

ARCHIVES of NIMH



The Official Journal of
National Institute of
Mental Health, Dhaka

ARCHIVES of NIMH

Editorial

Clinical guidelines: benefits and limitations

Review Article

Merits and demerits of online undergraduate medical classes during COVID-19: a narrative review

Original Articles

Pattern of psychiatric disorders among individuals facing the consequences of COVID-19 pandemic and attended in a tertiary care psychiatric hospital

Estimation of C-reactive protein level in schizophrenia

A comparison of the effects of 1.5% glycine and 5% glucose irrigants on plasma serum physiology and the incidence of transurethral resection syndrome during TURP sur-gery

Factors predicting depressive symptoms in patients with chronic kidney disease and end-stage renal failure

Prevalence of anxiety and depression among cancer patients in a community hospital of Bangladesh

Personality disorders among patients of substance use disorders

Case Report

Successful management of Sheehan's syndrome mimicking schizophrenia in a 36 years old female

Editorial

Clinical guidelines: benefits and limitations

Mohammad Tariqul Alam

1-2

Review Article

Merits and demerits of online undergraduate medical classes during COVID-19: a narrative review

Md. Sultan-E-Monzur, Zubair Mahmood Kamal

3-6

Original Articles

Pattern of psychiatric disorders among individuals facing the consequences of COVID-19 pandemic and attended in a tertiary care psychiatric hospital

Bidhan Ranjan Roy Podder, Mohammad Muntasir Maruf, Shabana Parveen, Zinat De Laila, Niaz Mohammad Khan, Farzana Rahman, Zubair Mahmood Kamal

7-13

Estimation of C-reactive protein level in schizophrenia

Mortoza Hassan, Jasmin Akhtar, Nazia Afrin Siddiqui

14-18

A comparison of the effects of 1.5% glycine and 5% glucose irrigants on plasma serum physiology and the incidence of transurethral resection syndrome during TURP surgery

Mohammad Haris Uddin, Golam Mawla Chowdhury, Forkan Abmmad, Bishwanath Kundu

19-25

Factors predicting depressive symptoms in patients with chronic kidney disease and end-stage renal failure

Nazia Afrin Siddiqui, Babrul Alam, Mohammad Haris Uddin, Mohammad Afjal Hossain, Md. Asbraful Alam, S M Nafeez Imtiaz, Md. Raquib Morsbed

26-31

Prevalence of anxiety and depression among cancer patients in a community hospital of Bangladesh

Shabina Akther, Shabeen Islam, Md. Reza-A-Rabby

32-39

Personality disorders among patients of substance use disorders

A.K.M Shafiqul Azam, Ahmed Riad Chowdhury, Ramendra Kumar Singha Royle, Md. Abdul Motin, Md. Mejbaul Khan Forhad, Suchitra Talukdar, Mohammad Tariqul Alam

40-46

Case Report

Successful management of Sheehan's syndrome mimicking schizophrenia in a 36 years old female

Sadia Afrin Shampa, Md. Sultan-E-Monzur, Fabima Sharmin Hossain, Md. Khairul Islam, Muntasir Maruf, Mohammad Tariqul Alam

39-41

Instructions for authors

A4-8

Personality disorders among patients of substance use disorders

A.K.M Shaful Azam, Ahmed Riad Chowdhury, Ramendra Kumar Singha Royle, Md. Abdul Motin, Md. Mejbaul khan Forhad, Suchitra Talukdar, Mohammad Tariqul Alam

Background: Substance use disorders (SUDs) constitute a major public health problem and are associated with extensive psychiatric comorbidity. Clinical studies have demonstrated a high prevalence of personality disorders (PDs) in SUD patients which leads to poor psychosocial functioning and unfavorable clinical outcome.

Objectives: The study was aimed to assess PD in patients with SUD.

Methods: This was a cross-sectional descriptive study carried out in the Department of Psychiatry, Sylhet MAG Osmani Medical College during the period from 1st September 2017 to 31st August 2019. Purposive sample was taken and SUD diagnosis was made by Consultant Psychiatrists according to DSM-IV criteria. Sociodemographic variables were collected in a predesigned semi-structured questionnaire and Structured Clinical Interview for Diagnosis (SCID-II) was applied for screening of PD. Data analysis was performed using SPSS version 22.

