Store	47	40.2	157	73.0	
From Hawker	21	17.9	14	6.5	
From Friend	24	20.5	44	20.5	
From Own Shop	25	21.4	0	0.0	
N=250, Multiple response percentage					

Source: Field survey

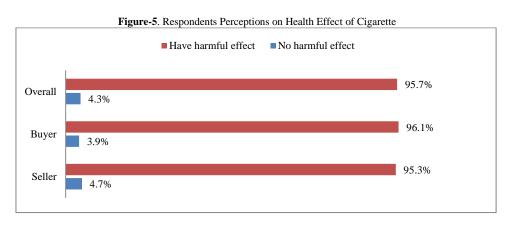
4.2.5. Respondents' Perceptions on Selling Cigarette to the Minors

What respondent think about selling cigarette to the minors was explained in Figure 4. Most of the sellers and buyers think that selling cigarette to the minors is bad job. More than ninety percent sellers' (91.1%) and buyers' (93.7%) perception is, selling cigarette to the minors is not a good job. Less than ten percent sellers (8.9%) and buyers (6.3%) opined that selling cigarette to the minors is a good job. Overall perception is almost identical to the previous statistics (Amin, 2015).



4.2.6. Respondents' Perceptions on Health Effect of Cigarette Use

Cigarette uses have terrific health effect on overall healthcare. Respondent's perception is described in Figure 5. More than ninety five percent sellers (95.3%) and buyers (96.1%) think that using cigarette has harmful effect on health while less than five percent sellers (4.7%) and buyers (3.9%) said that using cigarette has no harmful effect on health. The overall perception of majority respondents (95.7%) is using cigarette has harmful effect on health.



4.3. Sellers' Responses

4.3.1. Obstruction for Selling the Cigarette

Whether the sellers face obstruction or not while selling cigarette was articulated in Figure 6. Among 191 sellers, more than three quarters of sellers (84.8%) didn't face any obstruction at all while only 15.2% sellers faced obstruction. Among 15.2%, more than eight percent sellers (8.9%) obstructed by law enforcement officers while some of the sellers obstructed by tobacco control activist (3.1%) and relatives (3.1%).

Not Obstructed 84.8%

Other 15.2%

Relatives 3.1%

Tobacco control activist 3.1%

4.3.2. Influencing Factors for Selling Cigarette

Factors that influence the sellers for selling cigarette was described in table 9. The influencing factors are categorized into seven sections. Less than half of the sellers (45.5%) sell cigarette for earning more money where taking care of family business (41.9%) is the second highest reason for selling cigarette. Both reasons are much more influential than that of others. 16.8% sellers sell cigarette after being influenced by the agents of Tobacco Company.

Table-9. Influencing Factors for Selling Cigarette

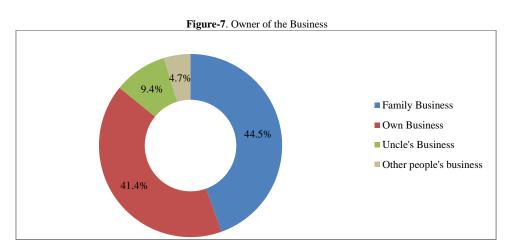
Influenced by	Respondents (N=191)	Percent of Cases
For earning more money	87	45.5
To take care of family business	80	41.9
By the agents of tobacco company	32	16.8
By relatives	12	6.3
No way to get other job	8	4.2
Willingly	6	3.1
Having gift from the tobacco Company for free	3	1.6

Source: Field survey

More than five percent sellers (6.3%) sell cigarette after being influenced by the relatives while less than five percent sellers sell cigarette willingly (3.1%), because of job shortage (4.2%) and having gift from the tobacco Company for free (1.6%).

4.3.3. Owner of the Business

Ownership of the business was described in Figure 7. In this figure the business ownership is classified into four sections. Less than half of the sellers (44.5%) said that they are doing family business while 41.4% said that they are doing their own business.

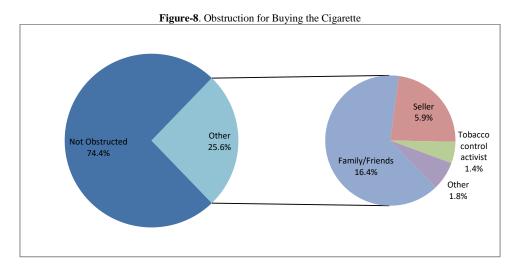


Family business and own business jointly covered 85.9% which is more the three quarter of total sellers. On the other hand, 9.4% and 4.7% sellers are doing uncles' business and other peoples' business respectively.

