

**Drug abuse in Bangladesh: knowledge, attitude
and perceptions of secondary school students**

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INTRODUCTION

From antiquity, man tried to escape from the unpleasant experiences of life, whether real or in fantasy, by using natural products in various forms. Drugs like cannabis and opium products have been used traditionally in countries of South-east/South Asia for ritual, religious and recreational purposes from time immemorial. This was socially acceptable because there was no 'abuse'. However, the legacy of twentieth century haunting the nations of the world is the 'virtual epidemic' of drug abuse. The UN estimates that some 180 million people worldwide - 4.2% of people aged 15 years and above - were consuming some drugs in the late 1990s (ODCCP 2001). Substance-related deaths have been estimated at nearly 5 million annually for alcohol and tobacco (Cercone 1994), and 200,000 annually for injecting drug abusers (Frischer 1994). Life-years lost through disability related to drug dependence have been estimated for 1990 at 39.3 million years worldwide for males and 13.3 million years for females (World Bank 1993). Quite a number of factors are incriminated for this surge of drug and substance abuse in the last three decades: rapid changes in political alignment, reduced family and community cohesiveness, increased unemployment and under-employment, economic and social marginalization and increased crime (UNDCP 1995). Several studies have incriminated increasing disposable income with per capita consumption of alcohol and other psychoactive substances (Smart and Murray 1983).

The adverse effects of drug abuse are complex. Most important are health and social consequences arising from the drug itself and associated life-style factors. Substance/drug abuse is significantly related to 'hepatitis, tuberculosis, cardiovascular diseases, cirrhosis and neuropsychiatric disorders; disinhibition and sexually transmitted diseases; unwanted pregnancy and complications in pregnancy including foetal distress; and violence and suicide' (WHO 1990), results in high use of medical and other services (McGeary and French 2000) and high productivity losses, and imposes a high burden on the economy

(Rice 1995). The association of drug abuse with anti-social behaviour (Taylor and Carey 1998), depressive illness (Winokur et al. 1998), sexual and physical abuse (Schafer et al. 2000), and weapon carrying in young people (McKeganey and Norrie 2000) are emphasized in the literature. Increase in injecting drug use and needle sharing are of great concern as it is associated with several health hazards such as hepatitis B. Of additional concern is the vulnerability of drug users to AIDS (Stimson 1992; Girls and Friedman 1994). Money laundering, corruption and financing of insurgent or terrorist groups are some of the other effects with profound socioeconomic and political implications (SEARO).

Of concern to the public health professionals and social scientists is the spread of this epidemic among adolescents¹. In American society, the tendency towards use of psychoactive mood-altering drugs begins in adolescence (Lex 1993). 'The 1996 Monitoring the Future Study' in US found that some 24% of eighth-graders, and 38% of tenth-graders admitted to have used an illegal drug in the preceding year, thus suggesting that the decision to begin using drugs is made in mid-adolescence, around 14 to 17 years (Johnston et al. 1996). Author from a study in Greece conclusively claimed the critical age for smoking and drug use to be between the years of 14 and 15 (Koraka and Korakas 1997). Another state-of-the-art review on adolescent nicotine use and dependence found that of those people who smoke as adults, over 90% began before age 19 years (Slade 1993). Also, those who chose to use tobacco and alcohol is more likely to use other drugs.

'Adolescence', unknown in traditional societies, is a period with few responsibilities and even fewer social expectations in highly technical societies, and results in adolescent life being 'fraught with self-doubt, social anxiety and efforts at establishing an adult persona' (Westermeyer 1999). This is the period of life for exploration and experimentation---the

¹ Adolescence is divided into three phases: the First phase (typically between 10 to 13 years, the *age of compliance*) is characterized by compliance with family and societal values. The Second phase (typically between 14 to 17 years, the *age of rebellion*) is characterized by opposition to selected rules and rejection of authority; the teenager seeks independence from parental guidance and relies on peers for support and guidance. In the Third phase (typically between 17 to 21 years, the *age of maturity*), the teenager becomes more self-reliant but will seek and accept guidance from adults; when deciding, will weigh the options and then take responsibility for outcome (Jessor and Jessor 1977).

means by which 'adolescents learn who they are and what they want to do with their lives'. Study on Indian youths found that alcohol or drugs could initially facilitate these efforts at achieving adult status through reducing self-doubt, alleviating anxiety, or enhancing social interactions (Binion et al. 1988). All the addicting drugs produce some degree of 'euphoria' and change the user's perception of reality, thus relieving stress and unhappiness and allow young person to escape from his or her environment (Heyman and Adger Jr. 1997). High socioeconomic status, lack of academic achievement, disenfranchisement from mainstream activities, 'boredom', peer acceptance, marginalized status, and personal characteristics (such as high curiosity, tolerance for risk, lack of self-esteem, the need to look older etc.) are implicated for abuse of drugs by adolescents (Gerra et al. 1999). Family influences in the form of parental use and opinions about tobacco, alcohol and drugs have a profound effect on adolescent drug abuse behaviour (Johnson and Leff 1999). Drug abuse in young people has dire consequences such as, unnatural death in the form of homicide or suicide, premature morbidity from STD, needle-borne infections and noxious agents etc., and accidental injuries (Newcomb and Bentler 1988).

Drug abuse situation in Bangladesh

Situated strategically near the "Golden Triangle" (Myanmar, Laos and Thailand) and across India to "Golden Crescent" (Pakistan, Afghanistan and Iran), Bangladesh is mainly used by the international drug traffickers and arms smugglers as a transit route from Asia to the western world. Drug abuse has been a rising social and economic problem in post-war Bangladesh. The extensive disruption of the social fabrics following the war of liberation, coupled with massive unemployment and frustration, and the use of the country as a transit route and the leakage therein, all contributed to the threatening drug problems in recent Bangladesh. A disturbing aspect of the problem is that more and more adolescents are being drawn into this devastating habit, especially during the last decade. The fact that the second decade of life is a period of rapid growth and development, and trying out new things and making first-time choices are part of growing up (Htoon et al. 1999), made the adolescents vulnerable to experimentation with drugs which is marketed through a wide retail network in the cities. The situation is

compounded by the rapidly changing social and sexual mores leading to wide permissiveness in the society in the last few decades.

Very little information is available on drug abuse in Bangladesh. A study among the students of Dhaka city done during 1988-1989 found drug abuse to be mostly prevalent among the 20-29 years age group followed by the adolescents (15-19 years). Affluence, mother's education, active involvement in politics and involvement in group activity was positively associated with drug abuse while no association was observed with marital status, family size, birth order or father's education. Students with academic regularity, residence with parents, and permanent residence in Dhaka city were less involved in drug abuse. Majority of the first abusers were influenced by their peers and curiosity was the major motive behind first abuse (IPGM&R 1991).

The most comprehensive information on drug abuse in Bangladesh is available in the draft report of 1997 Rapid Assessment Survey (Ray 1998). The commonly abused substances reported were: heroin, cannabis (*ganja* and *charas*), cough syrups containing codeine, buprenorphine, and sedative drugs. It found lifetime use of any drug including alcohol to be between 32.6-39%. *Ganja* was the most commonly reported drug of abuse by 19.9-32.3% of subjects. The use of opiates, i.e., heroin and opium together, was reported at 3.4-9.4%. Lifetime prevalence of i.v. drug use was low and about 0.5%. Logistic regression analysis showed that subjects in the age group of 31-40 years were most likely to use *ganja* in their lifetime.

In another report from a 40-bed male detoxification centre run by the government in Dhaka, 1,060 patients (81% new cases and 19% re-admission cases) were registered for treatment during April-September 1998 (Chowdhury and Rahman 1998). Majority of them (80%) were between 20-34 years of age, and 50% of them were married. Less than half (45%) had 7-12 years of schooling, and 35% were unemployed and 27% self-employed. Around 5% of the registered cases were aged between 15-19 years. Heroin, followed by codeine in the form of cough syrup (*Syr. Phensidyl*), and Buprenorphine (*Inj. Tidigesic*) were the three most frequently abused drugs among these patients. Other drugs

abused were cannabis, sedatives, pethidine and alcohol. Report for the year 1997-2000 from the centre showed that the same trend continued during these years, with some minor fluctuations (unpublished). In a recent report published in the daily newspaper, the number of drug addicts in the country is estimated to be about two million, >50% of whom live in Dhaka city (Kabir 2001).

Commonly abused drugs

A psychoactive substance is any substance that people take to change either the way they feel, think, or behave. This includes alcohol and tobacco as well as natural and manufactured drugs (ODCCP 2001). The use of psychoactive substances alters the normal functioning of the human body, and in the long run they can cause serious damage.

The commonly abused substances/drugs in Bangladesh can be classified as follows:

Category	Examples
a) Substances	
Tobacco and tobacco products	Cigarettes, <i>bidi</i> , cigars, chewing tobacco, pipe tobacco, snuff, <i>gul</i> , etc.
Cannabis	<i>Ganja</i> , <i>bhang</i> , <i>charas</i> , etc.
b) Drugs	
<u>Depressants</u> (sedatives that act on the nervous system. They provide artificial relaxation and relief from anxiety and mental stress but tend to produce psychological dependence; withdrawal from heavy use is severe)	i) Opioids: Opium, pethidine, codeine (in the form of cough syrup, <i>Phensidyl</i>), heroin, buprenorphin (<i>Tidegesic</i>). ii) Sedatives/hypnotics: Alcohol, sleeping pills, barbiturates.
<u>Stimulants</u> (activate, enhance or increase the activity of the central nervous system and cause tachycardia, pupillary dilation, elevated blood pressure and nausea or vomiting)	Cocaine, amphetamines, etc.
<u>Hallucinogens</u> (chemically diverse; produce profound mental changes such as euphoria, anxiety, sensory distortion, vivid hallucinations, delusions, paranoia and depression)	Marijuana, Mescaline, LSD, etc.

