

## Study on Pattern of Substance Abuse among the Patients Admitted in De-addiction Clinics of Selected Districts, Bangladesh

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### Abstract

### Original Research Article

This descriptive of cross sectional study was conducted in private drug de-addiction clinics of three Districts (Sylhet, Moulvibazar, and Habigonj) of Sylhet Division to explore the pattern of substance abuse, all patients admitted in the clinics with substance use between 1 January 2014 and 31 December 2016 were enrolled in the study. Data were collected from case-notes using a form with a sample size of 2119. In this study, it is revealed that 90% of the patients were below the age group of 30 years, with male predominance (88.39%) which is the main workforce of any nation. In the present study most of the patients came from urban area (1280, 60.40%) which may be a reflection of rapid industrialization and in urbanization in our country. It is further revealed from the study that 73% (1547) were from middle class followed by upper class (19%) and 8% were from lower class. The subjects of the study were commonly abusing Yaba (1126, 53.14%), Heroin (567, 26.26%), Fensidyl (231, 10.90%), Wine (142, 6.70%), Hypnotics (39, 1.84%) and Cannabis (14, 0.66%) reflecting the pattern drug abuse of the community. The commonest reasons for first use of substance in the study were frustration (884, %) followed by peer pressure (389, %), family disharmony (275, %), failure in love (267, %), economic hardship (171, %) and 133 respondents stated that they have no specific reason for being drug addict. This study revealed that substance abuses in young adults of productive age group from urban middle class families are constantly higher.

**Key words:** Pattern, Substance Use, De-addiction clinics.

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## INTRODUCTION

Substance abuse is recognized as an important public health and social problem in Bangladesh [1]. The incidence of drug abuse has been increasing day by day in a developing country like Bangladesh. Drug addiction hampers the mental well-being of an individual as well as it causes lots of physical complications [2]. Bangladesh is situated in the central point of the world's biggest growing narcotics zone: the 'golden crescent' (Afghanistan, Pakistan, and Iran) and the 'golden triangle' (Myanmar, Laos, and Thailand). So, the country has become a major transit point for drug dealers. They are routing their shipments through this country to the markets of other parts of the world including Europe, Africa and America. Besides this, India, which is an important producer of opium and

other substances located around Bangladesh [3]. The magnitude of the public health problems faced by drug abusers is likely to increase in the future in cities in Bangladesh. Drug abuse is a serious problem in the society which has medical, social, financial, and psychological and security effect on the individuals, families as well as on community level. In Bangladesh Near about 25 lakh people are drug addicted. In Bangladesh about 80 percent of the drug addicts are adolescents and young men of 15 to 30 years of age [4]. It is evident from current researches that substance use disorders have become a major public health problem in Bangladesh. Availability of drugs, peer pressure, curiosity, and frustration are among the causes of substance dependence [5]. The World Health Organization (WHO) has estimated that tobacco,

alcohol and illicit drugs together contributed to 12.4% of all deaths worldwide [6].

**Objectives**

**General Objective**

- To evaluate on pattern of substance abuse among the patients admitted in de-addiction clinics of selected districts of Bangladesh.

**Specific Objectives**

- To estimate substance abuse among the patients in three (3) selected districts.

**MATERIALS AND METHODS**

This descriptive study was conducted in private drug de-addiction clinics of three Districts (Sylhet, Moulvibazar, and Habigonj) of Sylhet Division. All patients admitted to the clinics and diagnosed with substance use disorder between 1 January 2014 and 31 December 2016 were enrolled in the study. The diagnosis was made by a consultant psychiatrist during admission. After taking informed consent from the authority of the clinics and the respondents and guardians, data were collected from case-notes using a form to note their socio-demographic characteristics and patterns of substance use. The guardians complemented the information. The questionnaire was prepared originally in English and translated to Bangla by an experienced translator and cross-checked by a local psychiatry professor. The total number of study subjects was 2119. Data analysis was performed using SPSS Statistics (SPSS Statistics, Inc. Chicago, US), version 16.0.

