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## KAP Study of Tobacco Users among the Garment Workers at Dhaka City in Bangladesh

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#### Authors' contributions

This work was carried out in collaboration among all authors. Authors MAIK, MIK, IJ and MRA designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors MJAS, SMSI, HAR and SMM managed the analyses of the study. Authors MAIK and IJ managed the literature searches. Authors MRA, IJ and MAIK replied to the reviewers comments. All authors read and approved the final manuscript.

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## ABSTRACT

The readymade garment (RMG) industry is a key sector of Bangladesh economy. This sector brings in about 78% of the country's total merchandize export earnings. More than 3.2 million people are working in this sector and mostly females from underprivileged social classes. Employment in this Ready-made garment sector in Bangladesh provides workers with economic benefits and some empowerment.

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A descriptive cross-sectional study followed by a qualitative approach was utilized. Through proportionate quota sampling, 560 garments workers were recruited from 6 (one large, two medium, and three small) garment factories in Mirpur area of Dhaka city.

Almost all of the garments workers knew that both smoking and smokeless tobacco (98.4%) is harmful for health. Knowledge on specific health hazards of smoking (96.96%) tobacco was relatively higher than those of smokeless (90%) tobacco. Electronic media (Radio/TV/Cinema) was the most common source of their knowledge (92.9%). In case of smoking tobacco, cancer (63.6%) was the mostly reported disease caused by smoking tobacco, followed by lung cancer (15.7%) and heart attack (11.3%). On the other hand, for smokeless tobacco, cancer (29.8%), followed by oral cancer (26.6%) and lung cancer (15.0%) was mostly reported diseases by the garments workers. Garment workers' knowledge on tobacco control policy was found to be very low. Only 35.0% knew about the policy. Although few garments workers know about the rules for prohibition of tobacco product in public place (25.7%) and public transport (11.3%), other specific rules under tobacco control policy were not known to majority of them.

The present study provides a scientific base regarding current tobacco using practice among garments workers in Dhaka city and their knowledge and attitude towards tobacco. Finding revealed from qualitative analysis of data suggested that now-a-days smoking is considered as a trend; people have to smoke for showing smartness or to maintain social status. Peer influence also plays an important role for initiating and maintaining smoking status. Socio-cultural influence for smokeless tobacco consumption was not well documented by this study which indicated a need for more focused qualitative study.

Keywords: Knowledge, attitude and practice (KAP); garments workers; tobacco; health hazards.

## 1. INTRODUCTION

The readymade garment (RMG) industry is a key sector of Bangladesh economy. This sector brings in about 78% of the country's total merchandize export earnings. More than 3.2 million people are working in this sector and mostly females from underprivileged social classes. Employment in this Ready-made garment sector in Bangladesh provides workers with economic benefits and some empowerment [1]. Though Bangladesh is now turning into a developing country, a large section of its population still belong to the poorest of the poor. According to WHO, over 1000 million people worldwide are employed in small-scale industries. The garment industry of Bangladesh is a one such industry. It is semi-structured sector, mostly run by private establishments. Garment workers are underprivileged group and they take tobacco as an amusement and a part of social culture. Smoking tobacco and smokeless tobacco use is an understudied and least prioritized problem in South-East Asia. Tobacco use prevalence varies among countries in this region.. In Bangladesh, tobacco use has become not only a major contributor to the country's high morbidity but also the biggest drains to the nation's economy. In Bangladesh, some nationwide studies have shown high prevalence of both smoking (e.g., cigarettes, bidis) and use of smokeless tobacco (e.g., betel

quid with tobacco, *khoini, gul, zarda*). The prevalence of smoking is high among males (44.7%) as compared to females (1.5%), whereas the prevalence of smokeless tobacco is almost similar among both males (26.4%) and females (27.9%) and individuals with no education, lower household income, and a lower standard of living have higher smoking prevalence [2]. Current tobacco use (smoking or smokeless) among all adults is 43.3%). The proportion is higher in males (58.0%) than females (28.7%) [3].