Results: Among the 168 SUD patients, 50.6% had PD. Majority of the participants had cluster B PD that comprised of 39.3% of the patients. Most frequently diagnosed type of PD was antisocial PD (20.8%), followed by borderline PD (13.1%) and each of the rest of the PDs were less than 5%. Regarding association of sociodemographic variable and PDs, occupational status ($p=0.027$) and age at initiation of substance use ($p=0.001$) had significant association with PD.

Conclusions: This study revealed significantly high frequency of PD among SUD patients. It is important to assess PDs among all SUD patients in order to design more effective management of this underemphasized problem and improve the treatment outcome.

Declaration of interest: None

Copyright and usage: ©Archives of NIMH 2021

Keywords: Personality disorder; substance use disorder; antisocial personality disorder; SCID-II.

Introduction

Personality disorder (PD) is an enduring pattern of behavior and inner experience that deviates significantly from the individual's cultural standards. It is rigidly progressive. Its onset is in adolescence or early adulthood, is stable over time, leads to unhappiness and impairment and manifests at least two of the following four areas; cognition, affectivity, interpersonal function, or impulse

control.¹ Substance use disorder (SUDs) includes the two terminology namely substance abuse and substance dependence, each are defined as "substance abuse is a maladaptive pattern of substance use, leading to clinically significant impairment or distress." The key difference between substance abuse and dependence is that dependence refers to a more severe condition where the

individual has difficulty controlling use or is physically or psychologically dependent on the substance whereas abuse is a residual category reserved for problematic or hazardous use in the absence of dependence.²

SUDs are a major cause of death and disability. Numerous clinical studies indicate that there is an association between SUD and PDs with evidence that PD may influence both the aetiology and course of SUD.³ In recent years, there has been increasing recognition of extensive co-morbidity between SUDs and PDs. A study conducted in Spain found 58.1% of SUD subjects had PDs.⁴ Another study in Brazil by Krieger et al. found high percentage of PD (55.4%) among drug user inpatients which was close (60%) to another comorbidity study of PD among SUD patients in New York conducted by Skodol et al.^{5,6} A Turkish study reported patients with SUD, 73.7% had an Axis II disorder and another study among Canadian population showed 59% of SUD patients had PDs.^{7,8} SUD causes educational drop out, unemployment, financial crisis, psychiatric disorders, family disharmony, domestic violence, criminal activities and many other social disadvantages.⁹ Patients with SUD clinician usually addresses and manage the primary clinical conditions related to substance use but the underlying factor like PD is unrecognized. So, it is necessary to search for the most potential underlying cause of substance use, especially the highly prevalent PD. The scarcity of sufficient clinical data of PD among SUD patients' encouraged researcher to do the study to see the actual condition. It provides a baseline data about frequency of PD among SUD patients and helps to understand the pattern of substance use and gives an idea about sociodemography of SUD patients in our country

Methods

This was a cross-sectional descriptive study carried out in the Department of Psychiatry, Sylhet MAG Osmani Medical College during the period from 1st September 2017 to 31st August 2019. SUD diagnosis was done by Consultant Psychiatrists according to DSM-IV criteria. SUD patient above 18 years of age and after adequate clinical improvement of intoxication or withdrawal state of SUD patients were included in the study. Those who refused to give consent, failed to communicate with the researcher or pre-diagnosed as psychotic illness were excluded. Data were collected from 168 samples in a pre-designed semi-structured questionnaire for socio-demographic variable and Structured Clinical Interview for Diagnosis for PD (SCID-II) was applied for screening of PD. Before commencement of this study, ethical approval was taken from ethical committee and

informed written consent was taken from all participants. Ethical aspects were strictly maintained in all the procedures. Statistical analysis was performed by using SPSS 22. Quantitative data were summarized as mean and standard deviation. Qualitative data were summarized as frequency and percentages and comparisons were done by chi-square (χ^2) test where appropriate. A probability (p) value of <0.05 was considered statistically significant.

Results

Total patients with SUD were 168, age ranged from 18 to 45 years with mean age of 26.5 (\pm 5.8) years, most of them were male (91.7%). Majority of the patients (92.3%) were Muslims, 53% were unmarried, 56% from urban background, 32.7% were unemployed, completed secondary education was 31.5%, and 90.5% patients had no family history of psychiatric illness. Approximately two-third cases (75%) had no family history of substance use and more than half (51.2%) of the substance users experience their first initiation within 20 -29 years.