Rationale

From the above discussion, it is evident that drug abuse is fast spreading among young people and the entry point along this downhill road is mid-adolescence, around 14 to 17 years of age. As the saying goes: prevention is better than cure. It will be much more cost-effective and socially beneficial if this epidemic can be prevented at an early stage through health education and behavioural change campaigns, specifically targeted to the adolescents. To design such an effective and culturally effective campaign, we need to know the basic mindset of the adolescents on drug abuse. With this in mind, BRAC and the Central Treatment Centre for Drug Addicts (CTC) at Tejgaon, under the sponsorship of WHO and Government of Bangladesh, together undertook a joint study to explore the knowledge, perceptions, and attitudes of the secondary school students regarding drug abuse. The insight gained from the study is expected to help policy planners and programme implementers in designing a preventive campaign for the adolescents, especially of high school age. And thus, prevent the emergence of the epidemic among secondary school students at an early stage.

OBJECTIVES

The survey aims to document the knowledge, perceptions and attitude of the high school adolescents with respect to abuse of addicting and illicit substances and drugs.

More specifically, the study will attempt to

- explore the knowledge, perceptions and attitude of class X students (age 15+ years) from different types of schools in the six metropolitan cities of Bangladesh with a self-administered test instrument;
- study the socioeconomic and demographic correlates of the knowledge, perceptions and attitude of the study population;
- formulate recommendations for the design of an effective preventive education programme for the high school students, based on the findings of the study.

METHODOLOGY

Design and sampling strategy

A self-administered semi-structured instrument was used for collecting relevant information from the students of class X from different schools. For selecting government and non-government schools, a random sampling techniques was used. A list of all government and non-government (included in the Monthly Payment Orders, MPOs) schools in each thana of the six metropolitan cities were obtained from the BANBES² office. Then a systematic random sampling was done to select two government and two non-government schools (one each for boys and girls), from each of the thana included in the six metropolitan cities. As the number of government schools is few, it happened that sometimes only one or two schools or at times none could be found in a particular thana. Thus, a total of 203 schools were selected (Table 1). From each school, around 20 students (n=4,035) were given the self-administered instrument. In addition to these, from each thana, convenient samples of madrashas and residential schools (n=43) were also studied because of their numerical and social importance with respect to drug abuse and the findings are reported elsewhere (see Appendix I).

Instruments

A draft semi-structured instrument was constructed after reviewing relevant literature and discussion among the investigators. The draft was then presented before a multidisciplinary audience in an in-house seminar of BRAC Research and Evaluation Division to elicit comments and suggestions for improvement. Valuable insights obtained from this highly participatory and interactive seminar were used to enrich and fine-tune the draft instrument. Finally, the instrument was pre-tested in a number of schools in Dhaka outside our sample for ascertaining consistency, appropriateness of language and sequencing of the questions, and to have an insight into the field operation procedure. The draft instrument was then modified, rephrased and edited in the light of feedback received before finalization.

² BANBES: Bangladesh Bureau of Educational Statistics (Under Ministry of Education)

The first part of the instrument (sections A & B, see appendix) collected student's personal information (e.g., type of family, family size, birth order, family environment etc.) and socioeconomic condition (e.g., parents' education and occupation). The second part of the instrument (sections C & D) tried to elicit knowledge of the respondents about the name and nature of addicting drugs and substances, their use and mode of intake, harmful effects, etc. The third part of the instrument (sections E & F) explored the attitude and perceptions of the respondents with respect to drug/substance abuse. The final part of the instrument, section G, probed about abuse of tobacco. The instrument was developed in Bangla.

Field operations

Facilitators for conducting this study were recruited from a pool of experienced field interviewers involved in BRAC research for a long time. Most of them were graduates in social sciences and some held post-graduate degrees. They were given one-day orientation on the concept and substance of the study including field procedures. The facilitators were actively involved in pre-testing the instrument and in the process they learned how to approach the school authority for conducting the survey and interact with teachers and students. In all, 22 facilitators were grouped into 11 teams and were deployed in six metropolitan cities.

To start with, the facilitators first approached the school authority, usually the headmaster/headmistress, briefed about their purpose and tried to seek permission for conducting the survey. When the authority consented, a suitable time was fixed after discussion with the class teacher for the self-administered survey, usually on the same day. From among the students of class X present on the day of survey, 20 were selected by systematic sampling and taken to an empty classroom, if available. Otherwise, rest of the students was requested to leave the room for half-an-hour only. The students were then briefed about the purpose and methods of the survey. When the facilitators were satisfied that the students understood the procedure, completely blank self-administered survey instruments were distributed to fill in anonymously within about half-an-hour. The sitting arrangement was such that the students were discouraged to talk or consult each

other during the test. They were assured of the confidentiality of information provided and also its irrelevance to their academic evaluation. Clarification was made, if and when, necessary. At the end of the session, the facilitators checked whether all the items were touched, and coded the instrument for school type and sex of the respondent. The session closed with thanks to the students and teachers for their time and patience.

Limitations

Most of the schools studied in this survey were from the large cities, and some from peri-urban areas. Thus, the findings from this study largely reflect the situation in the urban and peri-urban areas, and not necessarily the rural areas.

FINDINGS

Demographic and socioeconomic characteristics

Table 1 shows the distribution of the respondents by types of school and gender. Majority of the respondents (83%) were from non-government schools, especially the girls.

Table 1: Distribution of respondents by types of school and gender (%)

	Boy	Girl	All
<i>Types of School</i>			
Government (=33)	18.7	14.5	16.5
Non-government (=170)	81.3	85.5	83.5
n	1890	2145	4035

The demographic and socioeconomic characteristics of the respondents are shown in Table 2. Majority of the respondents were Muslim (91%), hailed from nuclear family (68%) and were the first child of the parents (35%). Ninety-two percent of them reside with their parents. Most of their fathers (49%) had about 12 years of schooling, while their mothers (52%) had about 8 years of schooling. Service and business were the two most common occupations of the respondents' fathers (49% and 32% respectively) while the mothers were mostly engaged in 'household domestic chores' (89%).

Knowledge on tobacco and alcohol

Table 3 presents the knowledge of the respondents about the addicting properties of substances such as tobacco, tobacco products and alcohol by gender. Around 70-80% of the respondents knew about the addicting substances tobacco and various tobacco products, girls more than the boys. Comparatively, more respondents were aware about the addicting properties of alcohol (>80%) with a similar gender difference. Though the respondents' awareness about the addicting properties of the above-mentioned substances was high, very small proportion could name the active ingredients in them (Table 3). Only 27% could correctly name the active ingredient in tobacco while the same response for alcohol was only 9%. However, in this instance, boys were more knowledgeable than the girls.

Table 2: Demographic and socioeconomic characteristics of respondents

<i>Characteristics</i>	Boy		Girl		All	
	%	n	%	n	%	n
Religion						
Muslim	89.5	1691	92.8	1991	91.3	3682
Non-Muslim	10.5	199	7.2	154	8.7	353
Family type						
Nuclear (Parents, children)	67.4	1274	69.4	1489	68.5	2763
Extended (above+Grand parents)	23.1	437	22.1	473	22.6	910
Single parent (Father or mother+children)	5.0	95	5.4	116	5.2	211
Others (Other than above)	4.4	84	3.1	67	3.7	151
Birth order						
1 st	35.8	676	35.7	765	35.7	1441
2 nd	25.6	483	24.0	514	24.7	997
3 rd	16.1	305	16.5	353	16.3	658
Other(s)	22.5	426	23.9	513	23.3	939
Current residence						
With parents	90.2	1705	93.1	1997	91.7	3702
With local guardians	5.2	99	3.9	84	4.5	183
Hostel/mess	1.1	20	0.2	15	0.6	25
Others	3.5	66	2.8	59	3.1	125
Father's schooling years						
None	6.1	104	5.0	99	5.5	203
≤ 8 yrs	31.6	540	33.8	667	32.8	1207
10-12 yrs	48.8	834	50.1	989	49.5	1823
12+ yrs	9.7	166	7.6	151	8.6	317
Others	3.8	65	3.5	69	3.6	134
Mother's schooling years						
None	10.7	189	9.5	195	10.0	384
≤ 8 yrs	48.4	876	53.7	1103	51.7	1979
10-12 yrs	37.2	660	35.1	720	36.1	1380
12+ yrs	2.7	48	1.8	36	2.2	84
Others	1.3	23	1.2	24	1.2	47
Father's occupation						
Service	49.0	899	47.5	970	48.6	1869
Business	30.4	548	33.8	690	32.2	1238
Wage-labour/self-employment	11.3	204	10.5	216	10.9	410
Others	4.7	84	4.9	101	4.8	185
Mother's occupation						
Service/business	8.2	153	7.5	159	7.8	312
Household work	87.8	1639	89.6	1898	88.7	3537
Others	4.0	75	2.9	62	3.4	137