As in Bangladesh the prevalence of Tobacco is quite high and so the frequency of oral diseases is also high. The smoking tobacco and chewing of tobacco products have a number of well documented detrimental effects on the oral cavity ranging from alteration of a person's appearance to others potentially fatal effect. The following disease are the principle conditions/diseases for which tobacco use carries an increased risk, tobacco stains and discolored teeth, halitosis, calculus also known as tartar, is a form of hardened dental plaque [4]. Among all Tobacco products, betel quid is the most commonly used product in most countries including Bangladesh (24.3%) and Thailand (1.8%). Nearly five percent of the adult population used tobacco as dentifrice in Bangladesh and India. The use of tobacco is very much common in all the countries of the South-East Asia especially in Bangladesh, India,

Myanmar, Nepal, and Sri Lanka. Tobacco is more commonly used in slum areas among the disadvantaged and low income groups. The general acceptance of tobacco use and low perceived health risk in those engaged in tobacco chewing is a major concern in India, as well as in Bangladesh. The habit of tobacco chewing is usually associated with the use different ingredients, which may have a synergistic effect on the development of diseases. High prevalence of chewing products in this region, especially among disadvantaged aroups is more, which calls for urgent intervention targeting the poor sections of the population. Many of the people generally know about the harmful effect of tobacco use on their health but many other detrimental effects on health of tobacco use yet not explained to them clearly as a result there are so many detrimental effects are not still well understood by the tobacco users. Thus there is a greater need of health education addressing both smoking as well as smokeless tobacco products harm among the users and non-users also [5].

Knowledge on the relationship between life threatening illness and exposure with smoking and smokeless tobacco has been compared between different countries. Data available from Global Adult Tobacco Survey (GATS) conducted in 14 low-middle income countries between 2008 and 2010 has been used for comparison. Knowledge on smoking tobacco as a cause of serious illness was uniformly high in almost all of the countries (>90.0%) except China (81.8%). Regardless of age, gender and residence, almost all of the respondents demonstrated knowledge on the devastating impact of smoking tobacco. Although 97.4% respondents in Bangladesh believed that smoking can cause serious illness, the level of awareness varied in terms of different types of illness. More than 90 percent of the respondents know the relationship between tobacco and lung cancer where as correlation between smoking tobacco with heart attack (40.6% in China, 65.1% in India) and stroke (28.2% in China, 50.5% in India) was relatively low. In Bangladesh, the percentages of respondents who believed tobacco as a cause for lung cancer, heart attack and stroke was 96.0%, 90.2%, and 87.2% respectively. Except China (64.3%), majority of the respondents (>80%) of all countries believed that second hand smoking can also cause serious illness. Even though age and gender variation was presence, very high number of respondents (95.2%) in Bangladesh possessed this

knowledge. Younger people were more aware about the impact of second hand smoking than the older one. Similarly, percentages of male who believed that smoking can cause serious illness were 97.0% which was 89.9% for the female counterpart.

In most of the countries where GATS was conducted, awareness of smokeless tobacco in relation with serious illness was very poor except in Bangladesh (92.7%) and India (88.8%). Although it slightly varies in terms of age, noticeable differences were not observed for gender or residence. 93.6% of the respondents between 25-44 age group have knowledge in this regard whereas it was 87.1% for people older than 65 years [6].

Despite knowledge regarding harmful effect of tobacco, people have positive attitude towards smoking tobacco. In a study, smokers and sometimes their non-smoking family members listed a number of benefits of smoking such as killing of time, coping with stress, being part of a group, enjoying happiness and relaxation. It also viewed as beneficial for keeping awake, solving problem, doing calculation etc.

Smoking practice is influenced by social environment. It was observed as an important part of men's gathering and often evokes never user as well as those who have quit smoking to have cigarettes. Apart from personal pleasure, smoking was described by both smokers and non-smokers as mandatory for a man in current social environment.

Family environment was shown to have an influence on smoking practice. It was possible to keep the house or bedroom free of smoking by imposing restriction by family member. In addition co-smoking within family members was viewed as enhancing family bonding and passing happy time. Wives often do not want to limit their husbands' smoking behavior to avoid destroying family atmosphere. Smoking was also associated with family gathering such as birthday, weeding ceremony etc. Relatives use cigarette as a common gift item for men [7].

