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Original Research Article

Factors associated with relapse amongst substance abusers

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ABSTRACT

Background: Relapse amongst substance abusers is common throughout the world, and Bangladesh is no exception to this. In Bangladesh, drug related problems are gradually becoming a burning issue in context of social, economical and medical perspective. The present study aimed to find out factors indicating relapse amongst substance abuser.
Methods: This descriptive type of observational study was conducted in the combined military hospital and other government/private hospital/institute, especially the central drug addict treatment center, Dhaka. Informed consent was obtained prior to data collection. Collected data was classified, edited, coded, and entered into the computer for statistical analysis by using SPSS-23. The chi-Square test was used to analyze the categorical variables, and a $p<0.05$ was considered as statistically significant.
Results: The study involved 100 patients who had a history of substance abuse. The most common substance abused was Yaba (27%), followed by cannabis (21%). The average duration of abuse for Yaba was 5.8 years, while the longest mean duration was for Alcohol (14.2 years). In the 2nd admission, the largest percentage of patients was aged 21-30 years and were male. The majority of patients were Muslim and were either unemployed or had a lower socioeconomic status. Patients age, occupation, socioeconomic status, peer pressure, and family problems all had a significant association ($p<0.05$) with relapse at different admissions. Peer pressure and family problems were also identified as factors affecting relapse, with 67.57% and 56.76% of patients experiencing them during their 2nd admission, respectively.
Conclusions: The study found Yaba to be the most commonly used drug, followed by cannabis, phensedyl, heroin, etc. Alcohol was found to have the longest duration of abuse. Most patients were aged 21-30 and unemployed in multiple admissions. Peer pressure and unemployment were major factors in substance abuse, and psychiatric illness was a common factor in relapse. The results align with global findings and highlight the need for a comprehensive approach to addressing substance abuse, considering all relevant factors.

Keywords: Substance, Drugs, Relapse, Abuse

INTRODUCTION

Relapse is a common problem among substance abuse patients worldwide, including Bangladesh.[1-3] Many factors contribute to relapse and can be divided into four categories: patient-related factors, environmental factors, clinician-related factors, and treatment-related factors.[4,5] Negative mood states and external pressure to use drugs are the most common causes of relapse, followed by the desire for positive mood states and social/family problems.[6,7] Substance abuse is a significant public health concern in Bangladesh, with a growing impact on the economy and society. The global drug trade is estimated to generate US$400 billion in annual revenue, with

Bangladesh spending an estimated Taka 70 crore on drug abuse each day.[8,9] This is a significant drain on the resources of a poor country like Bangladesh, with 80% of the money leaving the country in the form of gold or foreign currency. Young people, street children, slum dwellers, marginalized women, sex workers, and rickshaw pullers are the most vulnerable groups in Bangladesh when it comes to substance abuse.[10,11] Drug trafficking often involves street children and marginalized women. Most of the country's criminals are now involved in illicit drug trafficking. The most prevalent drugs in Bangladesh are cannabis, liquor, phensedyl, heroin, Yaba, injectable drugs, tranquilizers, and glue.[12] There has been a recent trend towards injecting drugs, which is increasing the risk of spreading HIV/AIDS. The drug Yaba, smuggled from Myanmar, is becoming increasingly popular.[13] Anabolic steroids, although not yet recognized as a drug of abuse under the law, are widely abused by sex workers. All these factors contribute to spread of substance abuse and increase risk of relapse and readmission. There have been no studies on relapse and readmission rates in Bangladesh, but personal observation suggests that relapse and readmission are often due to poor follow-up and sparse workup of patients, the availability of drugs in local area, personal problems, social instability, familial disharmony, and romantic disappointment among younger people in Bangladesh.[2,14] Factors such as purpose of addiction and personality also play a role in relapse. For example, people may use drugs to increase concentration, energy, alertness, improve self-esteem, elevate mood, for social interaction, to improve farm work or study, for religious reasons, or simply to alleviate boredom.[15] In Bangladesh, drug-related problems are becoming a significant concern from social, economic, and medical perspectives. Department of narcotic control of Bangladesh estimated that approximately 1.5 million people are involved in substance abuse.[16] Personality is a very important determining factor in drug involvement and can be identified as early as age seven in children's behavior.[17,18] Studies have shown that individual characteristics play dominant role in vulnerability to drug abuse.[19,20] However, results of studies examining the impact of patients' insight on their illness and compliance with treatment are inconsistent. There has been no nationwide research/survey on substance abuse and relapse in Bangladesh, but there are several indicators that are considered when assessing relapse risk, including social unrest and disruption of social fabrics, increased incidence of violence, increased money circulation and inflation, changing family systems, illicit trafficking, rural-urban migration, increased drug production in neighboring countries, and mental illness and psychiatric disorders. Aim of this study is to determine the factors that contribute to relapse in our setting.