4.4. Buyers Responses

4.4.1. Obstruction for Buying the Cigarette

The obstacles for buyers while buying cigarette was described in Figure 8. The figure shows that among 191 buyers, about three quarter of buyers (74.4.0%) didn't face any obstruction while buying cigarette and the remaining 25.6% buyers faced obstruction at the time of buying cigarette.



Among 25.6% obstruction, a big portion was obstructed by the family and friends (16.4%) and sometimes sellers (5.9%) also obstructed them from buying cigarette. Only few of them obstructed by tobacco control activist (1.4%), senior others (1.8%).

4.4.2. Influencing Factors for Buying the Cigarette

Influencing factors behind the buying cigarette was articulated in table 10. The potential factors are categorized into seven sections. Majority of the buyers (63.3%) said that they were influenced by peer pressure. Nearly a quarter of the buyers (23.2%), being the second highest response, said that they were influenced for buying cigarette by the request of the family members (Bansal-Travers *et al.*, 2014).

Table-10. Influencing Factors for Buying the Cigarette

Influenced by	Number of respondents	Percent of Cases			
Peer pressure	131	63.3			
On request of the family members	48	23.2			
Senior brother of the locality	10	4.8			
By the agents of tobacco company	9	4.3			
Indirect tobacco promotional activities	7	3.4			
Willingly	6	2.9			
Colleague	6	2.9			
Multiple response Percent based on cases					

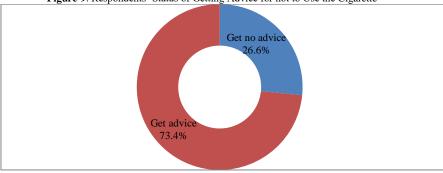
Source: Field survey

Less than five percent opined that they were influenced by the senior brother of the locality (4.8%), the agent of tobacco company (4.3%), indirect tobacco promotional activities (3.4%), willingly (2.9%) and by colleague (2.9%).

4.4.3. Respondents' Status of Getting Advice for not to Use the Cigarette

Using cigarette is very harmful for the minors and it brings multiple negative impacts to them. To what extend do the respondent get advice for not to use the cigarette was described in Figure 9. the figure shows that nearly three quarter of the buyers (73.4%) get advice for not to use cigarette while more than a quarter of the buyers (26.6%) get advice for not to use cigarette.

Figure-9. Respondents' Status of Getting Advice for not to Use the Cigarette



4.4.4. Buyers Get Advice from for not to Buy the Cigarette

According to the figure 9, most of the buyers get advice from different sources for not to use cigarette. The sources were articulated in the Table 11 and all sources are classified into six sections. According to the table, the main source of advice for not to buy cigarette is family.

Table-11: Buyers Get Advice from for not to Buy the Cigarette

Get Advice from	Number of respondents	Percent of Cases		
Family	102	49.3		
Friends	36	17.4		
Neighbors	29	14.0		
Relatives	28	13.5		
School/College/Madrasa	19	9.2		
Other sources	7	3.0		
Multiple response percentage based on cases				

Source: Field survey

Nearly fifty percent buyers (49.3%) opined that family is the prime source for advice. The second source of advice is friends (17.4%) where neighbors (14%) and relatives (13.5%) are the third and fourth source respectively. Less than ten percent buyers (9.2%) said that they got advice from their educational institutions like school, college, Madrasah etc. Sometime they get advice from other sources (3%).

4.4.5. Smoking Status of the Respondents According their Background Characteristics

To assess the tobacco consumption among the respondents in respect to their characteristics, chi-square test was done (Table 12). The statistical test showed that the category of the respondents (buyers or sellers) have significant association (p<0.001) with the tobacco consumption (Branston and Sweanor, 2016).