Table 1: Sociodemographic and some other characteristics of SUD patients (N=168)

Characteristic	Frequency (n)	Percentage (%)
Age (years)		
18-28	108	64.3
29-39	53	31.5
40-50	7	4.2
Gender		
Male	154	91.7
Female	14	8.3
Religion		
Islam	155	92.3
Hinduism	13	7.7
Marital status		
Unmarried	89	53
Married	79	47
Habitat		
Urban	94	56
Rural	74	44
Income (BDT)		
No monthly income	72	42.9
<10,000 BDT	26	15.5
10,000-30,000 BDT	38	22.6
>30,000 BDT	32	19

Characteristic	Frequency (n)	Percentage (%)
Family history of psychiatric illness		
Present	16	9.5
Absent	152	90.5
Family history of substance use		
Present	42	25
Absent	126	75
Age at initiation of substance (years)		
10-19	79	47
20-29	86	51.2
30-39	2	1.2
>40	1	0.6

Among the patients with SUDs, 50.6% patients had at least one PD and 49.4% patients did not have any PD. Most frequently diagnosed PD among the SUD patients was antisocial PD (20.8%), followed by borderline PD 13.1%, histrionic 4.8%, obsessive-compulsive 3.0%, dependent 2.4%, depressive 2.4%, avoidant 1.8%, paranoid, narcissistic, and schizotypal were 0.6% (Table 2).

Table 2: Distribution of respondents by different type of personality disorders (N=168)

Type of personality disorder	Frequency (n)	Percentage (%)
Paranoid	1	0.6
Schizotypal	1	0.6
Antisocial	35	20.8
Borderline	22	13.1
Histrionic	8	4.8
Narcissistic	1	0.6
Dependent	4	2.4
Avoidant	3	1.8
Obsessive-compulsive	5	3
Depressive	4	2.4

Among the SUD patients, 1.2% had cluster A, 39.3% had Cluster B and 7.1% had cluster C PDs. Cluster C comprises 7.1% (Figure 1).

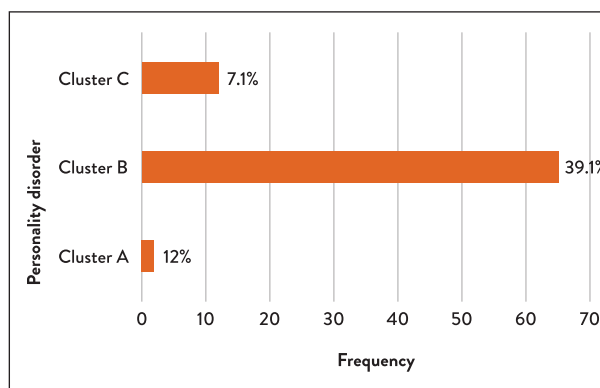


Figure 1: Distribution of respondents by cluster of personality disorders (N =168)

Regarding association of sociodemographic variables and PD, it revealed that 50 % of students, 36.8 % of service holder, 53.8 % of businessman, and 58.2 % of unemployed SUD patients had PD. PD also present among 40% of house maker, and among 67.7% of other profession (driver, day laborer) patients with SUD.

Table 3: Association of personality disorders with sociodemographic variables

Characteristic	Personality Disorder		X ²	P value
	Present n (%)	Absent n (%)		
Age (years)				
18-28	60 (55.6)	48 (44.4)	2.981	0.225
28-39	22 (41.5)	31 (58.5)		
40-50	3 (42.9)	4 (57.1)		
Gender				
Male	77 (50)	77 (50)	0.262	0.609
Female	8 (57.1)	6 (42.9)		
Religion				
Islam	80 (51.6)	75 (48.4)	0.830	0.362
Hinduism	5 (38.5)	8 (61.5)		
Marital Status				
Unmarried	48 (53.9)	41 (46.1)	0.843	0.358
Married	37 (46.8)	42 (53.2)		