METHODS

This descriptive type of observational study conducted at department of psychiatry, combined military hospital, Dhaka, Bangladesh, and other private and public institutes of Dhaka city, focusing primarily on drug addiction treatment centers. The study duration was 6 months, from January 2016 to June 2016. During this period, a total of 100 participants were selected through consecutive sampling method following the inclusion and exclusion criteria. Inclusion criteria for study being aged 18-50, undergoing treatment for 2 years, in remission, admitted to study hospital twice or more, and having a guardian's consent. This was to ensure only suitable participants included for accurate results. Exclusion criteria for study patients with cognitive impairment, unable to answer criteria questions, just starting treatment for first time/ whose legal guardian declined participation. Informed consent was obtained from legal guardians of participants regarding their participation in study. All necessary data collected using a structured questionnaire and was analyzed by Microsoft excel and SPSS program. Quantitative observations were indicated by frequencies and percentages. Chi-square test was used to analyze categorical variables, shown with cross tabulation. $P<0.05$ considered as statistically significant. Prior to commencement of study, ethical approval obtained from ethical review committee of study hospital.

RESULTS

Most used drug Yaba, with 27% of patients surveyed reporting its use. Second most common drug cannabis (Hashish), with 21% of patients surveyed reporting its use. Phensedyl, heroin, and multiple drugs were used by 17%, 11% and 10% of patients, respectively. Use of sedatives and alcohol was less common, with 8% and 6% of patients reporting their use, respectively.

Table 1: Distribution of the study patients by type of substance abuse (n=100).

Type of drugs	N	Percentage (%)
Yaba	27	27
Cannabis (Hashish)	21	21
Phensedyl	17	17
Heroin	11	11
Multiple drugs	10	10
Sedatives	8	8
Alcohol	6	6

Table 2: Distribution of study patients by duration of substance abuse (n=100).

Duration of abuse (Years)	Mean	±SD	Min-max
Yaba (n=27)	5.8	±2.0	3-10
Cannabis (n=21)	9.9	±2.5	6-12
Phensedyl (n=17)	11.8	±2.3	8-15
Heroin (n=11)	9.9	±2.1	6-15
Multiple drugs (n=10)	8.7	±3.2	6-13
Sedatives (n=8)	7.1	±4.2	5-12
Alcohol (n=6)	14.2	±3.4	9-18

Yaba had a mean duration of abuse of 5.8 years with SD of 2.0, and a range of 3 to 10 years. Longest mean duration of abuse was found for alcohol, at 14.2 years, with a SD of 3.4 and range of 9 to 18 years. For cannabis, mean duration was 9.9 years, with standard deviation of 2.5 years and range of 6-12 years. Phensedyl had second longest mean duration of abuse at 11.8 years, with a standard deviation of 2.3 years and range of 8 to 15 years.

Table 3: Association of factors affecting relapse at different admissions, (n=100).