**RESULT**

This descriptive type of cross sectional study was conducted among 2119 admitted patients in different de-addiction clinics of 3 Districts (Sylhet, Moulvibazar, and Habigonj) of Sylhet Division. The study revealed that, out of 2119 patients, 1908 (90.04%) was below age of 30 years. Among all patients 1873 (88.39%) were male and 246 (11.61%) were female. Out of 2119 patients 72.96% (1546) were from Sylhet, 14.82% (314) from Moulvibazar and 12.22% (259) from Habigonj. The socio-demographic characteristic and pattern of drug abuse as revealed by the study are presented. Table II shows that in the year 2014 there were 60.62% male patients and 19.38% in Sylhet District, 84.35% male and 15.65% in Moulvibazar District, 90.12% male and 9.88% were female in Habigonj District; in the year 2015 there were 88.86% male patients and 11.14% in Sylhet District, 89.38% male and 10.62% in Moulvibazar District, 96.10% male and 3.90% were female in Habigonj District; in the year 2016 there were 94.94% male patients and 5.06% in Sylhet District, 89.53% male and 10.47% in Moulvibazar District, 93.07% male and 6.37% were female in Habigonj District. Table III shows that in the year 2014 in Sylhet district 377 patients were from urban and 206 from rural areas; in Moulvibazar 66 from urban and 49 rural areas; in Habiganj 49 from urban, 32 rural areas. In 2015 in Sylhet 269 from urban and 180 from rural areas; in Moulvibazar 63 from urban and 50 from rural areas; Habiganj 41 from urban and 36 rural areas. In Sylhet 2016, 302 from urban and 212 from rural areas: in Moulvibaar 53 urban and 33 rural; in Habiganj 60 urban and 41 rural. Patients from urban areas were 1280 (60.40%) and rural areas 839 (39.60%). It is further revealed from the study that 73% (1547) were from middle class of the society followed by upper class (403, 19%) and 169 (8%) were from lower class.

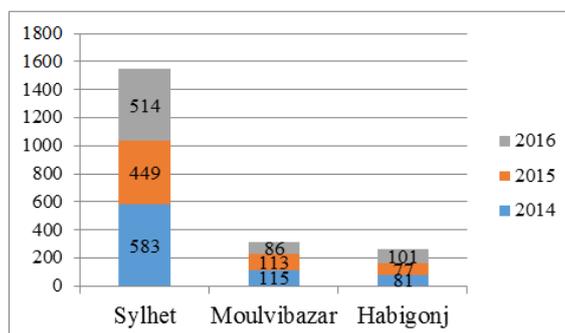


Fig-I: Distribution of the patients received treatment for drug abuse/addiction treatment centers in Sylhet Division (n=2119)

Table-I: Distribution of patient admitted for drug abuse in Sylhet Division by sex during the period of 2014-2016(n=2119)

| District    | 2014         |              | 2015         |             | 2016         |            |
|-------------|--------------|--------------|--------------|-------------|--------------|------------|
|             | Male         | Female       | Male         | Female      | Male         | Female     |
| Sylhet      | 470 (80.62%) | 113 (19.38%) | 399 (88.86%) | 50 (11.14%) | 488 (94.94%) | 26 (5.06%) |
| Moulvibazar | 97 (84.35%)  | 18 (15.65%)  | 101 (89.38%) | 12 (10.62%) | 77 (89.53%)  | 9 (10.47%) |
| Habiganj    | 73 (90.12%)  | 8 (9.88%)    | 74 (96.10%)  | 3 (3.90%)   | 94 (93.07%)  | 7 (6.37%)  |
| Total       | 640 (100%)   | 139 (100%)   | 574 (100%)   | 65 (100%)   | 659 (100%)   | 42 (100%)  |

**Table-II: Distribution of the patients received treatment for drug abuse/addiction treatment centers in Sylhet Division (n=2119)**

| Name of the District | 2014       |            | 2015       |            | 2016       |            | Total       |
|----------------------|------------|------------|------------|------------|------------|------------|-------------|
|                      | Urban      | Rural      | Urban      | Rural      | Urban      | Rural      |             |
| Sylhet               | 377        | 206        | 269        | 180        | 302        | 212        | 1546        |
| Moulvibazar          | 66         | 49         | 63         | 50         | 53         | 33         | 314         |
| Habiganj             | 49         | 32         | 41         | 36         | 60         | 41         | 259         |
| <b>Total</b>         | <b>492</b> | <b>287</b> | <b>373</b> | <b>266</b> | <b>415</b> | <b>286</b> | <b>2119</b> |

**Table-III: Distribution of the patents received treatment for drug abuse/addiction centers by age group in Sylhet District (n=1546)**