Table 3: Knowledge of the respondents on addicting substances (tobacco and alcohol) by sex (%)

	Boy	Girl	All
<i>Whether the followings are addicting?</i>			
Tobacco			
Yes	77.0	81.4	79.4
No	7.7	9.0	8.4
Don't know	15.3	9.6	12.3
Tobacco products			
Yes	69.3	74.6	72.1
No	7.5	9.3	8.4
Don't know	23.3	16.1	19.5
Alcohol			
Yes	81.8	85.3	83.6
No	2.4	2.6	2.5
Don't know	15.8	12.2	13.9
Active ingredient in Tobacco (<i>could name correctly: nicotine</i>)	37.5	18.6	27.5
Active ingredient in Alcohol (<i>could name correctly: ethyl alcohol</i>)	13.1	4.7	8.6
n	1,890	2,145	4,035

The respondents were asked about their knowledge regarding harmful effects of these addicting substances on human body. Seventy-six percent of the respondents knew that tobacco inhalation causes lung cancer while 66% knew that alcohol ingestion causes liver damage. The other harmful effects cited for tobacco in order of frequency were: chronic cough (58%), low vital capacity (40%), and elevated blood pressure (32%). Similarly, harmful effects cited for alcohol in order of frequency were: loss of judgment (47%), sense of guilt (43%), and disorientation (37%) (Table 4). Interestingly, not much difference was observed between the responses of the boys and the girls.

The key information from above is disaggregated by types of school in the next table (Table 5). Interestingly, The respondents from the government school were found to be far more knowledgeable than their counterparts about active ingredients of tobacco and alcohol as well as their harmful effects, mostly.

Table 4: Knowledge of the respondents on harmful effects of addicting substances by gender (%)

	Boy	Girl	All
<i>Harmful effects of tobacco intake*</i>			
Chronic cough	57.1	58.6	57.9
Low vital capacity	39.9	39.7	39.8
Increased blood pressure	32.4	31.0	31.7
Lung cancer	77.7	74.4	75.9
Others	4.4	3.9	4.1
Don't know	12.2	11.0	11.6
<i>Harmful effects of alcohol intake*</i>			
Behavioural changes	19.3	21.5	20.5
Disorientation	35.4	37.9	36.7
Loss of judgment	45.3	47.8	46.6
Liver damage	64.7	67.1	66.0
Sense of guilt	43.4	43.6	43.5
Others	3.0	2.8	2.9
Don't know	16.2	12.3	14.1
n	1,890	2,145	4,035

*multiple responses considered

Table 5: Knowledge of the respondents on addicting substances by type of school attended (%)

	Types of school		All
	Government	Non-government	
Active ingredient in Tobacco (could name correctly nicotine)	45.0	24.0	27.5
Active ingredient in Alcohol (could name correctly ethyl alcohol)	20.2	6.4	8.6
<i>Harmful effects of tobacco intake</i>			
Chronic cough	65.4	56.4	57.9
Low vital capacity	42.3	39.3	39.8
Increased blood pressure	39.5	30.1	31.7
Lung cancer	82.4	74.6	75.9
Others	5.7	3.8	4.1
Don't know	8.7	12.1	11.6
<i>Harmful effects of alcohol intake</i>			
Behavioural changes	20.2	20.5	20.5
Disorientation	49.5	34.2	36.7
Loss of judgment	61.7	43.7	46.6
Liver damage	71.7	64.9	66.0
Sense of guilt	50.1	42.2	43.5
Others	3.6	2.7	2.9
Don't know	9.3	15.1	14.1
Total (n)	665	3370	4035

We tried to explore respondents' knowledge according to some key factors such as mother's education, father's occupation and types of school (Table 6). A positive association between level of knowledge and mother's schooling was seen, though at a much smaller scale. Interestingly, not much variation was seen in the knowledge level of respondents according to types of school and fathers' occupation.

Table 6: Respondents' knowledge about the addicting property of alcohol, tobacco and tobacco products by mother's schooling and father's occupation (%)

	Mother's years of schooling				All
	None	≤ 9	10 - 12	> 12	
Knows that any of the substances (alcohol, tobacco products, or tobacco) cause addiction	89.1	92.6	93.9	95.2	92.8
n	384	1,979	1,380	84	3,827
	Father's occupation				All
	Service	Business /trade	Wage labour/self-employed	Others	
Knows that any of the substances (alcohol, tobacco products, or tobacco) cause addiction	93.0	93.1	90.7	90.3	92.7
n	2,003	1,238	419	185	3,845
	Types of school				
	Govt. school	Non-government school			
Knows that any of the substances (alcohol, tobacco products, or tobacco) cause addiction	93.4		92.5		
n	665		3,370		

Knowledge on addicting drugs

Majority of the respondents were familiar with the names of *Ganja* (96%), Heroin (89%) and *Phensidyl* (80%) (Table 7) as well as their addicting properties: *Ganja* (91%), Heroin (87%) and *Phensidyl* (73%) (Table 8). Surprisingly, quite an appreciable proportion of the respondents were both familiar (50%) and aware of the addicting property (41%), of cocaine though this drug is not so commonly available in this country. Table 9 presents the variation in knowledge about the addicting potential of drug abuse according to mother's schooling, father's occupation and school types. Here also, the same positive trend in knowledge with mother's schooling as before was noted. The offspring of the 'service' holders were found to possess higher level of knowledge than others. On the other hand, respondents from madrasha were found to have less knowledge on this aspect of drug abuse.

Table 7: Respondents' familiarity with the names of addicting drugs by gender (%)

	Boy	Girl	All
<i>Whether heard the name of the following drugs? *</i>			
Cannabis group			
<i>Ganja</i>	95.8	95.5	95.7
<i>Bhang</i>	36.2	38.6	35.8
<i>Charas</i>	33.6	27.2	29.3
<i>Marijuana</i>	28.5	24.0	25.4
Opioids			
<i>Opium</i>	72.1	67.6	69.7
<i>Codeine (phensidyl syrup)</i>	84.2	76.0	79.8
<i>Heroin</i>	90.6	88.2	89.3
<i>Pethidine</i>	42.4	44.2	43.4
<i>Morphin</i>	27.2	26.5	26.8
Depressants			
<i>Tari</i>	56.0	54.5	55.2
<i>Seduxen etc. (sleeping pills)</i>	15.9	18.6	17.3
Stimulants			
<i>Cocaine</i>	52.2	45.6	50.1
n	1,890	2,145	4,035

*multiple responses considered

Table 8: Knowledge of respondents about the addicting properties of the drugs by gender (%)

	Boy	Girl	All
<i>Whether knows about the addicting properties of the followings? *</i>			
Cannabis group			
<i>Ganja</i>	92.2	89.5	90.8
<i>Bhang</i>	32.8	31.5	32.1
<i>Charas</i>	29.7	23.0	26.1
<i>Marijuana</i>	25.9	20.9	23.2
Opioids			
<i>Opium</i>	62.3	56.5	59.2
<i>Codein (phensidyl syrup)</i>	78.5	67.9	72.9
<i>Heroin</i>	88.2	86.0	87.0
<i>Pethidine</i>	38.8	35.8	37.2
<i>Morphin</i>	24.0	22.0	23.1
Depressants			
<i>Tari</i>	50.5	48.8	49.6
<i>Seduxen etc. (sleeping pills)</i>	15.6	14.4	14.9
Stimulants			
<i>Cocaine</i>	46.9	35.8	41.0
n	1,890	2,145	4,035

*multiple responses considered

Table 9: Knowledge of respondents about the addicting properties of the drugs by mother's schooling, father's occupation and type of school (%).

	Mother's years of schooling				All
	None	≤ 9	10 – 12	> 12	
Knows that abuse of certain drugs cause addiction	83.1	88.1	91.6	94.0	89.0
n	384	1,979	1,380	84	3,827
	Father's occupation				All
	Service	Business /trade	wage labour/self-employed	Others	
Knows that abuse of certain drugs cause addiction	89.9	87.6	86.9	85.9	88.6
n	2,003	1,238	419	185	3,845
	Types of school				
	Govt. school		Non-government school		
Knows that abuse of certain drugs cause addiction		90.1		88.2	
n		665		3,370	

When asked about the source of their knowledge about addicting drugs, majority cited television (74%) followed by text books (67%) and the newspaper (63%) (Table 10). Peer group was also found to be an important source of their knowledge on addicting drugs (41%).