Variables	2nd admission (n=37)		3rd admission (n=27)		4th admission (n=36)		P value
	N	%	N	%	N	%	
Age (years)							
21-30	20	54.05	4	14.81	8	22.22	0.007
31-40	12	32.43	15	55.56	17	47.22	
41-50	5	13.51	8	29.63	11	30.56	
Sex							
Male	35	94.59	27	100	35	97.22	0.455
Female	2	5.41	0	0	1	2.78	
Religion							
Muslim	32	86.49	25	92.59	32	88.89	0.743
Hindu	5	13.51	2	7.41	4	11.11	
Occupational status							
Unemployed	20	54.05	21	77.78	30	83.33	0.019
Employed	17	45.95	1	3.70	6	16.67	
Marital status							
Married	33	89.19	25	92.59	34	94.44	0.775
Unmarried	3	8.11	2	7.41	1	2.78	
Divorced	1	2.70	0	0	1	2.78	
Socioeconomic status							
Lower	1	2.70	6	22.22	10	27.78	0.014
Middle	6	16.22	8	29.63	8	22.22	
Upper	30	81.08	13	48.15	18	50	
Peer pressure							
Present	25	67.57	18	66.67	33	91.67	0.022
Absent	12	32.43	9	33.33	3	8.33	
Family problem							
Present	21	56.76	20	74.07	30	83.33	0.040
Absent	16	43.24	7	25.93	6	16.67	

For the 2nd admission (n=37), the largest percentage of patients was in the age group of 21-30 years (54.05%) and the majority were male (94.59%). Most patients were Muslim (86.49%) and unemployed (54.05%). More patients were married (89.19%) and of upper socioeconomic status (81.08%). There was higher presence of peer pressure (67.57%) and family problems (56.76%) among patients. For the 3rd admission (n=27), the largest percentage of patients was in the age group of 31-40 years (55.56%) and all patients were male. Most patients were Muslim (92.59%) and unemployed (77.78%). More patients were married (92.59%) and of middle socioeconomic status (29.63%). There was a higher presence of peer pressure (66.67%) and family problems (74.07%) among patients. For 4th admission (n=36), the largest percentage of patients was in the age group of 31-40 years (47.22%) and the majority were male (97.22%). Most patients were Muslim (88.89%) and unemployed (83.33%). More patients were married (94.44%) and of upper socioeconomic status (50%). There was a higher presence of peer pressure (91.67%) and family problems (83.33%) among patients.

Statistically significant differences were found for the variables of age (p=0.007), occupational status (p=0.019), and peer pressure (p=0.022) and socio-economic status (p=0.014) between admission groups. No significant differences were found for the variables of sex (p=0.455), religion (p=0.743), and marital status (p=0.775).

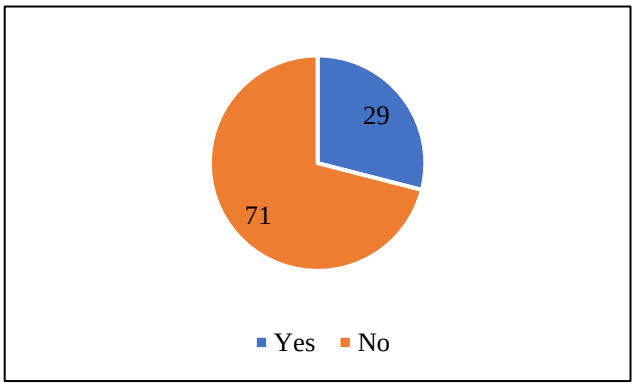

Figure 1: Distribution of the study patients by psychiatric illnesses (n=100).

Among the participants of the present study, 29% had been medically diagnosed to have psychiatric illness, while 71% did not have any diagnosed psychiatric illness.

Table 4: Distribution of the study patients by causes of relapse (n=100).

Causes of relapse	N	Percentage (%)
Peer pressure	25	25
Family problem	20	20
No guidance	18	18
Unemployment	17	17
Low mood	12	12
Failure in life (divorced, failure in love and failure in examination)	8	8

Of the 100 patients who relapsed, leading cause was peer pressure (25%) followed by family problems (20%). 18 patients (18.00%) cited lack of guidance and 17 (17%) unemployed. Low mood was reported as factor by 12 patients (12%) while failure in various areas of life such as divorce, love, and exams reported by 8 patients (8%).