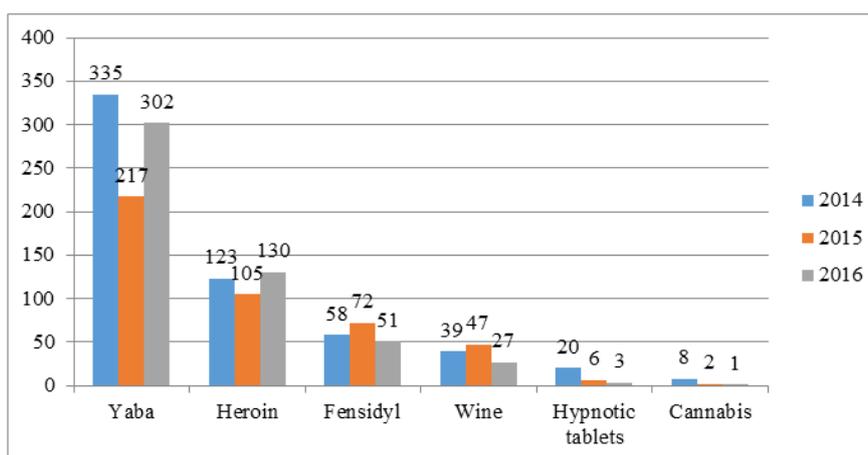
| Age group    | 2014              | 2015              | 2016              | Total              |
|--------------|-------------------|-------------------|-------------------|--------------------|
| 10-20 years  | 185 (31.73%)      | 205 (45.66%)      | 254 (49.42%)      | 644 (41.66%)       |
| 20-25 years  | 178 (30.53%)      | 109 (24.28%)      | 104 (20.23%)      | 391 (25.29%)       |
| 25-30 years  | 129 (22.13%)      | 93 (20.71%)       | 95(18.48%)        | 317 (20.50%)       |
| ≥30 years    | 91 (15.61%)       | 42 (9.35%)        | 61 (11.87%)       | 194 (12.55%)       |
| <b>Total</b> | <b>583 (100%)</b> | <b>449 (100%)</b> | <b>514 (100%)</b> | <b>1546 (100%)</b> |

**Table-IV: Distribution of the patents received treatment for drug abuse/addiction centers by age group in Moulvibazar District. (n=314)**

| Age group    | 2014              | 2015              | 2016             | Total             |
|--------------|-------------------|-------------------|------------------|-------------------|
| 10-20 years  | 51(44.35%)        | 45 (39.82%)       | 54 (62.79%)      | 150 (47.77%)      |
| 20-25 years  | 35 (30.43%)       | 36 (31.86%)       | 29 (33.72%)      | 100 (31.85%)      |
| 25-30 years  | 23 (20.0%)        | 28 (24.78%)       | 3 (3.49%)        | 54(17.20%)        |
| ≥30 years    | 06 (5.22%)        | 04 (3.54%)        | 00 (0.00%)       | 10 (3.18%)        |
| <b>Total</b> | <b>115 (100%)</b> | <b>113 (100%)</b> | <b>86 (100%)</b> | <b>314 (100%)</b> |

**Table-V: Distribution of the patents received treatment for drug abuse/addiction centers by age group in Habiganj District (n=259)**

| Age group    | 2014             | 2015             | 2016             | Total             |
|--------------|------------------|------------------|------------------|-------------------|
| 10-20 years  | 43 (53.08%)      | 41(53.25%)       | 51 (50.50%)      | 135 (52.12%)      |
| 20-25 years  | 26 (32.10%)      | 23 (29.87%)      | 43 (42.57%)      | 92 (35.52%)       |
| 25-30 years  | 11 (13.58%)      | 9 (11.69%)       | 5 (4.95%)        | 25 (09.65%)       |
| ≥30          | 01 (1.24%)       | 04 (5.19%)       | 02 (1.98%)       | 07 (02.71%)       |
| <b>Total</b> | <b>81 (100%)</b> | <b>77 (100%)</b> | <b>101(100%)</b> | <b>259 (100%)</b> |



**Fig-II: Distribution of the patients admitted for drug abuse by age group and substance abused for the period of 2014-2016 in Sylhet District.(n=1546)**

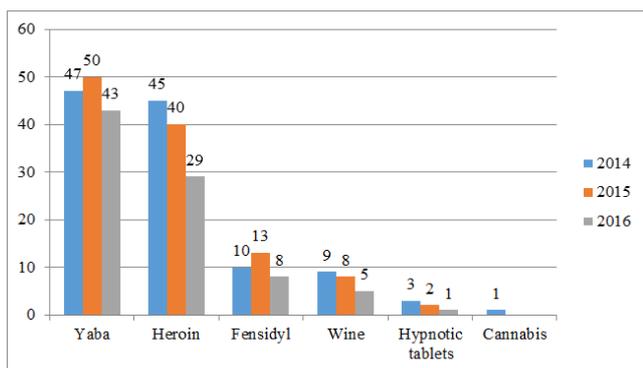


Fig-III: Distribution of the patients admitted for drug abuse by age group and substance abused and for the period of 2014-2016 in Moulvibazar District (n=314)