Table-12. Smoking Status of the Respondents according their Characteristics

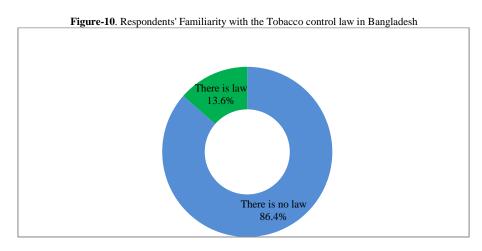
Charac	teristics of the	Non-smoker	•	Smoker		P-value
respondents	S	Frequency	Percent	Frequency	Percent	(Chi-square)
Cate	Seller	108	56.5%	83	43.5%	
C	Buyer	40	19.3%	167	80.7%	<0.001
	Less than 5000	33	43.4%	43	56.6%	
Fa mily Income	5001-10,000	64	49.6%	65	50.4%	< 0.001
mily Inco	More than 10,000	51	26.4%	142	73.6%	
Age	7-14 Years	69	62.2%	42	37.8%	
⋖	15-16 Years	38	39.6%	58	60.4%	< 0.001
	17-18 Years	41	21.5%	150	78.5%	
.01	Only working	66	34.2	127	65.8	
Professio	Only studying	26	22.8	88	77.2	
rof	Studying and working	52	69.3	23	30.7	< 0.001
n P	Working and want to study	4	25.0	12	75.0	
Ē	With family	122	40.3	181	59.7	
Live with	with friends	4	12.1	29	87.9	
ive	with other vendors	9	33.3	18	66.7	< 0.020
J	alone	5	27.8	13	72.2	
	with relatives	8	47.1	9	52.9	

Source: Field survey

In addition to this, the income level of the family (p<0.001), age group of the respondents (p<0.001), and also the profession of the participants (p<0.001) have the significant impact on association with cigarette consumption. In contrast, the living status, with who they live with has no significant association (p<0.020) with the tobacco consumptions either they live with their family or friends or even with other vendors or alone, these variations have no effect on their tobacco consumption (Camenga et al., 2018).

4.5. Awareness of the Sellers and under-aged Buyers about the Law and Prohibition 4.5.1. Respondents' Familiarity with the law

Among the total of 498 respondents, only 54 (13.4%) respondents assured that they know that is a law regarding the tobacco in Bangladesh. Highest majority (86.45%) of the participants have no prior knowledge on if there was any law on tobacco control in Bangladesh. The familiarity with the Policies, Acts or laws regarding the tobacco or tobacco products usage was asked from the minor participants of the study.



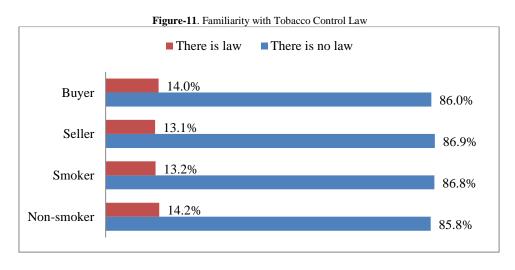
It is also found in our qualitative study that the adult sellers whose age are above eighteen and selling cigarette to the minors are not familiar with the law regarding the tobacco control in Bangladesh. Most of them have agreed that they never heard of such kind of Acts or Rules by which government protects the selling cigarette to the minors. Company or authority also does not inform them about the Acts and prohibition (Driezen *et al.*, 2016b).

One of the respondents opine in this context:

"I have no knowledge in this regard if there was a law on tobacco control in our country. No one told me about this. I have never protected by anybody for selling anywhere to anybody and even, no one prohibited me."

4.5.2. Familiarity with Tobacco Controlling Law According To Category of the Respondents and Smoking Status

Above mentioned diagram shows the categorized familiarity of the participants about the tobacco controlling Law in Bangladesh. Only 29 (14.0%) of the buyers and 25 (13.1%) of the sellers agrees that they know that there is a law on tobacco control in Bangladesh. On the other hand, a good number of cigarette buyers which is about 86.0% among have no prior familiarity with the law which is about to 86.9% for the case of minor sellers.



Simultaneously, in the case of the minor smokers of the participants in the study, a number of 33 (13.2%) knows that there is a law regarding the tobacco control in our country, which is about 14.2% of the non-smokers. Among the participants, a number of 217 (86.8%) of the smoker said that they were familiar with the tobacco controlling law in Bangladesh which is about to 127 (85.8%) in the case of non-smoker.

4.5.3. Perceptions of the Minor Respondents about Tobacco Controlling Law in Bangladesh

The Figure 12 demonstrates the perceptions of the minor respondents about the tobacco control law in various segments. Of the total 498 participants, 85.5% of the respondents agreed on ban on smoking at the public place and 7.3% of the respondents disagreed with this and the same percent of the participants have a neutral position on this segment. In the case of ban on advertisement and promotional activities of the cigarette and tobacco products, only 9.0% participants disagreed on this law that is they may favor on the advertisement of cigarette, 20.3% of the respondents haven't taken any position as they are neutral on advertisement and most of the attendant (70.7%) of this survey agreed with on ban on advertisement of tobacco products.