About 82% people did not know that smokeless tobacco is as hazardous as smoking. Although people have positive attitude towards tobacco, it is not reflected in their regular practice. In a study, 50% people believed that tobacco use should be prohibited in public place and more than 85% people believed that tobacco should

not be used in front of children, but less than half of subjects wanted to quit tobacco and less than quarter subjects had advised other tobacco users to quit tobacco [8].

## 2. METHODOLOGY

#### 2.1 Study Area and Period

The Study takes place in different garment factories of Mirpur area in Dhaka city of Bangladesh during February 2014 to January 2015.

## 2.2 Study Population

Target population of this study includes both male and female workers of readymade garments factories in Mirpur area of Dhaka city. Workers moving frequently and changing their residence are not included as study population.

## 2.3 Sampling Design

A mixed-method approach (quantitative & qualitative) was designed for this study.

As 70% of total garments workers are female, the ratio of male and female worker in garments factory is 3:7 [1]. Considering this ratio, the number of male and female workers in the study sample were 168 and 392 respectively. For each unit 21 male and 49 female workers were recruited by using simple random sampling.

For qualitative part of the study, total 5 Focus Group Discussion (FGD) were conducted with the garments workers. One FGD was conducted in each garments factories where quantitative data collection were taken place. Each of the FGDs was consisted with 8-10 garments workers who were not recruited for quantitative data collection.

## 2.4 Data Analysis

SPSS 17.0 software was used for data entry and analysis. Descriptive analyses were done to summarize information by calculating the number and percent for categorical variables, whereas the mean and standard deviation (sd.) were calculated for continuous variables. For doing qualitative analysis, the recorded data has been transformed into text to prepare transcripts. Separate transcripts has been prepared for each FGDs. Transcripts were read thoroughly and coded accordingly. All of the coding has been grouped together under major themes and subthemes which were utilized to writing report.

## 3. RESULTS

The results of the present study were presented in four separate sections. The first section comprised of demographic characteristics of garments workers. The second section revealed findings related to tobacco using practice of the garments workers. Prevalence, types, frequency, initiation and duration of smoking and smokeless tobacco consumption practice was reflected in this section. In addition, expenditure on tobacco and places of using tobacco were also stated here. The third section deals with garments workers attitudes related tobacco. This section provides information on garments workers overall attitudes on tobacco, reasons for using tobacco, their wishes to stop tobacco and the reasons behind it. The fourth section is related to garments workers knowledge on health hazards, tobacco control policy and fine for violation of rules under tobacco control policy.

## 3.1 Demo-graphic Characteristics of Sample

Table 1 revealed that among total garments worker under study 70% were female. More than half of the respondents (54.6%) were at the age range of 18-25 years and a very few (1.6%) were under the age of 18 years. A higher percentage (42.7%) of the garments worker under the study was at secondary level of education where as a limited number (2.1%) was at the stage of higher education. A majority of respondents under this study was married (63.4%) and a small percentage was widow/widower (3.2%). Approximately half of the respondents were living in nuclear family (52.7%).

It was showed in Table 2 that average working experience of the respondents in the garments factory was more than 5 years (67.4 months). The above table also depicted that average monthly income and average family income of the respondents were 2,535 taka and 9,396 taka respectively.

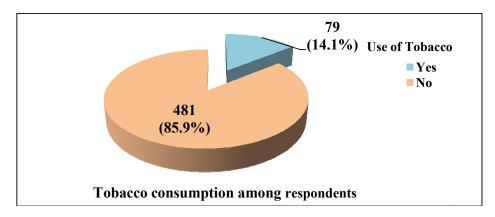
## 3.2 Tobacco Using Practice among the Garment Workers

Fig. 1 showed the prevalence of tobacco consumption of the garments worker under study was 14.1%. It was found from Table-3 that consumption of only smoking tobacco (58.2%) such as bidis, cigarette, pata bidis etc. was highly prevalent among the respondents. Only smokeless tobacco such as sada pata, jarda, gul, pan masala etc. was used by more than one third

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of all tobacco consumers. Respondents who use both smoking and smokeless tobacco were very

few in number (6.3%) and all of them were male (Table 4).