Characteristic	Personality Disorder		X2	P value
	Present n (%)	Absent n (%)		
Habitat				
Urban	44 (46.8)	50 (53.2)	1.224	0.269
Rural	41 (55.4)	33 (44.6)		
Income (BDT)				
No monthly income	41 (56.9)	31 (43.1)	5.738	0.125
<10,000	11 (42.3)	15 (57.7)		
10,000-30,000	14 (36.8)	24 (63.2)		
>30,000	19 (59.4)	13 (40.6)		
Education				
Illiterate	2 (22.2)	7 (77.8)	5.597	0.231
Primary	19 (51.3)	18 (48.7)		
Secondary	32 (60.4)	21 (39.6)		
Higher secondary	21 (44.7)	26 (53.3)		
Graduate and above	11 (50)	11 (50)		
Occupation				
Student	16 (50)	16 (50)	15.794	0.027*
Service	7 (36.8)	12 (63.2)		
Business	14 (53.8)	12 (46.2)		
Unemployed	32 (58.2)	23 (41.8)		
House maker	2 (40)	3 (60)		
Family history of psychiatric illness				
Present	9 (56.2)	7 (43.8)	0.226	0.634
Absent	76 (50)	76 (50)		
Age of initiation of substance (years)				
10-19	52 (65.8)	27 (34.2)	16.51	0.001*
20-29	32 (37.2)	54 (62.8)		
30-39	-	2 (100)		
Number at substances used				
Single	73 (55.7)	58(44.3)	1.240	0.265
Multiple	12(32.4)	25(67.6)		

P value measured from x2 test; * denotes statistically significant difference

The association between PD and occupational status of the patients with SUD was statistically significant ($\chi^2=15.794$; $df=7$, $p=0.027$) (Table 3). Analysis of the ages showed that participants with personality disorders were initiate their substance at an earlier age. Among 79 patients of aged

10-19 years 65.8% had PD; while among 86 patients of aged 20-29 years 37.2% had PD, which were significantly differ with those without PD. There were statistically significant association between age at initiation of substance and PD ($\chi^2=16.518$; $df=3$, $p=0.001$) (Table 3).

Discussion

We found that half of the SUD patients (50.6%) had PDs. This result was in accordance with the findings of a study found that among inpatient with SUD, 50% had one or more PDs.¹⁰ Similar prevalence of PDs were reported in different studies using SCID-II as in USA by Nace et al. (57%), Ross et al. (53%), Krieger et al. (55.4%), Skodol et al. (59%) and Zikos et al. (59%).^{5,6,8,11,12} Another study in USA found 74% PD among inpatients using modified version of SCID-II.¹³ Extreme rate of PD 90% were reported in Australia using IPDE as screening tool and included patients with severe psychopathology related to injectable drug use.¹⁴

In the present study, highest diagnosed PD was antisocial PD (20.8%). Other PDs were borderline 13.1%, histrionic 4.8%, obsessive-compulsive 3%, dependent 2.4%, depressive 2.4%, paranoid 0.6%, narcissistic 0.6% and schizotypal 0.6%. Similar findings were observed in a Turkish study, found 23.5% antisocial PD in substance dependent patients and in another study found antisocial PD 16%; borderline 13%; paranoid 8%, and avoidant 8%.^{15,16} Casadio et al. found similar findings- it was antisocial 13.8%, borderline 15%, paranoid 4.4%, avoidant 7.8%, schizoid 3.7%, histrionic 1.5%, narcissistic 2.5%, dependent 1.6% and obsessive-compulsive and passive-aggressive 4.7%.¹⁷ Similarities may be due to the same pattern of substance use and same instruments used for screening. Kranzler et al. found 34% borderline, 28% antisocial, 28% narcissistic, 22% avoidant, 22% paranoid, 18% obsessive-compulsive and 10% dependent in their sample of SUD patients which did not match with the researcher's finding.¹⁸ Inconsistency was also found with a Greek study, where 33.5% antisocial, 27.7%, borderline, 16.8% avoidant, 13.9% paranoid, 12.1% passive-aggressive, narcissistic 11.6%, histrionic 11%, dependent 9%, 6% obsessive-compulsive 6% and 4% had schizotypal PD.¹⁹ Though SCID-II was used in these studies, these variations in findings may be due to socio-cultural differences and the types of substance used. Cluster B was the highest PDs (39.4%) followed by Cluster C (7.1%) and Cluster A (1.2%) in this study which was in accordance with Casadio et al. who found 33% cluster B, 14% cluster C and 8% cluster A PDs. Morgenstein et al. found 37.7% cluster B, 33.6% cluster C and 21.3% cluster A PDs; Zikos et al. found almost same type of distribution with cluster B predominance (32%), Cluster A and C each were 27%. Nace et al. found Cluster B at 30%, Cluster C at 8%, and Cluster A at 7%.^{8,11,17,20-22} Above studies showed a clear resemblance in cluster B PD though other clusters are somewhat inconsistent with present study.