Table 10: Source of knowledge of the respondents about the addicting properties of the drugs by gender (%)

	Boy	Girl	All
<i>Reported source of knowledge about addicting properties of the drugs cited*</i>			
Text books	65.5	68.9	67.3
Friends	41.5	37.9	39.6
Relatives	33.9	43.1	38.8
Newspaper	64.7	62.3	63.4
Radio	31.2	35.9	33.7
Television	71.4	76.7	74.2
Cinema	31.1	33.4	33.3
Others	5.0	3.3	4.1
n	1,890	2,145	4,035

*multiple responses considered

Table 11: Source of knowledge of the respondents about the addicting properties of the drugs by mother's schooling and father's occupation (%)

<i>Reported source of knowledge ↓</i>	Mother's years of schooling				All
	None	≤ 9	10 - 12	> 12	
Text books	61.2	65.2	71.8	78.6	67.5
Friends/relatives	54.7	52.2	53.5	57.1	53.0
Mass media*	81.0	84.2	90.1	91.7	86.2
n	384	1,979	1,380	84	3,827
	Father's occupation				All
	Service	Business /trade	Wage-labour /self-employed	Others	
Text books	70.6	64.5	60.9	65.4	67.3
Friends/relatives	53.3	52.8	49.9	58.4	53.0
Mass media*	87.8	86.2	80.7	80.1	86.2
n	2,003	1,238	419	185	3,845
	Types of school				All
	Govt. school		Non-government school		
Text books	74.3		65.9		
Friends/relatives	54.4		53.0		
Mass media*	91.6		85.2		
n	665		3,370		

*TV/Radio/Newspaper/cinema; NB. multiple responses considered

The variation in the source of knowledge by key factors, if any, was explored in Table 11. The more educated the mothers were, mass media was cited more and more as the major source of knowledge about drugs. On the other hand, mass media and textbooks were cited as the two major sources of drug-related knowledge more frequently by offspring of the 'service' holders and by respondents from the government schools compared to others.

According to the respondents, these addicting drugs are mostly available in slums/squatter settlements (58%) and from specific persons acting as couriers (43%) (Table 12). Majority of the respondents noted injection (63%) and inhalation with cigarettes and cigars (56% and 41%) as the two most common routes of drug intake as far as they know (Table 13). According to them, intake of addicting drugs commonly produces drowsiness (69%), loss of motor control (64%), and abnormal behaviour (64%) among others (Table 14). No appreciable gender difference was seen in most of the above responses.

Table 12: Knowledge of the respondents about the availability of addicting drugs by gender (%)

	Boy	Girl	All
<i>Places where addicting drugs are known to be available*</i>			
Slums	54.2	61.5	58.1
Shops selling cigarettes/betel leaves	30.7	32.5	31.7
Some specific couriers	38.9	46.3	42.8
Shops selling traditional medicine	6.7	6.6	6.6
Pharmacies	16.9	15.0	15.9
Others	3.5	1.9	2.7
Don't know	33.7	25.3	29.2
n	1,890	2,145	4,035

*multiple responses considered

Table 13: Knowledge of the respondents on the methods of intake of addicting drugs by gender (%)

	Boy	Girl	All
<i>Routes of intake</i>			
Sniffing	36.0	38.2	37.2
With cigarettes	54.7	58.1	56.5
Cigar-like sticks	39.4	42.6	41.1
Chewing	15.8	17.9	16.9
Swallowing	29.3	30.0	29.7
Injecting	57.9	68.5	63.5
Don't know	29.5	18.4	23.6
n	1,890	2,145	4,035

*multiple responses considered

Table 14: Knowledge of the respondents on the effects of addicting drugs on body and mind by gender (%)

	Boy	Girl	All
<i>Effects on body and mind</i>			
Drowsiness	63.8	74.1	69.3
Euphoria	18.7	19.0	18.9
Disorientation	35.0	37.6	36.4
Abnormal behaviour	56.9	69.7	63.7
Quarrelsome	22.1	26.8	24.6
Loss of control over movement	61.0	65.9	63.6
Others	2.4	2.2	2.3
Don't know	26.2	14.1	19.8
n	1,890	2,145	4,035

*multiple responses considered

Table 15 presents the data on knowledge of the respondents about the physical and mental effects of addicting drugs disaggregated by types of school. Here also, the same

Table 15: Knowledge of the respondents on the effects of addicting drugs on body and mind by type of school attended (%)

	Government school	Private school	All
<i>Effects on body and mind</i>			
Drowsiness	72.2	68.7	69.3
Euphoria	19.4	18.8	18.9
Disorientation	49.5	33.8	36.4
Abnormal behaviour	71.1	62.2	63.7
Quarrelsome	33.1	22.9	24.6
Loss of control over movement	70.4	62.3	63.6
Others	2.7	2.2	2.3
Don't know	17.4	20.2	19.8
Total (n)	665	3370	4035

trend as before was noted: the government school respondents had better level of knowledge than respondents of the non-government schools.

Attitude towards drug abuse

Table 16 presents respondents' attitude towards substance/drug abuse by gender. Encouragingly, majority of them were aware about the harm of drug abuse to society (86%) and human body (83%). Also, more than 70% of the respondents linked drug abuse to disturbed family peace while 64% cited it to be a factor in failing academic performance. When they were asked about their idea of kinds of boys and girls who abuse drug, majority stated them to be children from unhappy families (70%), followed by children from affluent families (50%) and children from families without parents/guardians (47%). There was minimum gender difference among the respondents in their attitude towards substance/drug abuse.

Table 16: Respondents attitude toward substance/drug abuse by gender (%)

	Boy	Girl	All
<i>Stated attitude</i>			
Harmful to body and mind	83.2	83.0	83.1
Harmful to society	85.1	86.7	86.0
Not so harmful	1.6	1.4	1.5
Sign of growing up	3.8	3.3	3.5
Spoils study	66.0	63.1	64.5
Disturbs family peace	68.6	72.9	70.9
Despised by friend/relatives	62.3	61.1	62.2
Others	4.0	3.4	3.7
Don't know	4.3	2.9	3.6
<i>Kinds of boys and girls thought to be susceptible to substance/drug abuse*</i>			
Those who are irregular in study	42.0	39.5	40.7
Those from affluent families	49.0	50.0	49.6
Children from unhappy families	65.1	74.5	70.5
Those without parents/guardians	44.9	48.2	46.6
Those from families where harsh physical punishment is given	28.0	31.3	29.7
Others	4.7	3.8	4.2
Don't know	12.5	10.5	11.4
n	1,890	2,145	4,035

*multiple responses considered

We also wanted to see the differential in negative attitude of respondents towards drug abuse by selected variables (Table 17). Interestingly, the level of negative attitude increased with mothers' schooling while respondents from non-government schools expressed less negative attitude than those from government schools.

Table 17: Respondents attitude towards substance/drug abuse by mother's level of education (%)

	Mother's years of schooling				All
	None	≤ 9	10 - 12	> 12	
Negative attitude*	92.7	94.7	97.0	97.6	95.4
n	384	1,979	1,380	84	3,827
	Father's occupation				All
	Service	Business/ Trade	wage labour /self-employed	Others	
Negative attitude*	96.0	95.0	91.9	95.1	95.2
n	2,003	1,238	419	185	3,845
	Types of school				
	Govt. school	Non-government school			
Negative attitude*	97.3	94.9			
n	665	3370			

*e.g., harmful to body, mind and society, despised by friends/relatives etc.

To probe further the attitude of the respondents towards drug abuse, they were asked whether they would like to make friends with a person known to be abusing substances/drugs. Only a small proportion (16%) responded positively, girls more than the boys. An equal portion remained undecided (15%) (Table 18).

Table 18: Whether respondents would like to make friendship with an addict by gender (%)

	Boy	Girl	All
<i>Whether they will make friendship with a known addict</i>			
Yes	13.7	18.2	16.1
No	72.0	66.2	68.9
Don't know	14.3	15.6	15.0
n	1,890	2,145	4,035

Table 19 gives the reasons for their specific positive or negative responses. Among those who responded positively, majority (81%) thought that counseling by peers about the harms of drug abuse might motivate addicts to give up the bad habit.

Table 19: Stated reasons for making/not-making friendship with a known drug addict by gender (%)

	Boy	Girl	All
<i>Stated reasons for making friendship with a known drug addict</i>			
Social counseling	75.7	83.9	80.6
Moral obligations	22.4	14.6	17.7
Others	1.9	1.5	1.7
n	259	391	650
<i>Stated reasons for not making friendship with a known drug addict</i>			
Negative image of drug addict	83.9	82.5	83.2
Fear of personal loss/social stigmatization	12.9	13.6	13.2
Moral/Religious	3.2	3.9	3.6
n	1,360	1,420	2,780

Here are some of their illustrating comments:

A girl from a government school in Chittagong:

"...because I will try to bring her/him away from this path. Many will not behave in a friendly manner with her/him. This may sadden her/him and s/he may take more drugs. As a friend, I will try to keep her away from these...I will inform her/him about the curse of addiction. I will tell her/him that this is *haram* and harmful to health. This may cause death...life-risk is involved."

A boy from a non-government school in Dhaka:

"Now a days, adolescents take these as a hobby...but they know how harmful these are! If we mix with them and raise this awareness, they may be well again. If we, good boys and girls, can hammer the bad properties of these drugs, they may shun away from these. What is good and what is bad... one understands..."

Another girl from a non-government school in Rajshahi:

"A boy or girl indulges in drug addiction only when s/he has sorrow, and under stress...if we don't make friendship with them, they will feel lonely, especially those without guardians. But, if we make friendship with them and make them understand that addiction is not good, it is harmful for you and the country-then they may listen. If we keep away from them, they wouldn't know".

A boy from a Madrasha in Dhaka:

"I will make friendship with him and advice him to despise addiction. If our parents tell us to refrain from taking alcohol, *Ganja* etc., then these things will go away. I think that the government should be careful if it wants to save the country from drugs!"