## Fig. 1. Prevalence of tobacco consumption among the garments worker under study

Table1. Percentages of socio-demographic characteristics among the garments worker under
study

Socio-demographic variable	Number	Percentage (%)
Overall	560	100.0
Gender		
Female	392	70.0
Male	168	30.0
Age		
≤17 years	9	1.6
18-25 years	306	54.6
26-35 years	185	33
36-45 years	48	8.6
46-55 years	12	2.1
Education Level		
Illiterate	75	13.4
Primary	198	35.4
Secondary	239	42.7
Higher secondary	36	6.4
Higher education	12	2.1
Marital status		
Un-married	162	28.9
Married	335	63.4
Divorced/separated	25	4.5
Widow/widower	18	3.2
Family type		
Nuclear	295	52.7
Joint	265	47.3

## Table 2. Working experience, monthly income & monthly family income of the garments worker under study

	Minimum	Maximum	Average	SD
Working experience (in Month)	1	432	67.4	51.6
Monthly income (BDT)	4,500	30,000	8,087	2,535
Monthly family income (BDT)	5,300	100,000	15,743	9,396

Demographic variable	Number (percentage)				
	Smoking only	Smokeless only	Both	Total	
Overall	46 (58.2)	28 (35.4)	5 (6.3)	79 (100)	
Gender			<b>x</b> <i>y</i>		
Male	46(88.5)	1(1.9)	5(9.6)	52(100)	
Female	0	27(100.0)	0	27(100)	
Age					
≤17 years	-	-	-	-	
18-25 years	13(68.4)	5(26.3)	1(5.3)	19(100)	
26-35 years	28(68.3)	10(24.4)	3(7.3)	41(100)	
36-45years	3(20.0)	11(73.3)	1(6.7)	15(100)	
46-55 years	2(50.0)	2(50.0)	-	4(100)	
Education					
Illiterate	3(17.6)	14(82.4)	-	17(100)	
Primary	13(52)	11(44.0)	1(4.0)	27(100)	
Secondary	24(80)	3(10.0)	3(10.0)	30(100)	
Higher secondary	4(100)	-	-	4(100)	
Higher education	2(66.7)	-	1(33.3)	3(100)	
Marital status					
Un-married	11(84.6)	1(7.7)	1(7.7)	13(100)	
Married	35(58.3)	21(35.0)	4(6.7)	60(100)	
Separated/divorced	-	1(100.0)	-	1(100)	
Widow/widower	-	5(100.0)	-	5(100)	
Family type					
Single	22(55.0)	16(40.0)	2(5.0)	40(100)	
Joint	24(61.5)	12(30.8)	3(7.7)	39(100)	

Table 3. Types of tobacco products consumed among the garments worker under study by selected demographic characteristics

Among the male tobacco users 88.5% used only smoking tobacco and most of them were at the age between 18 to 25 years (68.4%). Consumption of only smoking tobacco was highly prevalent among those tobacco users who were unmarried (84.6%), lived in joint family structure (61.5%) and were at higher secondary stage of education(100 percent). Since no female were found as only smoking or both smoking and smokeless tobacco user, all of the female tobacco users consumed only smokeless tobacco (100%). No male respondents were found to consume only smokeless tobacco.

Table 4 also demonstrated that prevalence of only smokeless tobacco using practice increase with age, the highest percentages was in the age group between 36-45 years (73.3%), whereas the lowest percentage was among the younger age group of 26-35 years (24.4%).

Smokeless tobacco using prevalence was found to decrease with increasing level of education. Higher percentages of only smokeless tobacco users were illiterate (82.4%) and no respondents at higher secondary and grater level of education were found to use only smokeless tobacco. By marital status, only smokeless tobacco using practice was highly prevalent among those who were divorced (100%) and those who were widow/widower. Lowest percentages (7.7%) of unmarried respondents were found to be consumed only smokeless tobacco.

By family type, the percentages of using only smokeless tobacco was higher among the respondents lived in single family structure (40%) than those of joint family type (30.8%).