In the present study age of the respondents ranged from 18 to 45 years with the mean age of 26.5 ± 5.8 years. Most of the patients (64.3%) were in the age group of 18-28 years followed by 31.5% in 29-39 and 4.2% in 40-50 years age group. A cross-sectional study was conducted in Sylhet, Bangladesh by Roy and Miah found the mean age of the patients were 25.9 ± 7.6 years; Maruf et al. found 28.8 ± 8 years.²³⁻²⁵ These observations reveal that young adults are the most vulnerable group for SUDs. Male patients with SUDs were 91.7% and female was 8.3% in the current study. Similar findings were found in several other studies where 90.5%, 94.1% and 94.8% responders were males.²³⁻²⁵ These findings indicate that male persons are the most affected group for SUD in our perspective.

About 53% of participants were unmarried and 47% patients were married in this study. From Bangladesh perspective most of the study findings were similar to previous studies showing unmarried vs. married status- (57.1% vs. 34.3%), (62.9% vs. 46.8%) and (51.6% vs. 44.5%).^{23,24,25} The findings were consistent with another study where they found marriage as a protective factor against substance use.²⁶ Among the substance user's Muslim participants represented 92% and Hindu 8% by religious status, which was similar with another study where authors found 61.6% Muslim and 36.6% Hindu users.²⁷ More than half of the participants were from urban background (56%) which was consistent with an USA study where the rates substance users in adults are generally higher in metropolitan counties. Among the patients most of respondents (42.9%) had no monthly income, 15.5% respondents were in the low-income group, 22.6 % respondents were in the middle-income group and 19 % respondents were in the high-income group and over half (56%) belonged to the lower-middle social class. This finding resembled near with other studies done by Roy and Miah, and Maruf et al.^{23,25} Most of the patients (31.5%) had attained secondary level of education, followed by higher secondary 28.1%, primary education 22%, graduates and above were 13.1% and 5.4% respondents were illiterate. In Bangladesh Roy & Miah found most of the SUD patients completed HSC level 34.2%, SSC level 10.3%, primary level 20.6%, graduate 21.9% and illiterate 1.3% and similar result was found by Kamal et al.^{24,25}

In current study 32.7% of the respondents belonged to unemployed group, 19% were students 15.5% businessmen, 11.3% service holders and others were 21.5% (driver, chef, day labors, etc.). In a study by Kamal et al. found similar findings where 32.2% were unemployed, 19% each were students and businessmen,

service holder 16%, day laborers 10% and others 12% (driver, housewife, cultivator). Majority of the participants (90.5%) had no family history of psychiatric illness that was not consistent with most other studies. In one study where researcher found substance use was high among those who have first degree relatives with substance use.²⁸

Approximately two-third of cases (75%) had no family history of substance use and more than half of the substance users experience their first initiation within 20-29 years which comprised of 51.2% and almost half (47.6%) had started their substance use within 10-19 years. This finding was consistent with studies where 65.2% males had started taking substance within 15-24 yrs of age and 76.8% within 11–20 years age.^{27,29} The investigator has found statistically significant difference concerning sociodemographic characteristics between patients with PD and those without PD in age at initiation of substance and occupational status. In a study, among the substance users, presence of PD had significant relationship with occupation which is similar to findings of present study.¹⁷

This study also found non-significant association with age group, gender, religion, marital status, habitant, family history of psychiatric illness, and family history of substance use and type of institution in between the groups with and without PD. Westermeyer and Thuras highlighted that there were no significant difference concerning gender, marital status, and employment status in patients with or without PD.³⁰

Conclusions

This study revealed higher frequency of PDs among SUD patients of which antisocial and borderline were the commonest. Cannabis use was the most common SUD. It is of great concern that such a huge number of patients abused different substances and a substantial portion of them suffered from PD. Both the issues considered here needs to be evaluated at the national level to resolve the sufferings and burden imposed on the patients themselves as well as their family members and society. Since this was a cross-sectional study, the causal link could not be established and as purposive sampling method was applied in this study, it might have created bias in some of the results. As patients with SUDs experienced significantly higher rate of PDs, active assessment of PD in every patient who use substance is crucial. Further large-scale multicenter studies are required to evaluate PDs in SUD patients to provide modified treatment associated with improved outcomes. A strong referral unit should be present at the grass root level and should be equipped well enough for addressing the problem of this group.