Similarly, those expressing unfavourable responses were mainly concerned about the negative image of drug addicts in the society (83%) and to save their own goodwill to their parents and peers, wanted to keep away from them.

Some representative comments:

One boy from a non-government school in Chittagong:

"Because I may also be addicted by his influence...s/he thinks it is good! When I am not in mental peace, s/he may encourage me to abuse drugs. That's why I won't make friendship with a person who abuses drugs".

A girl from a non-government school in Khulna:

"...people will raise finger at me and will say, 'see that is the friend of the drug addict...s/he also surely is addicted! These are not good!' ...my dear friends will not mix with me...I will be bad before the eyes of my neighbours!"

A Madrasha student from Dhaka:

"I want to live an honest life so that I can have peace in the after world...we want that ours will be an ideal state and will be guided by the Holy Quran. Those who go against it...should be severely punished..."

Another girl from a non-government school in Barisal:

"Because everybody mix with good boys and girls but nobody mixes with a person who takes drugs! If I mix with them, I may start taking drugs slowly due to pressure from them...sanctity of my mind and character will be lost. There will be no peace in the family...unnecessarily money will be spent".

Perceptions about drug addiction

We wanted to know about respondents' perception regarding precipitating factors for first time substances/drug use by the adolescents. The most common factors perceived were: lack of peace in the family (68%), peer pressure (50%), and frustration (50%) beside others (Table 20).

Table 20: Perceived reasons for abusing substance/drug by gender (%)

	Boy	Girl	All
<i>Perceived reasons for abusing substance/drug</i>			
Curiosity	29.8	27.7	28.7
Peer pressure	48.3	51.9	50.2
Recreation	30.3	24.1	27.0
Release of anxiety, tension	35.6	41.4	38.7
Frustration	48.0	52.1	50.2
Lack of peace in family	63.2	72.5	68.2
Poor performance in study	25.3	27.9	26.7
Others	3.0	1.6	2.2
Don't know	14.2	11.4	12.7
n	1,890	2,145	4,035

Table 21: Perceptions about the prevention and cure of substance/drug abuse by gender (%)

	Boy	Girl	All
<i>Whether any of your close friends ever tried ganja, phensidyl or heroin?</i>			
Yes	16.3	4.5	10.1
No	61.5	85.3	74.1
Don't know	22.2	10.2	15.8
<i>How drug abuse can be prevented</i>			
Preventive health and social awareness education	31.8	27.3	29.4
Close and effective parental supervision	23.3	18.6	20.8
Good family environment with healthy interpersonal relations	10.5	15.2	13.2
Through regulatory steps	6.3	5.5	5.9
Avoiding physical/mental punishment	1.2	1.2	1.2
Don't know	26.9	31.8	29.5
<i>Whether drug addiction is completely curable</i>			
Yes	56.7	54.5	55.6
No	19.3	21.9	20.7
Don't know	24.0	23.6	23.8
n	1,890	2,145	4,035

Lastly, we wanted to know whether any of the respondent's close friend(s) was/were addicted to any of the three drugs: *ganja, phensidyl or heroin*. Only 10% responded in the

affirmative, about three and half times more boys than girls (Table 21). Next, we tried to elicit respondents' ideas about prevention of substance/drug abuse. They made quite a number of practical suggestions for dealing with the problem though about one-third was undecided. These were, in order of importance: health education (29%), parental supervision (21%), peaceful family environment where members interact cordially (13%). Interestingly, majority of the respondents perceived that drug addiction is completely curable with treatment (56%).

To quote some of their observations on how drug abuse can be prevented:

- "parents should be cautious about quarreling before their children...there should be good relation between parents...there should be a peaceful environment in the family."*
- "parents should not exert pressure for studying...even if someone performs poorly in the exam, s/he should not be scolded badly..."*
- "advertisement of tobacco in TV should be stopped...drinking alcohol by hero should not be shown in cinema."*
- "teachers should equally treat all students...they shouldn't be hurt before others..."*
- "the adults should not smoke or drink in front of the adolescents and children."*
- "conduct health awareness campaign in the mass media."*
- "change residence where drugs won't be available easily."*
- "pocket money should not be given more than needed."*

Adolescents and smoking: probing in-depth

Tobacco is considered to be a "gateway drug" the use of which may lead to alcohol, marijuana, and other illegal drug use in the long term. The earlier a person starts smoking, the greater the risk to his or her health and the harder it is to quit. Thus, the issue of adolescent tobacco smoking is very important from public health point of view. In this section, we will present some findings from in-depth probing on tobacco smoking (Table 22). Reportedly, around 26% of the respondent's friends currently smoke, more boys than girls. When probed specifically about the respondent's own tobacco habit, 11% were found to be ever smoker while only 6% revealed to be a current smoker, whether regular or irregular. In both instances, boys out-proportioned girls to a great extent. Majority of the current smokers started smoking from Class IX/Class X, about 9% started

as early as primary level. There was not much difference between boys and girls in this regard. Around 43% of the respondents stated that there was at least a member in the family (mostly father) who used to be a smoker. The respondents stated peer pressure (37%), curiosity (30%), and entertainment to be the three most common reasons underlying their experimentation with smoking.

Table 23 shows some of the possible determinants of the 'current smoker' status of respondents. Interestingly, 'current smoker' status was positively associated with father's occupation in business/trade, mother's schooling under 12 years, presence of a smoker in the family, lack of congenial relationship between parents, co-residence with someone other than parents, and poor academic achievement.

Table 22: In-depth probing on tobacco smoking by gender (%)

	Boy	Girl	All
<i>Do any of your friends currently smoke?</i>			
Yes	45.5	9.7	26.5
No	39.6	79.4	60.7
Don't know	14.9	10.9	12.8
<i>Is there any smoker in your family?</i>			
Yes	48.0	39.1	43.2
No	49.9	59.0	54.7
Don't know	2.1	2.0	2.0
<i>Whether you ever smoked in the past?</i>			
Yes	19.6	3.2	10.9
No	80.4	96.8	88.1
<i>Whether you currently smoke?</i>			
Yes, regularly	1.6	0.1	0.8
Yes, irregularly	9.6	0.7	4.9
No	88.8	99.2	94.3
n	1,890	2,145	4,035
<i>From which class you started smoking?</i>			
Primary	9.6	9.1	6.4
Class VI to Class VIII	33.2	36.4	33.0
Class IX/Class X	57.2	54.5	60.6
<i>Reasons for smoking first time</i>			
Peer pressure	39.2	20.0	36.9
Curiosity	27.8	45.7	30.0
Entertainment	15.3	14.3	15.2
Relieve of anxiety, tension	3.1	2.9	3.1
Motivated by advertisement	2.0	2.9	2.1
Other(s)	10.2	8.6	10.0
Don't know	2.4	5.7	2.8
n	255	35	290

Table 23: Current tobacco smoking by father's occupation, mother's education and presence of smoker in the family (%)

	Father's occupation				All
	Service	Business /trade	Wage labour/self-employed	Others	
Respondent currently smokes	5.8	5.6	5.5	6.5	5.7
n	2,003	1,238	419	185	3,845
	Mother's years of schooling				All
	None	≤ 9	10 - 12	> 12	
Respondent currently smokes	5.7	5.8	5.3	1.2	5.5
n	384	1,979	1,380	84	3,827
	Presence of a smoker in the family			All	
	Yes	No	Don't know		
Respondent currently smokes	9.2	2.8	9.8	5.7	
n	1,745	2,208	82	4,035	
	Perceived relationship between parents				All
	Good	Not good	No comments	Not applicable	
Respondent currently smokes	5.4	14.0	11.5	3.9	5.7
n	3,656	86	87	206	4,035
	Co-residence				All
	With parents	With local guardian	Hostel/mess	Other(s)	
Respondent currently smokes	5.4	7.7	4.0	12.0	5.7
n	3,702	183	25	125	4,035
	Total marks obtained in the last annual examination				
	Can't recall	≤ 444	445-599	600-799	≥ 800
Respondent currently smokes	4.9	8.8	8.0	5.0	2.9
n	1,844	60	889	1,006	136

DISCUSSION AND CONCLUSIONS

Drug abuse among adolescents is fast becoming a serious public health and social problem in Bangladesh for a number of socioeconomic and political reasons discussed earlier. Adolescence is the period of life when the young people are vulnerable to peer-pressure, and eager for exploring new experiences and taking risks. Though majority of the adolescents come out of this period relatively unharmed, some of them fall prey to the curse of drug abuse and addiction that disadvantage them for the rest of their lives. However, if preventive health education and behaviour modification programmes are to be effective, an understanding of current prevailing behaviours, attitudes and subjective norms is required (Bassen-Engquist et al. 1992). This will help set enlightened life-style patterns in them because 'teenagers are ready to change if they perceive that the reasons to change outweigh the reasons not to change' (Prochaska JO et al. 1992). With this in mind, this study explored the level of knowledge, attitudes and perceptions of tenth graders studying in various kinds of schools in six metropolitan cities of Bangladesh (along with some peri-urban spots). The findings are expected to help policy planners and programme implementers to design and launch an acceptable (to the adolescents and their parents/guardians) preventive health and behaviour modification campaign on drug-related issues for the adolescents of Bangladesh.