#### 3.2.1 Practices of using smoking tobacco

#### 3.2.1.1 Smoking tobacco consumption status

From Table 4, it was showed that majority of the respondents used smoking tobacco on daily basis (82.2%). By age, it was found that daily practice of using smoking tobacco was increased with increasing of age. The highest percentages of daily smoker was in the age group of 36-45 years and 46-55 years (100%) where as the lowest percentage was found in the age group of 18-25 years (85.7%). Reverse pattern was observed in case of occasional smoking practice; it was decreased with increasing age. A highest

percentage of occasional users were in the age group of 18-25 years (14.3%) where as no one within the age group of 36-45 years and 46-55 years was occasional smoker. By education, daily smoking practice was highly prevalent among illiterate or at higher education level (100%) and it was relatively less for respondents with higher secondary education level (75.0%). Opposite pattern was found to be observed in case of occasional tobacco using practice. Percentage of occasional tobacco using practice was highest among the respondents with higher secondary level of education (25.0%) where as the percentage was lowest among illiterate and higher education group (0%).

By marital status, percentage of unmarried (91.7%) daily smokers was slightly higher that of married respondents (87.2%). Just opposite pattern was observed for occasional smoker.

By family type, daily tobacco using practice was little bit higher among the respondents in single family structure (95.8%) than those of joint family structure (81.5%).

#### 3.2.1.2 Initiation of smoking tobacco

Age of initiation of smoking tobacco: Table 5 depicted that more than half of the smokers initiated to smoke at 18-25 years of age (54.9%). A lowest percentage of smokers initiated smoking after the age of 25 years (5.9%). 39.2% initiated smoking before 18 years. Initiation of smoking before 18 years was highly prevalent among the respondents with age group of 18-25 years (57.1%). By education, the percentage of smoking initiation before 18 years was highest among illiterate respondents (66.7%). With increasing of age the percentages of smoking initiation before 18 years was found to be decreased up to secondary education. At higher secondary level of education, it was found to be increased. By marital status, smoking initiation before 18 years was higher among un-married (58.3 percent) respondents than married respondents (33.3%). The percentage of smoking initiation before 18 years was almost same for respondents within single and joint family structure. Highest percentages of respondents with the age of 26-35 years initiate smoking at the age of 18-25 vears.

 Table 4. Smoking tobacco consumption status among the garments worker under study by selected demographic characteristics

Demographic variable	Number (percentage)			
0	Daily user	Occasional user	Total	
Overall	45(82.2)	6(11.8)	51(100)	
Gender				
Male	45(82.2)	6(11.8)	51(100)	
Female	-	-	-	
Age				
≤17 years	-	-	-	
18-25 years	12(85.7)	2(14.3)	14(100)	
26-35 years	27(87.1)	4(12.9)	31(100)	
36-45years	4(100)	-	4(Ì00)	
46-55 years	2(100)	-	2(100)	
Education			( )	
Illiterate	3(100)	-	3(100)	
Primary	13(92.9)	1(7.1)	14(100)	
Secondary	23(85.2)	4(14.8)	27(100)	
Higher secondary	3(75)	1(25.0)	4(100)	
Higher education	3(100)	-	3(100)	
Marital Status				
Un-married	11(91.7)	1(8.3)	12(100)	
Married	34(87.2)	5(12.8)	39(100)	
Separated/divorced	-	-	-	
Widow/widower	-	-	-	
Family Type				
Single	23(95.8)	1(4.2)	24(47.1)	
Joint	22(81.5)	5(18.5)	27(52.9)	

By education, the prevalence of smoking initiation at the age of 26-35 years was highest among the respondents with higher education (66.7%) and lowest among illiterate (33.3%) respondents. By types of family, the percentage of smoking initiation at the age of 18-25 years was little bit higher among respondents in single (58.3%) than joint (51.9%) family. Smoking initiation after the age of 25 years was highest among the respondents with the age group of 46-55 years (50%). By education, smoking initiation after the age of 25 years was not found among any education group except respondents with secondary education (11.1%). By marital status, smoking initiation after the age of 25 years was only found among married respondents (7.7%). Smoking initiation after the age of 25 years was little bit higher among respondents within joint family (7.4%) than single family structure.