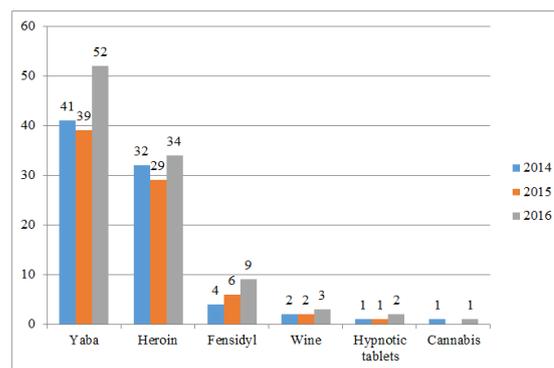


Fig-IV: Distribution of the patients admitted for drug abuse by age group and substance abused for the period of 2014-2016 in Habiganj District (n=259)

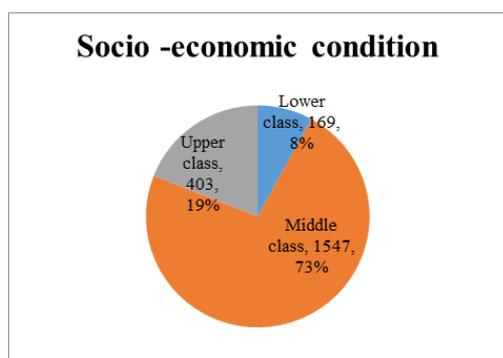


Fig-V: Distribution of the patients by socio-economic class (n=2119)

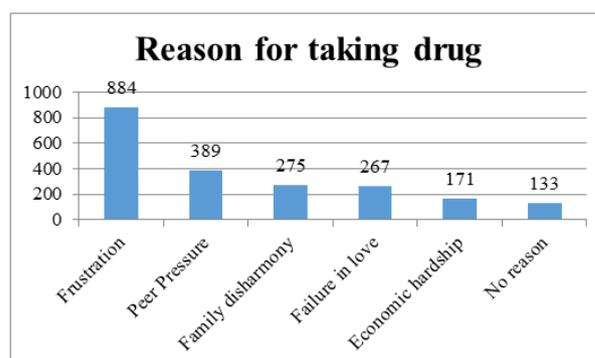


Fig-VI: Distribution of the patients by reasons for taking drug (n=2119)

## DISCUSSION

In this study, it is revealed that 90 of the patients were below the age group of 30 years with male predominance (88.39%) which is the main workforce of any nation. This result was almost similar to a study conducted in Sylhet, Bangladesh [7, 8]. In the present study most of the patients came from urban area (1280, 60.40%) and rural areas 839 (39.60%) which may be a reflection of rapid industrialization and in urbanization in our country [7]. It is further revealed from the study that 73% (1547) were from middle class of the society followed by upper class (403, 19%) and 169 (8%) were from lower class. A study conducted in India by Rather YH in 2013 revealed a slightly different observation where they found more than half (56%) had a poor or lower-middle socio-economic background [9]. The subjects of the study were commonly abusing Yaba (1126, 53.14%), Heroin (567, 26.26%), Fensidyl (231, 10.90%), Wine (142, 6.70%), Hypnotics (39, 1.84%) and Cannabis (14, 0.66%) reflecting the pattern drug abuse of the community. Slightly different pattern was observed in a study in 2017 by Mohit M A *et al.* [10] The commonest reasons for first use of substance in the study were frustration (884, %) followed by peer pressure (389 %), family disharmony (275 %), failure in love (267 %), economic hardship (171, %) and 133 respondents stated that they have no specific reason for being drug addict. Slightly different picture was observed by Sani M N in 2010 and Hasem *et al.* in 2017 [11, 12].

## Limitations of the study

The study was carried out in one division which may not reflect the scenarios of the whole country.

## CONCLUSION

This study revealed that substance abuses in young adults of productive age group from urban middle class families are constantly higher. Findings of this study may planners and health managers for better intervention strategies to prevent substance abuse.

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