

Socio-Demographic Characteristics of Substance Abuse: A Cross-Sectional Study among Male Patients of a Drug Addiction Treatment Center in Dhaka

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Abstract: *Introduction:* Substance abuse is a major health problem in Bangladesh. We examined socio-demographic characteristics of male patients with substance use disorder in drug addiction treatment center in Dhaka city. *Methods:* This descriptive cross-sectional study was conducted in Central Drug Addiction Treatment Center (CTC), Tejgaon, Dhaka, Bangladesh from January 2012 to June 2013. Data were collected by administering a semi-structured questionnaire comprised of socio-demographic variables, family characteristics and substance related variables. A total of 136 male patients were interviewed purposively by face to face from outpatient department of CTC. Substance use disorder was established on the basis of DSM-IV TR by the Structured instrument SCID-CV (Structured Clinical Interview for DSM-IV Axis-1 Disorders- Clinical Version). Patients with comorbid psychiatric disorder and other organic brain disorders were not included in this study. *Results:* The mean age of 136 patients was 30.63±7.23; about 42% were in 26-30 years age group, most respondents (48.5%) were unemployed, 95% were Muslim, and 70% urban dwellers. About 85% (115) of the patients started their using drugs by cannabis, about 9% took Phensidyl as a first drug, about 59% (80) took more than one drugs. In this study, 76 out of 136 patients took drugs by smoking which constitute 55.9%, followed by injections (37.5%). *Conclusions:* Cannabis was the most common as the first illicit drug used by the patients. The result suggested that 18-30-year age group was most commonly abusing time. Preventive programs could be targeted on this age group.

Keywords: Substance Dependence, Socio-demographic Characteristics, Bangladesh.

INTRODUCTION

Substance abuse is a challenging public health and social problem in Bangladesh [1]. The use of drugs has been known since ancient period. In a study, conducted in the outpatient department of National Institute of Mental Health in Dhaka, revealed that 7.66% of respondents suffered from a substance-related disorder [2]. A national survey on mental health showed that 0.63% of the adult population (18 years and above) in Bangladesh suffered from substance abuse disorder [3]. Another study conducted in a private psychiatric clinic in Dhaka showed that 29.6% of admitted psychiatric patients were suffering from substance-related disorder [4]. Illicit drug use and trafficking not only retards economic development of countries but also contribute to the spread of crimes, violence and corruption [5]. According to World Health Organization, the use of psychoactive substances causes significant health and social problems for the people who use them, and also for others in their families and communities [6].

Abuse of illicit drugs has been increasing day by day in Bangladesh, though the exact precision is unavailable [1]. The mentionable illicit drugs are opium derivatives, cannabis, stimulants (yaba, cocaine), hypnotics, cough syrup (phensidyl, dexpotent etc.) [1]. Early adult males are abusing drugs in the country [1] and heroin was the most abused drug in the country which may be changed recently [1]. However, substance abuse is under studied in Bangladesh and there is dearth of epidemiological research on it. Therefore, we aimed to see the sociodemography and pattern of substance use among the male patients in Central Drug Addiction Treatment Center of Bangladesh.

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METHODS

This descriptive cross-sectional study was conducted in Central Drug Addiction Treatment Center (CTC), Tejgaon, Dhaka, Bangladesh from January 2012 to June 2013. Data were collected by administering a semi-structured questionnaire comprised of socio demographic variables, family characteristics and substance related variables. Sociodemographic variables included age, marital status, educational attainment, religious practice, occupation and permanent residence area. Family characteristics include type of family, number of family members, economic status of the family, family history of substance use and earning person of the family. Substance related variables include duration of use substance use, age of substance initiation, daily expenditure for substance, type and number of substances, and route of drug administration. A total of 136 (51 injectable and 81 non-injectable substance dependence) male patients were interviewed purposively by face to face from outpatient department of CTC. Substance use disorder was established on the basis of DSM-IV TR by the Structured instrument SCID-CV (Structured Clinical Interview for DSM-IV Axis-1 Disorders- Clinical Version). Patients with comorbid psychiatric disorder and other organic brain disorders were not included in this study. After collection, data were cleaned and analyzed by Statistical Package for the Social Science, version 20 along with Microsoft Excel version 2010. Data were analyzed on the basis of the objective of the study and expressed as descriptive approach in mean, frequency and percentages.

Current study was conducted complying the declaration of Helsinki 1964. Before starting this study, the research protocol was approved by the Institutional Review Board of Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka. Steps of the study were supervised by department of Psychiatry, BSMMU. Informed written consent was obtained from the patients without any influences. Data were collected anonymously; confidentiality of data was ensured adequately and any unauthorized access to data was not possible.

RESULTS

A total of 136 patients with substance use disorder were evaluated with using semi structured questionnaire to see their sociodemography and pattern of substance abuse. The mean (\pm SD) age of patients was 30.63 ± 7.23 years ranging from 18 – 50 years. Out of 136 patients, majority (41.9%) were in 26-30 years followed by 18-25 years group (20.6%), about 37% studied up to primary level, about 47% were married, 48.5% were unemployed (Table 1).