**Peer influence on initiation of smoking tobacco:** Although table 5 revealed that no respondent ≤17 years were found to initiate smoking, qualitative data from FGD reported that respondents started to initiate smoking at during their school age. Peer influence played a significant role to initiate smoking at very early

age. They were young enough to easily influence by the peer group when they were advised to smoke to control sleepy state at night to study for a longer duration.

**Influence of culture on initiation of smoking tobacco:** Social environment also played a major role to initiate smoking. In village children were used to take meal for the day laborers. Sometimes they asked the children to put fire on bidis for smoking. This kind of practice influences children to initiate smoking. During FGD, one of the male participants said.

#### 3.2.1.3 Duration of using smoking tobacco

Table 6 revealed that more than half of the respondents were using smoking tobacco from more than 10 years; only 27% were using smoking tobacco from 6 to 10 years and about 21.6 % respondents were using tobacco from 5 years or less. About 50 percent and 35.7% of the respondents between the age of 18 to 25 years were using smoking tobacco during 5 years or less and6-10 years respectively. It was also found that all of the respondents between the age range of 36-45 years and 46-55 years had been using smoking tobacco from more than

Table 5. Initiation of smoking tobacco consumption among the garments worker under study
by selected demographic characteristics

Demographic		Initiation of smo	king tobacco (in ye	ears)
variable	≤17	18-25	≥26	Total
Overall	20(39.2)	28(54.9)	3(5.9)	51(100)
Gender				
Male	20(39.2)	28(54.9)	3(5.9)	51(100)
Female	-	-	-	-
Age				
≤17 years	-	-	-	-
18-25 years	8(57.1)	6(42.9)	-	14(100)
26-35 years	9(29.0)	20(64.5)	2(6.5)	31(100)
36-45years	2(50.0)	2(50.0)	-	4(100)
46-55 years	1(50.0)	-	1(50.0)	2(100)
Education				
Illiterate	2(66.7)	1(33.3)	-	3(100)
Primary	8(57.1)	6(42.9)	-	14(100)
Secondary	7(25.9)	17(63.0)	3(11.1)	27(100)
Higher secondary	2(50.0)	2(50.0)	-	4(100)
Higher education	1(33.3)	2(66.7)	-	3(100)
Marital Status				
Un-married	7(58.3)	5(41.7)	-	12(100)
Married	13(33.3)	23(59.0)	3(7.7)	39(100)
Separated/divorced	-	-	-	-
Widow/widower	-	-	-	-
Family Type				
Single	9(37.5)	14(58.3)	1(4.2)	24(100)
Joint	11(40.7)	14(51.9)	2(7.4)	21(100)

10 years. By education, mostly respondents with primary education (35.7%) were using smoking tobacco from 5 years or less. Those who had been smoking from 6 to 10 years mostly were illiterate (66.7%). And those who had been using smoking from more than 10 years mostly were higher education (66.7%). with Higher percentages (41.7%) of unmarried respondents had been using smoking tobacco during 5 years or less and 6-10 years. On the other hand, more than half of the married respondents had been using smoking tobacco from more than 10 years. By family structure, those who had been using smoking tobacco during 5 years or less and 6-10 years most of them were living within joint family type. But who had been using smoking tobacco from more than 10 years most of them were living within single family (62.5%).