A look into the socioeconomic characteristics of the study population establishes their largely enlightened middle-class origin with educated parents. Their fathers are mostly engaged in white-collar jobs and businesses. This is reflected in the fairly good level of general knowledge on different aspects of substance/drug abuse and addiction among the study population. However, when probed, a lack in depth of knowledge was noted e.g., few could name the active ingredients in tobacco and alcohol. An appreciable level of knowledge regarding the harmful effects of substance/drug abuse/addiction and its social and familial consequences opens the opportunity for behaviour change interventions. The important role of mass media in disseminating knowledge on issues of public health is observed in this study, which needs to be exploited skillfully in any future preventive

campaign. Text-books were also an important source, though the problem was discussed only in the religious book, and that also in the last chapter. A positive association of mother's education and father's occupation in the service/business sector with knowledge level of the respondents was seen in this study. This might have acted through increased access to the mass media resulting from economic well-being, and perhaps also an enlightened environment in the family. The questionable quality of madrasa education is reflected in the comparatively low level of knowledge among respondents from these kinds of schools.

It is encouraging to note the respondents' high level of awareness regarding harmful consequences of drug abuse, both physical and societal. More importantly, the respondents were found to have a good understanding of the role of congenial family environment vis-à-vis drug-related problems. The negative image of the drug addict in the society is well established in the mind of the respondents and this appeared to be a strong barrier for making friendship with drug abusers. It is interesting to note that, of those who responded positively with respect to making friendship with a known abuser, majority expressed their willingness to help the person to get rid of this curse. Thus, these types of adolescents with a compassionate attitude may be used as peer counselors in any preventive health education campaign against drug abuse effectively. The respondents' strong perception about the curability of drug addiction is another added advantage for programme planners.

Respondents' perceived reasons for abusing drugs warrants further attention. Reasons cited such as curiosity, peer pressure, etc. tallies well with the particular characteristics of mid-adolescence (14-17 years). This *age of rebellion* is characterized by their reliance on peers for guidance and the belief that they and the peers are infallible and right, besides rejection of authority and perceived flaws in parents and other adults (Liepman et al. 1998). This is also the age of experimenting, exploring and discovering new things, and these are part of growing up into an adult. Peer pressure to use substances/drugs at this age satisfies this need and adolescents easily fall victim. This is amply shown when the respondents mentioned peer pressure and curiosity as the two main reasons for smoking

tobacco for the first time. Also, the role of family members and family environment in the case of tobacco smoking is reiterated in this study. Any preventive health campaign on drug abuse/addiction should take note of this and offer alternate ways of satisfying these needs and use their leisure productively, especially within the family environment.

Last, but not the least, very little gender variation in knowledge on drug related issues was seen in the study community. Mass media and textbooks might have played a key role in smoothing out differences, if any, between the boys and girls. This eases the tasks of programme planners, obviating the need of separate health education model.

Conclusions

It is encouraging to note that the study population has fairly good level of knowledge on different aspects of substance/drug abuse/addiction, irrespective of gender. The mass-media and the text books played key role in achieving this knowledge. Also, the perceived importance of the role of family and peers in causing, preventing and curing drug-related problems pinpoints the areas of focus for any preventive campaign. As the study revealed, peer group is an important determinant of adolescent behaviour related to substances/drug abuse and needs the attention of programme designers for behaviour modification interventions. However, there are reasons for concern too. The existence of tobacco use among the study population at an early age is a matter of concern because 'using tobacco (and alcohol) at a younger age increases the risk of using other drugs later' (AACAP 1998). This necessitates attention of public health experts for early preventive interventions.

RECOMMENDATIONS

Based on the study findings, the following recommendations are made for designing a preventive health education campaign on substance/drug abuse specifically targeted to the adolescents:

- The proposed preventive health education programme on substance/drug abuse should take note of the adolescents' particular mindset and knowledge base to make the programme more informative and adolescent-sensitive, and thus more acceptable to them. Participatory involvement of the adolescents in the design and implementation of the programme, and use them as peer educators, can make the programme highly productive.
- The role of family in the prevention, causation and management of drug abuse is emphasized by the study participants. Thus, any preventive programme on substance/drug abuse should strive for raising awareness among family members and seek their active involvement in the campaign. Emphasis is also needed for informed parental behaviour leading to risk aversion and the importance of peaceful and congenial family environment for preventing substance/drug abuse.
- The school-going adolescents pass a large part of their day in schools and as the study revealed, they are sometimes subjected to peer pressure for experimentation with tobacco or other substances. Given the importance of tobacco as a gateway drug for substance/drug abuse, the preventive campaign should aim at 'tobacco-free school' with active cooperation from the teachers. For this, awareness-building campaign among the teachers is also needed.
- The important role of mass-media in the prevention of substance/drug abuse is emphasized in this study. These should be innovatively used in any future programme. Compassionate understanding of the individual and familial problems underlying experimentation with drugs and probable solutions should be focused in such campaigns. Also, measures should be undertaken to reach the large section of working adolescents who hail from the poorer section of the society and not enrolled to any school.

The potential of textbook in disseminating knowledge and behaviour modification related to substance/drug abuse should be optimally exploited. Currently, the problem is only discussed in the religious text, and that also nearly at the end of the book. To reinforce the drug-related messages, stories, essays, case studies, etc. should be included in the mainstream curricula such as Bangla and English literature, social sciences and health and hygiene studies. The teachers also need orientation to deal with the subject unbiased and with empathy.

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APPENDIX

I. Findings from other schools (Madrasha, residential schools and cadet colleges)

As a supplementary to the main study, we also studied some other types of schools given their importance in the society as well as drug abuse. Convenient samples of respondents from madrashas in Dhaka and Chittagong, one from each thana if available, and for the rest of the cities, one madrasha from each city was taken. Residential schools having hostel facilities were selected one each from the cities, where available. Two cadet colleges were also included in this category. In all, 29 madrashas and 14 residential/cadet schools were studied. Key findings from this supplementary study are presented below:

Table X1. Knowledge on tobacco and alcohol (%)

	Madrasha	Other schools	All
Knows tobacco is addicting	76.7	73.2	75.6
Knows alcohol is addicting	79.0	84.5	64.7
Knows tobacco products are addicting	65.7	62.8	64.7
Could correctly name nicotine present in tobacco	11.9	41.0	21.5
Could correctly name ethyl alcohol present in alcohol	5.4	28.0	12.9
n	481	239	720

Table X2. Knowledge on harmful effects of tobacco and alcohol (%)

	Madrasha	Other schools	All
<i>Tobacco</i>			
Lung cancer	66.9	77.8	70.6
Chronic cough	53.8	65.7	57.8
Difficulty in breathing	31.6	47.7	36.9
<i>Alcohol</i>			
Liver damage	54.7	69.0	59.4
Loss of judgement	35.6	51.9	41.0
Sense of guilt	37.0	43.9	39.3
n	481	239	720

Table X3. Knows that the followings are addicting drugs (%)

	Madrasha	Other schools	All
<i>Ganja</i>	91.3	95.4	92.6
Heroin	85.7	90.0	87.1
Codeine (<i>Phensidyl</i>)	74.4	79.5	76.1
Cocaine	22.5	54.0	32.9
Pethidine	23.9	49.0	32.2
Marijuana	11.6	30.1	17.8
Sleeping pills	8.5	14.6	10.6
N	481	239	720

*multiple responses considered

Table X4. Source of knowledge on addicting drugs (%)

	Madrasha	Other schools	All
Television	60.3	71.1	63.9
Text books	42.6	71.5	52.2
Newspaper	66.5	74.5	69.2
Friends	43.9	50.6	46.1
Relatives	29.3	35.6	31.4
Cinema	23.3	38.9	28.5
Others	3.3	10.5	5.7
n	481	239	720

*multiple responses considered

Table X5. Knowledge on harmful effects of addicting drugs (%)

	Madrasha	Other schools	All
Drowsiness	59.7	69.5	62.9
Loss of control over movement	57.4	72.0	62.2
Abnormal behaviour	51.4	58.2	53.6
Disorientation	27.2	40.6	31.7
Quarrelsomeness	12.3	24.7	16.4
Euphoria	19.5	26.8	21.9
Don't know	27.7	15.9	23.8
n	481	239	720

*multiple responses considered

Table X6. Stated attitude towards substance/drug abuse (%)

	Madrasha	Other schools	All
Harmful to society	81.1	87.4	83.2
Harmful to body and mind	75.5	84.5	78.5
Disturbs family peace	63.4	71.5	66.1
Spoils study	69.2	73.6	70.7
Despised by friends/relatives	55.5	73.2	61.4
Sign of growing up	4.9	4.6	4.7
Don't know	4.8	2.9	4.2
n	481	239	720

*multiple responses considered

Table X7. Perceived reasons for abusing substance/drug (%)

	Madrasha	Other schools	All
Lack of peace in the family	52.0	69.9	57.9
Peer pressure	51.4	56.1	52.9
Frustration	36.4	59.4	44.0
Relief of tension	27.2	43.9	32.8
Curiosity	24.3	41.4	30.0
Recreation	31.0	36.8	32.9
Poor academic performance	28.7	30.5	29.3
n	481	239	720

*multiple responses considered

Table X8. Perception about preventing substance/drug abuse (%)