DISCUSSION

In present study it was observed that 27.0% patients were Yaba abuser followed by cannabis (21.0%), phensedyl (17%), heroin (11%), multiple drugs (10.0%), sedatives (8.0%) and alcohol abuser (6.0%) respectively. This was slightly different to the findings of another study where methamphetamine was the most used drug.[5] This difference was mostly due to the prevalence and availability of different types of drugs in different regions. The proportion of heroin abusers in this study (18.75%) was less than that found among other comparable studies, which can also be attributed to the difference in drug availability.[21] Mean duration of Yaba abuse was found 5.8±2.0 years (range from 3 to 10 years), cannabis 9.9±2.5 years (range from 6 to 12 years), phensedyl 11.8±2.3 years (range from 8 to 15 years), heroin 9.9±2.1 years (range from 6 to 15 years). multiple drugs 8.7±3.2 years (range from 6 to 13 years), sedatives 7.1±4.2 years (range from 5 to 12 years), alcohol 14.2±3.4 years (range from 9 to 18 years). In another study the duration of abuse for all the patients ranged from 1 year to 50 years while the mean duration was 9.5±6.6 years.[22] The longest duration of abuse was for alcohol (14.2±3.4 years) and phensedyl (11.8±2.3 years), followed by heroin, then hashish (cannabis). This was similar to the findings of other studies where alcohol was found to be the most frequently abused substance.[23] In the second admission, 54.1% of patients were aged 21-30 years, 14.8% were in their third admission, and 22.2% were in their fourth admission. 54.1% were unemployed in the second admission, 77.8% in the third admission, and 83.3% in 4th admission. 81.1% came from upper-class families in the second admission, 48.1% in 3rd admission, and 50.0% in the 4th admission. 67.6% of patients relapsed due to peer pressure in the second admission, 66.7% in 3rd admission, and 91.7% in 4th admission. This was found to be statistically significant ($p<0.05$) among the three groups. The study also found a significant association between unemployment and substance abuse, and peer pressure and substance abuse, which has been documented in other studies around the world.[2,24-26] Psychiatric illness is often associated with the relapse rate of substance abuse as observed in multiple global studies.[27,28] Among the present study participants, 29% had been diagnosed with psychiatric illness. This was comparatively lower compared to other similar studies.[29] A study by Satija et al observed that substance abstinence rate was significantly higher among addicts without psychopathological ailments.[30] In the study on causes of relapse, it was noted that 25% of respondents reported relapsing due to peer pressure, while 20% attributed their relapse to family problems. 18% stated they relapsed due to a lack of guidance, while 17% were unemployed at the time of their relapse. Additionally, 12% reported being in a low mood, and 8% reported relapsing due to failures in life such as divorce, failed relationships, or failed exams. Similar to these findings, it was also observed that peer pressure and family problems were most common cause of substance abuse relapse in multiple other studies.[2,24,31]

Limitations

The study was conducted with a small sample size collected only from Dhaka city hospitals. So, the results may not represent the whole community.

CONCLUSION

The study showed that Yaba was the most used drug, followed by cannabis, phensedyl, heroin, multiple drugs, sedatives and alcohol. The duration of abuse varied among different substances, with alcohol having the longest duration. The majority of patients were aged 21-30 and unemployed in the second, third, and fourth admissions. The study also found that peer pressure and unemployment were significant factors associated with substance abuse, while psychiatric illness was a common factor in substance abuse relapse. The results were consistent with other studies globally. In conclusion, this study highlights the need for a comprehensive approach to addressing substance abuse, taking into account the various factors associated with drug abuse and relapse.

Recommendations

Family cohesion should be improved, for that adequate and qualitative time should spent among the family members. Religious values and familial values should be practiced in the family.

Community and state-based facility can be established to provide rehabilitation to the drug abuser like creating a job opportunity to unemployed group.

Social awareness should be created to prevent substance abuse. Print and electronic media can play a more vital role in this aspect.

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