# 3.2.1.4 Number of smoking tobacco used per day

Table 6 revealed number of smoking tobacco used per day by three standard category  $\leq$ 5, 6-10, and >10. Overall more than half of the smoking tobacco users (54%) used  $\leq$ 5 smoking tobacco per day, 38 percent used 6-10 smoking tobacco per day, and only 8% used >10 smoking tobacco per day. Number of using smoking tobacco per day was found to be increased with age. Using smoking tobacco  $\leq 5$ , 6-10, and >10 per day was highly prevalent among respondents within the age of 18-25 years (71.4%), 36-45 years (75%) and 46-55 years (50%) respectively. By education, per day smoking ≤5 was highest among respondents with primary education (64.3%); per day smoking 6-10 was highest among respondents with higher secondary (66.7%), higher education (66.7%) and illiterate (66.7%); and per day smoking >10 was highest among respondents with higher secondary level(33.3 percent). By marital status, almost equal percentage of unmarried (54.5%) and married respondents (53.8%) were using ≤5 smoking tobacco per day; whereas percentages using of 6-10 smoking tobacco among unmarried respondents (45.5%) was higher than that of married respondents (35.9%). Only married respondents (10.3%) were found to use >10 smoking tobacco per day. By family type, percentage of using ≤5 smoking tobacco was higher within joint family (57.7%) than single family (50.0%). On the other hand, percentage of using 6-10 (41.7%) and >10 (8.3%) smoking tobacco was highest among single family.

 Table 6. Duration of using smoking tobacco among the garments worker under study by selected demographic characteristics

Demographic		Duration of using si	moking tobacco (in	years)
variable	≤5	6-10	>10	Total
Overall	11(21.6)	14(27.5)	26(51.0)	51(100)
Gender				
Male	11(21.6)	14(27.5)	26(51.0)	51(100)
Female	-	-	-	-
Age				
≤17 years	-	-	-	-
18-25 years	7(50.0)	5(35.7)	2(14.3)	14(100)
26-35 years	4(12.9)	9(29.0)	18(58.1)	31(100)
36-45years	-	-	4(100)	4(100)
46-55 years	-	-	2(100)	2(100)
Education				
Illiterate	-	2(66.7)	1(33.3)	3(100)
Primary	5(35.7)	2(14.3)	7(50.0)	14(100)
Secondary	5(18.5)	7(25.9)	15(55.6)	27(100)
Higher secondary	1(25.0)	2(50.0)	1(25.0)	4(100)
Higher education	-	1(33.3)	2(66.7)	3(100)
Marital Status				
Un-married	5(41.7)	5(41.7)	2(16.7)	12(100)
Married	6(15.4)	9(23.1)	24(61.5)	39(100)
Separated/divorced	-	-	-	-
Widow/widower	-	-	-	-
Family Type				
Single	3(12.5)	6(25.0)	15(62.5)	24(100)
Joint	8(29.6)	8(29.6)	11(40.7)	27(100)

### 4. DISCUSSION

The present study provides an indication regarding current prevalence and practice of tobacco consumption among the garments workers in urban part of Bangladesh. It also reflects their knowledge on specific diseases related to tobacco and tobacco control policy in Bangladesh as well as their attitudes towards tobacco.

The prevalence of overall tobacco consumption was 14.1 percent among the garments workers, which was relatively less than national data obtained from GATS in 2009 (43.3%) [9]. Although national data revealed that prevalence of smokeless tobacco was higher than smoking tobacco, present study showed just opposite picture for garments worker. Even though the present study comprised only with 30 percent of male respondents and smoking tobacco consumption only found among male respondents, the prevalence of smoking tobacco consumption was very high compared to smokeless tobacco.

Smoking tobacco consumption practice was relatively high among the respondents aged 18-25 years; among those with higher secondary level of education: and among unmarried respondents. Most of the respondents were found to smoke on a daily basis. Although occasional smoking practice was found among younger group of respondents, all of the respondents within aged group were used to smoke on daily basis. With increasing the years (duration) of smoking, people become addicted and started to smoke on daily basis. Reasons for using smoking tobacco were varied among respondents according to demographic characteristics. Most of the respondents aged 18-25 years used smoking tobacco for having good feelings; among respondents with higher secondary level of education, tension reduction and having good feelings were common reasons for using smoking tobacco [10]. The interesting findings were revealed among garments workers' education, knowledge and expenditure on smoking tobacco. With increasing level of education both knowledge and expenditure were found to be increased. Various studies showed positive relationship among education and knowledge on smoking tobacco. Similar pattern was found among education and expenditure on tobacco. This finding was also suggested by GATS in 2009. So, in spite of having knowledge about harmful effect of tobacco, people tend to

spend on tobacco product. It indicates that there might be some socio-cultural factors which influence on consumption of smoking tobacco. Finding revealed from qualitative analysis of data suggested that now-a-days smoking is considered as a trend; people have to smoke for showing smartness or to maintain social status. Peer influence also plays an important role for initiating and maintaining smoking status.