	Madrasha	Other schools	All
Health and social awareness education	27.7	30.1	28.5
Parental supervision	22.0	30.1	24.7
Good family environment	7.9	11.7	9.2
Regulatory steps	9.1	7.9	8.8
Avoiding physical/mental punishment	1.2	1.7	1.4
Don't know	32.0	8.4	27.5
n	481	239	720

Table X9. Tobacco use by the respondents (%)

	Madrasha	Other schools	All
Respondent is a current smoker			
Regular	1.0	2.9	1.7
Irregular	6.9	13.4	9.0
n	481	239	720
Class when started smoking			
I-V	24.5	9.8	18.1
VI-VIII	28.3	41.5	34.0
IX/X	47.2	48.7	47.9
n	52	40	92

II. The Survey Instrument (English Version)

SURVEY ON KNOWLEDGE, ATTITUDE AND PERCEPTIONS REGARDING
SUBSTANCE/DRUG-ABUSE AMONG SECONDARY SCHOOL STUDENTS IN
METROPOLITAN CITIES OF BANGLADESH, 2001

A BRAC-CTC (GoB) Joint Project
Self-administered Questionnaire (Time: approx. 30 minutes)

Identification:

(Information on this page is to be filled in by the Test Facilitator)

City/Peri-urban area ----- Code -----

Name of Thana -----Code -----

Name of School -----Code -----

Gender of the student: (Tick one) Boy 1 Girl 2

Date of Test: / /

Time of Test: / pm

Administered by : Name -----

Signature -----

Scrutinized by: Name/Signature -----

Edited by: Name/Signature-----

Coded by: Name/Signature-----

Section A: Personal Information

Question No.	Question	Coding category	
A1	Who are your family members?	Father,mother,children	1
		Above+any other person	2
		Mother,children	3
		Father,children	4
		Others	9
A2	Total family members?	Nos.	
	Total siblings?	Nos.	
A3	Your birth order?	First	1
		Second	2
		Third	3
		Fourth	4
		Other	9
A4	With whom you currently reside?	With parents	1
		With local guardians	2
		Hostel/Mess etc.	3
		Other	9
A5	i) Whether your parents are currently alive?	Both parents alive	1
		Only mother alive	2
		Only father alive	3
		Both are dead	4
	ii) If both of them are alive, how is their relationship to each other?	Good	1
		Not good	2
		Other	2
		No comments	2
		Not applicable	9
A6	Duration of your residence in city/peri-urban area	Since birth _____years	99
A7	Your religion	Muslim	1
		Hindu	2
		Buddhist	3
		Christian	4
		Other	9
A8	Total marks you obtained in last annual exam (convert grade to number)	----- Don't remember	99


Section B: Socioeconomic information

Question No.	Question	Coding category
B1.	Your father's education	Illiterate 1
		Can read and write only 2
		Completed primary education 3
		Completed class eight 4
		SSC/ Dakhil 5
		HSC/Alim 6
		BA/BSC/BCOM/Fazil 7
		MA/MSC/MCOM/Kamil 8
		Other 97
		Not applicable 98
Don't know 99		
B2	Your mother's education	Illiterate 1
		Can read and write only 2
		Completed primary education 3
		Completed class eight 4
		SSC/ Dakhil 5
		HSC/Alim 6
		BA/BSC/BCOM/Fazil 7
		MA/MSC/MCOM/Kamil 8
		Other 97
		Not applicable 98
Don't know 99		
B3	Your father's occupation	Service 1
		Professionals (engineer,doctors etc.) 2
		Trade and/or business 3
		Self-employment (small capital) 4
		Agriculture (self-employed) 5
		Wage labour(agri-labour, day-labour) 6
		Household work 7
		Unemployed 8
		Other (old, retired, disable etc.) 97
		Not applicable 98
Don't know 99		
B4	Your mother's occupation	Service 1
		Professionals (engineer,doctors etc.) 2
		Trade and/or business 3
		Self-employment (small capital) 4
		Agriculture (self-employed) 5
		Wage labour(agri-labour, day-labour) 6
		Household work 7
		Unemployed 8
		Other (old, retired, disable etc.) 97
		Not applicable 98
Don't know 99		

Section C: Knowledge on Substance abuse

SI No.	Question	Coding category
C1	Do these substances cause addiction?	
	a) Tobacco (Cigarettes, <i>Bidi</i> , Cigar etc.)	Yes, cause addiction 1 No, do not cause addiction 2 Don't know 3
	b) Tobacco products (snuff, <i>gul</i> , tobacco leaves, <i>zarda</i> etc.)	Yes, cause addiction 1 No, do not cause addiction 2 Don't know 3
	b) Alcohol (Beer, wine, whisky, spirit, Bangla, <i>Mrita Sanjibani</i> etc.)	Yes, cause addiction 1 No, do not cause addiction 2 Don't know 3
C2	Name one chemical substance present in tobacco that is harmful to health?	Name _____ Don't know 9
C3	Of the following effects on human body, which is/are caused by tobacco? (can circle more than one)	It causes chronic cough 1 It lowers vital capacity 2 It increases blood pressure 3 It causes lung cancer 4 Other(s) _____ (name) Don't know 9
C4	Name one chemical substance present in alcoholic beverages that is harmful to health?	Name _____ Don't know 9
C5	Of the following effects on human body, which is/are caused by alcohol? (can circle more than one)	Behavioural changes e.g., euphoria 1 Disorientation 2 Loss of judgment 3 Liver damage 4 Sense of guilt 5 Other(s) _____ Don't know 9

Section D: Knowledge about addicting drugs

SI No.	Question	Coding category
D1	Do you know that there are some drugs, abuse of which cause addiction?	Yes, I do know 1 No, I don't know 2
D2	Have you heard the name(s) of any of the followings?  (can circle more than one)	Ganja 1 Bhang 2 Charas 3 Tari 4 Marijuana 5 Phensidyl 6 Heroin 7 Opium 8 Pethidine 9 Morphin 10 Valium 11 Cocaine 12 Other(s) _____

D3	Which of the followings you know as addicting? \longrightarrow (can circle more than one)	Ganja 1 Bhang 2 Charas 3 Tari 4 Marijuana 5 Phensidyl 6 Heroin 7 Opium 8 Pethidine 9 Morphin 10 Valium 11 Cocaine 12 Other(s) _____
D4	How do you know that this/these is/ are addicting? (can circle more than one)	From text book(s) 1 From friends 2 From relatives 3 From Newspaper 4 From Radio 5 From Television 6 From cinema 7 Other(s) _____
D5	Do you know where can addicting drugs can be bought? (can circle more than one)	Slums 1 Shops selling cigarettes/betel leaf 2 Some specified person 3 Shops selling traditional medicine 4 Pharmacies 5 Other(s) _____ Don't know 99
D6	Do you know how these addicting drugs are taken? (can circle more than one)	Sniffing 1 With cigarettes 2 Making cigar-like sticks 3 Chewing 4 Swallowing 5 Injecting 6 Don't know 9
D7	Do you know what reactions these drugs cause in body? (can circle more than one)	Drowsiness 1 Euphoria 2 Disorientation 3 Abnormal behaviour 4 Quarrelsome 5 Loss of control over movement 6 Other(s) _____ Don't know 99

Section E: Attitude towards addicting substance/drug

Sl No.	Question	Coding category
E1	What do you think about substance/drug abuse?	Harmful to body and mind 1 Harmful to society 2 Not so harmful 3 Sign of growing up 4 Spoils study 5 Disturbs family peace 6 Despised by friends/relatives 7 Other(s) _____ 8 No comment/Don't know 99
E2	In your opinion, what kind of girls and boys abuse substance/drug? →	Those who are not regular in study 1 Those from affluent families 2 Those from unhappy families 3 Those without parents/guardians 4 Those from families where harsh physical punishment is given 5 Other(s) _____ Don't know/no comments 99
E3	Would you like to establish friendship with an individual who abuses substance/drug?	Yes (Go to E4) 1 No (Go to E5) 2 Don't know/not sure 99
E4	If yes, state why? →	
E5	If no, state why? →	

Section F: Perceptions regarding addicting substance/drug

Sl No.	Question	Coding category
F1	Why do you think people abuse substance/drug?	Curiosity 1 Peer pressure 2 Recreation 3 Release of anxiety, tension 4 Frustration 5 Lack of peace in family 6 Poor performance in study 7 Other, specify _____ Don't know _____ 99
F2	What kind of life is led by people who abuse substance/drug?	Happy 1 Unhappy 2 Miserable 3 Other, specify _____ Don't know 99
F3	If somebody becomes addicted, is it possible to completely cure her/him?	Yes 1 No 2 Don't know 9

F4	What can be done to prevent someone from becoming addicted to drugs? Please mention at least three ways.	1) 2) 3) Don't know	99
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Section G: Information on Tobacco use/abuse

Sl No.	Question	Coding category	
G1	Have any of your close friends ever took Ganja, Phensidyl, Heroin or any addicting drugs?	Yes	1
		No	2
		Don't know	9
G2	Does any of your friends smoke?	Yes	1
		No	2
		Don't know	9
G3	Is there any smoker in your family?	Yes	1
		No	2
		Don't know	9
G4	a) Have you ever smoked?	Yes	1
		No	2
	b) Do you currently smoke?	Yes, regularly	1
		Yes, irregularly	2
		No (If so, End here)	9 End here
	c) From which class you started smoking?	Class _____	
	d) Do you remember, what prompted you to smoke the first time?	Curiosity	1
		Peer pressure	2
		Entertainment	3
		Release of tension	4
		Frustration	5
		Lack of peace in family	6
		Poor performance in study	7
		Motivated by advertisement	8
		Other(s) _____	
		Don't know	99