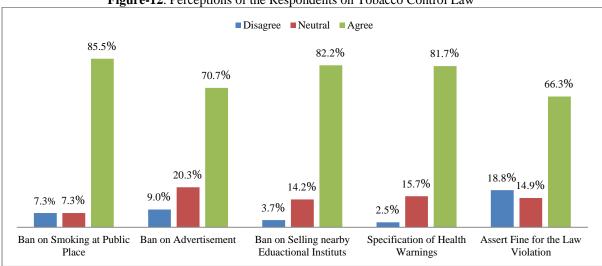


Figure-12. Perceptions of the Respondents on Tobacco Control Law

Ban on selling nearby educational institutions was a component of the measurement of awareness of the participants. About 3.7% attendant to this segment disagreed with it and of 14.2% have a neutral position. Furthermore, 82.2% participants agreed that it should be enacted the ban on selling the cigarette or tobacco products nearby the educational institutes (Nargis *et al.*, 2018). Specification of the health warnings at the front of cigarette shop as well as pictorial health warnings at every cigarette pack is favored by the 81.7% participants of the total respondents. Only 2.5% attendant disagreed with the health warning and about to 15.7% participants have taken no position. Simultaneously, 18.8% of the participants disagreed with asserting the fine on the violation of the law which is about to the 14.9% who has a neutral voice on punishments (Hossain A. *et al.*, 2015). A great number of the respondents (66.3%) agreed that there should be assert fine for the law violations.

4.5.4. Adult sellers' Perceptions and Awareness

Though, all of the participants of the qualitative study agreed that they think that it not good to sell the cigarette to any minor. They suppose it should be stopped and banned by the government and the concern authority. Sellers are not exactly able to measure the age of the buyers. In contrast, most of them are not aware of the law and the prohibition. One attendant says that:

"I have no knowledge on this if selling the cigarette to any minors is prohibited by the law. I've been selling cigarette here for many years. No one has said me yet regarding this issue. I've just known from you right now. But, I think selling cigarette to the minor and even selling by them is not a good job."

It is apparent evidence that most of the adult sellers have no prior knowledge about the law and prohibition. They hardly hear of the minor's issue in cigarette consumption. Majority agreed that authority, company or civil society also did not inform them about the Acts and policies (Pradhan *et al.*, 2013). A small number of respondents noticed that they just heard an Act regarding the tobacco but no insight knowledge on it, even about the minors' issue.

Another respondent explains regarding the minor sellers:

"They (minor sellers) may be influenced by somebody or something. Family, relatives or anybody may engage them to this business and their families are leaded by their earnings."

4.5.5. Status of Selling Cigarette by the Adult Sellers

From our qualitative study, it is found that most of the adult sellers agree that they sell the cigarette to the minors without any doubt and hesitations. They don't bother about the buyers whether the buyer is male, female, street child or the minor. As one of the respondents opine:

"Every day, I've approximately 200 cigarette buyers. Among them, at least 40-50 buyers are under aged. Most of these under-aged cigarette buyers are students and child labor. Students come after completion their classes and the others come at any time. They come to buy, I sell. If I will not sell, someone else will sell. So, I am selling".

Sellers have no intention about the age of the buyers. For their business purpose and to earn more, they don't bother on buyers' age and so on (Richard *et al.*, 2004).

6. Conclusions and Recommendations

The study aimed to identify the flaws and implementation related loopholes of the provision of ban on selling cigarette to and by the minors in Bangladesh. The study found that the proportion of the selling cigarette to and by the minors is high. Awareness of the sellers and under-aged buyers are not up to the mark and majority of them are not familiar with the law regarding the tobacco control in the country as well as the prohibition and punishment criterion for selling cigarette to the minors and for engaging them to this business. The implementation of law and its provision gets minimum concentration in the line of government's mainstream agendas. Punishment for law violations, especially contravening the laws regarding the minor category has no exemplary. Lack of proper, adequate and competent institutional capacity to execute the law, performance of the regulatory bodies and a policy guideline are the main reasons behind the non-implementation. The existing acts and rules have no luminous, lucid and clear guideline about the minor issues of the tobacco control. Reluctant to obey the law, negligence and little priority of the authority, lack of acquaintance with the law, awareness among and proper monitoring by stakeholders are crucial most reasons for non-implementation of the Acts. Having the insights on devastating effects of cigarette selling to and by the minors in Bangladesh, it is high time for the policy makers and the concern authority to take necessary steps to protect the minor from this vulnerability. The findings suggest that an awareness building program should be launched by the government including NGOs, academic institutes and voluntary organizations through academic syllabus, seminars, workshops, posters, and leaflets to raise awareness on the bad effects of tobacco.

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