Table-1: Demographic characteristics of respondents (n=136)

Variable	Frequency	Percent
Age in years		
18-25	28	21
26-30	57	42
31-35	23	17
36-40	13	9
41 & above	15	11
Educational qualification		
Illiterate	14	10.3
Primary	50	36.8
Secondary	47	34.6
Higher secondary	18	13.2
Graduate	6	4.4
Master degree	1	0.7
Marital status		
Married	64	47.1
Unmarried	51	37.5
Divorced	7	5.1
Others	14	10.3
Religion		
Islam	130	95.6
Hindu	6	4.4
Occupation		
Service	12	8.8
Business	34	25
Student	2	1.5
Laborer	16	11.8
Unemployed	66	48.5
Others	6	4.4
Residence		
Urban	95	69.9
Rural	41	30.1
Total	136	100

Table-2: Family characteristics of the respondents (n=136)

Variables	Grouping	n (%)
Type of family	Joint Family	85 (62.5)
	Nuclear Family	51 (37.5)
Monthly family income (in BDT)	1-10000	91 (66.9)
	10001-20000	43 (31.6)
	20001-30000	2 (1.5)
Other family members taking drugs	Yes	13 (9.6)
	No	123 (90.4)
Main earning person of the family	Yes	48 (35.3)
	No	88 (64.7)

Among the 136 patients, 85 (62.5%) patients lived in joint family and 51 (37.5%) in nuclear family. In this study, 66.9% patients' monthly family income was 10,000 or less followed by 31.6% were in 10,000-20,000 income group. Out of 136 patients, only 13 (9.6%) patients reported that their family member took drugs. Regarding earning capability 48 out of 136 patients said that, they were the main earning person of the family. Regarding duration of use of principal substance mean duration of use was 6.15 ± 4.88 in years and duration range was 06 months to 22 years. The mean age at first use of substance was 18.56 ± 4.88 in years and range was 10-40 years. The mean daily expenditure for substance was 377.35 ± 257.53 and range was 100-2000 BDT daily (Table 2). About 85% of the patients began drug abuse with cannabis, 9% with heroin, about 59% (80) took more than one drugs, 56% took drugs by smoking, followed by injection (37.5%) and swallowing (6.6%) (Table 3).

Table-3: Substance use characters

Variables	Mean \pm SD	Range
Duration of use substance use	6.15 ± 4.88	06 Months - 22 year
Age at first use (years)	18.56 ± 4.72	10- 40 years
Daily expenditure (BDT)	377.35 ± 257.53	100-2000
Name of the initiating drug	Frequency	Percentages
Cannabis	116	85.29
Phensidyl	12	8.82
Heroin	5	3.68
Yaba (Amphetamine)	2	1.47
Alcohol	1	0.74
Currently taking more than one drug		
Yes	80	58.80
No	56	41.20
Route of drug administration		
Smoking	76	55.90
Injection	51	37.50
Oral	9	6.60

DISCUSSION

This study sought to identify some socio-demographic factors which may be related to patients attending to a government hospital suffering from substance abuse. The highest age range of the first substance abuse by the abusers in the present study is between 18-30 years, accounting for 70% of the population of the abusers, mean age of patients was 30.63 ± 7.23 ranging from 18-50 years. This finding is consistent with the findings done by Riya *et al.* [7] and Rahman *et al.* [8] which were 28.29 ± 7.37 and 25.3 years respectively. The Bangladesh Bureau of Statistics (2013) found that 20–34 years was the age of initiation for most (47.3%) intoxicating substance abusers and 33% of abusers started between 15–19 years old [9].

The study also looked at the educational levels and the dropouts in abusers. From the distribution, it is evident that the greater number of substance abusers dropped out of school at the primary school level (36.8%) and at secondary level 34.6%. In a study done by Riya *et al.* in different private rehabilitation centers it was found that 24% were found to have education up to primary level, 18.7% illiterate [7]. In this current study it was found that 69.9% patients were from urban and 30.1% from rural areas. In a study it was found that 78.67% from urban areas and 14% in rural areas [7]; it was found that 82.9% from urban areas in another study [10]. From above studies it reveals that drug abuse is increasing in rural areas. This study revealed 48.5% respondents were unemployed, 25% businessmen, about 9% service holder which is similar with other studies in the country such as Rahman *et al.* found, 56.1% respondents were unemployed [8], 33.3% respondents were unemployed in another study [7]. Current study revealed married persons were abusing drugs more than unmarried and singles which is similar with other studies in Bangladesh where 62% drug abusers were

married [11]. About 67% respondents family income were below 10,000 taka per month which is similar with previous studies in the country such as a study done by Riya *et al.* found 50.2% respondents family income were below 10,000 BDT (Taka) per month.

Current study revealed about 56% patients taking drugs by inhalation, 37.5% by injection and 6.6% by swallowing; 58.8% patients took more than drug; about 85% of the patients began drug abuse with cannabis. This mode of drug taking is similar with previous studies. In a study done by Riya *et al.* found 65.5% patients take drug by inhalation or smoking, 30% by swallowing and 12.5% by injection [7]. Smoking or inhalation was the route used by most (90.5%) respondents, 81.9% also used oral and 14.3% parenteral routes; about 91% abused more than 1 drug [12].

Current study has several limitations such as small sample size, single center-based study, hospital based study, purposive sampling technique, only male gender which would be considered during generalization of the study results. Despite the limitations this study provides information about socio-demographic characteristics of patients attending in government drug addiction treatment center in Dhaka.

CONCLUSION

In a summery, cannabis was the most common illicit drug abused by the patients, unemployment was an important variable which needs to be decided either as risk factor of consequence of drug abuse and 18-30 years age group was most vulnerable time to abuse drugs. Preventive programs could be targeted on this age group. Unemployed group also should be focused. We hope these findings highlight the important characteristics of drug abuse patients which could be helpful for better management.

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