A.K.M Shafiul Azam, Medical Officer, Psychiatry, Mental Hospital, Pabna, Bangladesh; **Ahmed Riad Chowdhury**, Assistant Professor, Psychiatry, Sylhet MAG Osmani Medical College (SOMCH), Sylhet, Bangladesh; **Ramendra Kumar Singha Royle**, Associate Professor, Psychiatry, SOMCH, Sylhet, Bangladesh; **Md. Abdul Motin**, Assistant Professor, Psychiatry, Rangpur Medical College, Rangpur, Bangladesh; **Md. Mejbaul Khan Forhad**, Medical Officer, Psychiatry, Faridpur Medical College, Faridpur, Bangladesh; **Suchitra Talukdar**, Assistant Registrar, Psychiatry, SOMCH, Sylhet, Bangladesh; **Mohammad Tariqul Alam**, Associate Professor, Psychiatry, National Institute of Mental Health, Dhaka, Bangladesh.

Correspondence: A.K.M Shafiul Azam, Medical Officer, Psychiatry, Mental Hospital, Pabna, Bangladesh.

Email: azamshafiul43@gmail.com

How to cite this article: Azam AKMS, Chowdhury AR, Royle RKS, Motin MA, Forhad MMK, Talukdar S, et al. Personality disorders among patients of substance use disorders. Arch NIMH. 2021; 4(2): 40-46.

Received 15 Oct 2021, revised 15 Nov 2021, accepted 29 Nov 2021.

References

- 1 Sadock BJ, Sadock VA, Ruiz P. Kaplan and Sadock's Synopsis of Psychiatry. New Delhi: 2015; 11th ed. Wolters Kluwer.
- 2 American Psychiatric Association. Diagnostic and statistical manual of mental disorders Washington, DC: American Psychiatric Association 2000; 4th ed., text revision.
- 3 Sher KJ, Bartholow BD, Wood MD. Personality and Substance Use Disorders: A Prospective Study. J Consult Clin Psychol. 2000; 68(5): 818–829.
- 4 Haro G, Mateu C, Martínez-Raga J, Valderrama JC, Castellano M, Cervera G. The role of personality disorders on drug dependence treatment outcomes following inpatient detoxification. Eur Psychiatry. 2004; 19: 187-192.
- 5 Krieger DM, Benzano D, Reppold CT, Fialho PO, Pires GB, Terra MB. Personality disorder and substance related disorders: a six-month follow-up study with a Brazilian sample. J Bras Psiquiatr. 2016; 65(2): 127–134.