III. List of Participating Schools

City Division	Name of Thana	Name of School
<i>Dhaka</i>	Cantonment & Kafrul	North Kafrul High School, Haji Syed Ali Khan High School, Muktijuddha High School, Manikdi Adarsh Biddhaniketon, Vashantek High School, Balughat High School, Halim Foundation girls High School, Manikdi Islamia Senior Madrasha, Adamjee Cantonment Public School
	Gulshan & Badda	Kalachandpur High School, Badda Girls High School, Ekramunnessa Girls High School, North Badda Islamia Kamil Madrasha, Khaled Memorial High School, Mohakhali Darul Ulum Hossainia Kamil Madrasha, Ekramunnessa High School Gulshan Model Girls High School, Banani Model High School, Rowshan Ara Girls High School
	Mirpur & Pallabi	Mirpur Govt. School Boys, Mirpur Govt. School Girls, BADC High School, Hazrat Shaha ALi Girls High School, Hazrat Shah Ali Fazil Madrasha, Combined International School (Res), Bangla High School Boys, Bangla High School Girls Baitul Musharaf Dhakhil Madrasha, Madrashai Baitul Mamur
	Mohammadpur	Kamal Majumder School & College, Agargaon Taltola Govt. Colony H.S, Agargaon Taltola Govt. Colony H.S, Shere Bangla Nagar Govt. Boys High School, Shere Bangla Nagar Govt. Girls High School, Kaderia Toyebia Alia Madrasha, Dhaka Residential School & College
	Uttara	Daskin Khan Ideal Girls High School, Kachkura High School, Civil Aviation School Girls, Faidabad Asgarul Ulum Madrasha, Sunrise Pre Cadet, Civil Aviation School boys
	Tejgaon	Tejgaon Govt. Girls High School, Govt. Science College (School wing), Nakhalpar Hossain Ali High School (boys), Nakhalpar Hossain Ali High School (girls), Hazi Maron Ali Kamil Madrasha, Dhaka Pre-cadet Residential School, Nababpur Govt. School
	Sutrapur	Banglabazar Govt. Girls High School, Wari High School, Gandaria High School Izmalul Kuran Madrasha, Muslim Govt. Academy (Res)
	Dhanmondi	Dhanmondi Govt. Boys School, Kamrunnesa Govt. Girls School, Sukrabad High School, Lake Circus Girls High School, National Pre Cadet & High School
	Ramna	Nilkhet High School, Ramna Railway High School, Segunbagicha High School, University Laboratory High School, Rabeya Cadet School, Nayatola AUN Kamil Madrasha
	Motijheel	Mothjeel Govt. Boys High School, Mothjeel Govt. Girls High School, T & T High School, Arambag Girls High School, Mesbahul Ulum Fazil Madrasha
	Hajaribag	Rayer Bazar High School, Gojmahal High School, Salcha Girls School Mohammadia Alim Madrasha
	Kamrangirchar	Waz Uddin High School, Ashrafabad Boys High School, Nurjahan High School boys, Ashrafabad Girls High School, Al Amin Madrasha
	Kotwali	New Govt. Girls High School, Hammadia High School, Mahmuda Khatun Women Madrasha, Annandamoai Girls High School, Dhaka Collegiate School

	Shyampur	Muradpur Ideal High School (boys), Muradpur Ideal High School (girls), Muradpur Dakhil Madrasha, Samironnessa Girls High School, Dhaka Mohammadia Dakhil Madrasha, Samironnessa Boys High School
	Demra	Ideal Girls High School, PDB High School, Jatrabari Ideal High School (Girls) Jatrabari Ideal High School (Boys), Tamirul Millat Kamil Madrasha
	Khilgaon	Khilgaon Govt. School, Sahid Faruq Iqbal Girls High School, Khilgaon High School National Ideal School, Khilgaon Model High School
	Lalbag	Agrani Girls High School, Farid Uddin Siddique Boys School, Bangladesh Rifle School & College, Engineering University Girls School, Udyon High School
	Sabujbag	Kadamtola East Bashabo Girls High School, Kadamtola East Bashabo Boys High School, Baganbari Ideal High School, Bashabo Higher Secondary Girls School Madrsha-E- Mohammadia Arabia

Chittagong	Kotwali	Govt. Girls High School, Govt. Boys High School, Kajem Ali High School, Gulzar Begum City Corp. Muslim Girls High School, Sobhania Alia Madrasha
	Panchlish	Probortak Biddapith Boys, Nasirabad Govt. Boys High School, Chittagong Govt. Girls High School, Srijonee Grammar School, Srijonee Grammar Residential School
	Kamaphuly	Char Chaktoli City Corp. High School Girls, Char Chaktoli City Corp. High School Girls, Delwar Jahan Memorial School & College, Kalarpole Kazi Omar Chow. High School
	Patenga	Patenga City Corp. Girls High School & College, Chittagong Steel Mills High School, Patenga High School, Baitus Sarif Adarsha Kamil Madrasha, Eastern Refinery Model High School
	Bayjedbostami	Imaratennesa City Corp. Girls High School, Chittagong Public School & College Baizid Line High School, Dr. Mazharul Haque High School (Girls), Panchlish City Corp. Girls H. School
	Doublmoring	Chittagong Collegiate School (Girls) School Govt., Agrabad Govt. Colony High School, Barik Miha ML High School, City Govt. Girls High School
	Chittagong port	Bandar Mohammadia Dahakil Madrasha, Bandar High School, Bandar High School Nimtala High School, Nimtala High School
	Pahartoli	Garib- E- Newaz High School, PH Amin Academy, Katrolly Jakerul Ulum Fazil Madrasha, Kattalia Nurul Hauqe Chow. High School, Feroj Shah Girls High School
	Chandgaon	Alhaj Anowara Begum Girls School, Al Khan High School, Mohora Saira Khatun Quadaria Girls High School, Mirja Ahmed Ispahani Smriti Biddaly, Chittagong Residential School, A Amin Baria Fazil Madrasha
	Bakalia	East Bakalia City Corporation Girls High School, Bakalia Govt. Lab High School Bakalia Model Girls High School, Sanowara High School Boys
	Khulshi	Pahrtali Girls High School, Tigerpas ML High School, Abu Hurayra R. Madasha Wireless Jhautala Colony Boys High School, Wairless Jhautala Colony Girls High School

	Halishahar	Halishhar Meher Afjal High School, Halishahar Munshipara High School Halishahar Ahmed Miah City Corp. Girls High School, Halishahar Begumernesa High School, Sitakunda Govt. Ideal High School, Sitakunda Govt. Girls School Mashjidda High School, Kumira Residential Boys High School, Kumira Residential Girls High School
<i>Khulna</i>	Kotwali	Railway Girls High School., Dhaka Match Factory High School, Iqbal Nagar Girls High School, Metro Police Line High School
	Khalishpur	Khulna Biddut Kendra High School, Rotary High School, Khalipur Girls High School, Khulna Newsprint Mill Boys High School
	Sonadanga	Khulna Govt. Girls School, Nazrul Nagar Girls High School, Palli Mongol High School, Biddut UB High School
	Daulatpur	Krishna Mohon High School, Afil Uddin High School, Mohoshin Girls High School Mohoshin Boys High School
	Khanjahan Ali	Teligati Junior High School, Khanabari Girls High School, Govt. Laboratory High School, Shiromoni High School, Gilatola High School, Gilatola Dhakhil Madrasha Arong Gata High School
<i>Sylhet</i>	Sylhet sadar	<u>Name of School</u> Hazrat Shahafin High School, South Biswanath High School, Darul Ulum Islamia Madrasha, Pilot Govt. High School, Kishore Mohon Bahumukhi Girls High School Sylhet Cadet College, Nasiba Khatun International High School, Khaja Nasibari International School, Police line High School, Govt. Agragami High School Mainunnessa Girls High School, Lalabazar High School, South Surma High School
	Barisal sadar	Halima Khatun Girls School, Udyon High School, Zila School, KRS High School Nuria High School, Barisal Cadet College, Sagardi Islamia Kamil Madrasha Kashimpur Girls High School
<i>Rajshahi</i>	Matihar	Dashmari High School, BCSIR Laboratory High School, Mirjapur High School Rajshahi Ideal High School, Meherchandi High School
	Shah Mukhdum	Nowdapara Girls High School, Choto Bongram Girls High School, Sha Makhdum High School, Hamidpur Nowdapara Pilot High School
	Rajpara	Rajshahi Court Academy Boys High School, Mission Girls High School, Court Model High School, Balajannesa Girls High School, Rajpara Darus Salam Alia Madrasha
	Boalia	Surjakana High School, Sabitri Girls High School
	Tanore	Pariso Durgapur High School, Mirjapur High School, Tanore Girls School Pranpur Girls High School
	Durgapur	Dharmapur High School, Singha Ideal Girls High School, Harirampur High School Durgapur Girls High School
	Boalia	Sheroid Govt. High School, Rajshahi Govt. Madrasha, Rajshahi Govt. Girls School PN Girls High School
	Paba	Naowhata High School, Baya High School