Although majority of the respondents knew about tobacco control policy of Bangladesh, they forgot about the specific rules under this law. Specific rules regarding public place and public transport were known by majority of the respondents. Having knowledge about prohibition of smoking in public places, garments workers were found to smoke at shops, markets and fewer percentages at workplaces also. It indicated about their practice to violet rules under tobacco control policy irrespective of their knowledge on it [11]. Smoking at work places/garments was found to be less because smoking is restricted within garments factory.

In our culture, smoking is an acceptable behavior for adults. So, smoking behavior cannot be controlled only increasing level of knowledge related to health hazards of smoking. Warning message and text might have little impact on reducing smoking behavior than socio-cultural and regulatory intervention. Initiative should be taken from government to control smoking behavior. Law enforcing agents might play an important role to implement Tobacco control policy for reducing prevalence of smoking. In addition with law enforcers, pressure from general people of the society would work better for controlling smoking behavior and for reducing violation of rules under tobacco control policy [12,13]. In this regard, specific rules under tobacco control policy should be promoted in large scale among mass people.

Among smokeless tobacco users, most of the respondents were found to consume tobacco on daily basis. Practice of using smokeless tobacco on daily basis was increased with age. On the other hand, practice of using smokeless tobacco occasionally was decreased with age. Although female were found to initiate smoking before adult age, males did not initiate it before the age of 18 years [14]. Early initiation of smokeless tobacco was decreased with age-which reflects that now-a-days people tend to initiate smokeless tobacco much earlier than before. Frequency of smokeless tobacco consumption was less among young and respondents at higher level of education [15]. Both males and females used smokeless tobacco mostly for having good feeling; in addition it was seen as a tension reduction strategy for males. Moreover, consumption of smokeless tobacco for having good feelings was mostly found among all respondents regardless of their age, education, marital status and family type. Although the respondents believed that smokeless tobacco is more harmful than smoking tobacco, it had a little impact on their tobacco using practice. In addition, knowledge on health hazards of tobacco had a poor connection with tobacco using practice. It dictates about some other socio-cultural influence on smokeless tobacco using practice. Since qualitative part of this study was more focused on smoking tobacco, cultural influence was not revealed from this study. More focused qualitative study is needed in this purpose.

## 5. CONCLUSION

The findings obtained from this study provided valuable information regarding tobacco consumption pattern among the garments workers under study. It also provided facts about garments workers knowledge on health hazards and tobacco control policy of Bangladesh and also informed about how they obtained those information. The garments workers general attitude towards tobacco was also revealed by this study. Reason behind tobacco consumption practice was another valuable source of information which can be utilized for reducing prevalence of tobacco consumption. Findings obtained from this study also suggested valuable insight regarding strengthening implementation of tobacco control policy of Bangladesh. Besides knowledge and attitudes towards tobacco, it revealed some socio-cultural aspects which have valuable base for controlling tobacco а consumption practice among garments workers. In addition, the present study provides important indication for future research.

## 6. RECOMMENDATIONS

- 1. Intervention for controlling tobacco using behavior should be designed specifically for targeted population.
- Knowledge on specific diseases related to tobacco should be raised especially among adolescent during secondary level to reduce early initiation of smoking tobacco.

Family and society can also play a strong role in this regard.

- Besides rules related to prohibition of smoking in public place, other specific rules under tobacco control policy should be promoted in large scale to build social awareness and social unity for controlling smoking behavior. Electronic media can be used as an important approach for promotional activities.
- Law enforcers should be more sensible regarding their own tobacco using practice and should be more active for implementing tobacco control policy.
- 5. Socio-cultural influence on tobacco using behavior should be investigated by more focused in-depth qualitative research.

## CONSENT

As per international standard, workers' written consent has been collected and preserved by the author(s).

## ETHICAL APPROVAL

It is not applicable.

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#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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