- 6 Skodol AE, Oldham JM, Gallaher PE. Axis II co-morbidity of Substance Use Disorders among patients referred for treatment of Personality Disorders. *Am J Psychiatry*. 1999; 156 (5): 733–738.
- 7 Darçin AE, Nurmedov S, Noyan CO, Yilmaz O, Dilbaz N. Psychiatric co-morbidity among inpatients in an addiction Clinic and its association with the process of addiction. *J Psychiatry Neurosci*. 2015; 28(3): 196–203.
- 8 Zikos E, Gill KJ, Charney DA. Personality Disorders among alcoholic outpatients: Prevalence and course in treatment. *Can J Psychiatry*. 2010; 55(2): 65-73.
- 9 Siddike PMA, Soron TR, Ahmed HU, Chowdhury CA. Social and family determinants of substance abuse among the patients of two hospitals in Bangladesh. *J Addict Res Ther*. 2017; 8(4): 1-4.
- 10 Thomas VH, Melchert TP, and Banken JA. Substance dependence and personality disorders: co-morbidity and treatment outcome in an inpatient treatment population. *J. Stud. Alcohol*. 1999; 60: 271–277.
- 11 Nace EP, Davis CW, Gaspari JP. Axis II Co-morbidity in Substance Abusers. *Am J Psychiatry*. 1991; 148(1): 118–120.
- 12 Ross S, Dermatis H, Levounis P, Galanter M. A comparison between dually diagnosed in patients with and without axis ii co-morbidity and the relationship to treatment outcome. *Am J Drug Alcohol Abuse*. 2003; 29(2): 263–279.
- 13 Weiss RD, Mirin SM, Griffin ML, Gunderson JG, Hufford C. Personality disorders in cocaine dependence. *Compr. Psychiatry*. 1993; 34(3): 145–149.
- 14 Gibbie TM, Hides LM, Cotton SM, Lubman DI, Aitken C, Hellard M. The relationship between personality disorders and mental health, substance use severity and quality of life among injecting drug users. *MJA*. 2011; 195(3): 16–21.
- 15 Evren C, Kural S, Erkiran M. Antisocial personality disorder in Turkish substance dependent patients and its relationship with anxiety, depression and a history of childhood abuse. *Isr J Psychiatry Relat Sci*. 2006; 43(1): 40–46.
- 16 Langås AM, Malt UF, Opjordsmoen S. In-depth study of personality disorders in first-admission patients with substance use disorders. *BMC Psychiatry*. 2012; 12(180): 1–10.
- 17 Casadio P, Olivoni D, Ferrari B, Pintori C, Speranza E, Bosi M, et al. Personality disorders in addiction outpatients: prevalence and effects on psychosocial functioning. *Subst. Abuse: Res*. 2014; 8: 17–24.
- 18 Kranzler HR, Satel S, Apter A. Personality disorders and associated features in cocaine-dependent inpatients. *Compr. Psychiatry*. 1994; 35(5): 335–340.
- 19 Kokkevi A, Stefanis N, Anastasopoulou E, Kostogianni C. Personality disorders in drug abusers: prevalence and their association with Axis I disorders as predictors of treatment retention. *Addict. Behav*. 1998; 23(6): 841–853.
- 20 Morgenstern J, Langenbucher J, Labouvie E, Miller KJ. The co-morbidity of alcoholism and personality disorders in a clinical population: prevalence rates and relation to alcohol typology variables. *Am Psychol*. 1997; 106(1): 74-84.
- 21 Afolabi AB, Oladotun AS, Chinwe II. Socio-demographic variables and personality profiles of patients with substance use disorder in a drug abuse treatment facility in Nigeria. *J. humanit. soc. sci*. 2014; 4(15): 110-115.
- 22 Boys A, Marsden J, Strang J. Understanding reasons for drug use amongst young people: A functional perspective. *Health Educ. Res*. 2001; 16(4): 457-469.
- 23 Maruf MM, Khan MZR, Jahan N. Pattern of substance use: study in a de-addiction clinic. *Oman Med. J*. 2016; 31(5): 327-331.
- 24 Kamal M, Huq N, Mali B, Akter H, Arafat SMY. Epidemiology of substance abuse in Bangladesh: a narrative review. *J. Ment. Disord. Treat*. 2018; 4(2): 1-4.
- 25 Roy S, Miah MZ. Socio-demographic and clinical profile of substance abusers attending a regional psychiatric hospital in Sylhet, Bangladesh. *J Addict Res Ther*. 2017; 8(5): 1-4.
- 26 Heinz AJ, Wu J, Witkiewitz K, Epstein DH, Preston KL. Marriage and relationship closeness as predictors of cocaine and heroin use. *Addict Behav*. 2009; 34(3): 258–263.
- 27 Ranjan DP, Namita, Chaturvedi RM. A study of socio-demographic factors contributing to the habit of drug abuse in the urban slum community of Mumbai. *Biomed. Res. J*. 2010; 21(3): 277-284.
- 28 Sbrana A, Bizzarri JV, Rucci P, Gonnelli C, Massei JG, Ravani L et al. Family history of psychiatric disorders and alcohol and substance misuse in patients with bipolar i disorder, substance use disorder, or both. *Am J Addict*. 2007; 16: 227–231.
- 29 Rather YH, Bashir W, Sheikh AA, Amin M, Zahgeer YA. Socio-demographic and clinical profile of substance abusers attending a regional drug de-addiction center in chronic conflict area: Kashmir, India. *Malays J Med Sci*. 2013; 20(3): 31-38.
- 30 Westermeyer J, Thuras P. Association of antisocial personality disorder and substance disorder morbidity in a clinical sample. *Am J Drug Alcohol Abuse*. 2016; 1: 93-110.



The Official Journal of
National Institute of
Mental Health, Dhaka

This journal is approved by
Bangladesh Medical & Dental Council (BM&DC)

This Journal is Published by
National Institute of Mental Health, Dhaka