# **Substance Abuse among Bipolar Mood Disorder Patients**

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## **Abstract**

Background: Substance abuse is a major comorbidity among patients with bipolar mood disorder (BMD). In a major portion of patients with BMD substance abuse remains undiagnosed and untreated in Bangladesh. Objective: This descriptive cross sectional study was conducted from November, 2014 to May, 2015 to determine proportion of substance abuse among patients with BMD. Materials and method: A total of 151 patients with bipolar mood disorder were selected purposefully from both the inpatient and outpatient department of National Institute of Mental Health (NIMH), Dhaka, Bangladesh. Both male and female were included and informed written consent was taken from each respondent. During data collection, a structured questionnaire designed by the researchers containing socio-demographic and other variables was used. Results: Among the respondents 23.8% was found to abuse substance. Conclusion: So during the treatment of BMD the physicians should always search for substance abuse among the patients and treat them accordingly to achieve a fruitful outcome.

**Keywords:** Substance abuse; bipolar mood disorder.

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## Introduction

Substance abuse is exceptionally common during the course of bipolar mood disorder (BMD). The reasons of substance abuse in bipolar patients are unknown. One explanation is that patients with both bipolar and substance use disorders are more likely to seek psychiatric treatment than patients with only one of the two conditions. Alternatively, because one of the criteria for mania is an excessive involvement in pleasurable activities that have a high potential for painful consequences.<sup>1</sup>

Comorbidity of substance abuse has many adverse effects on patients with bipolar disorders. It seems

that higher co-occurrence of substance abuse with bipolar disorder is a risk factor for bipolar patients, and may expose them to higher rates of psycho-social consequences. Lower quality of life, higher rates of committing suicide or suicidal ideation, lower probability of improvement, low treatment response and increased duration of hospitalization are important findings through several researches.<sup>2</sup>

Life-looking study about co-occurrence of substance abuse with bipolar disorder also shows that 57% of patients with type I bipolar disorder were abusing or dependent to one substance,

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28.2% were using two substances and 11.3% were abusing three substances. Among the patients with type II bipolar disorder, 39% were abusing or dependent to one substance, 39% were using two substances and 11% were using three or more substances. Alcohol was the most frequently used substance abused by type I and II bipolar patients.<sup>3</sup> Co-occurrence of substance abuse are of diagnostic and therapeutic importance because they may complicate the clinical symptoms, decrease treatment response,<sup>4</sup> and provide for the establishment of another psychological disorder.<sup>5</sup>

Co-morbidity of substance abuse disorders has many adverse effects on patients with bipolar disorders.<sup>6</sup>

The results from three successive large-scale epidemiologic surveys showed that substance abuse is significantly more prevalent among persons with BMD than among unaffected persons or even those with major depressive disorder. Among patients with bipolar disorder, substance abuse is associated with delayed recovery, hastened relapse, greater inter-episode symptom burden, and increased disability and mortality. 10-14

The aim of this study was to determine the proportion of substance abuse among bipolar mood disorder patient.

#### Materials and method

This was a descriptive cross sectional study; subjects were chosen by convenient sampling technique and were done from November 2014 to May 2015. The study was conducted in both inpatient and outpatient department of National Institute of Mental Health (NIMH), Sher-E-Bangla Nagar, Dhaka, Bangladesh which is a specialized hospital for Psychiatry in Bangladesh. A total of 151 bipolar mood disorder patients were included conveniently in the study. Among them 120 were male and 31 were female. Patients were diagnosed as bipolar mood disorder on the basic criteria described in Diagnostic and Statistical manual of Mental Disorders 5th edition

(DSM-5).1 A structured questionnaire was prepared to determine the sociodemographic characteristics; such as age, sex, residence, marital status, family type, monthly family income, etc. and relevant variable of substance abuse. To find out the Substance Use Disorder/substance abuse DSM-5 criteria was used. 1 Both male and female patient diagnosed as bipolar mood disorder, aged between 18 and 60 years were included in the study. An informed written consent was taken from each of the patient by using a consent form. The research was conducted in full accord with ethical principles. Data were analyzed using Statistical Package for Social Sciences (SPSS), the Windows version 15.0. For presentation of results frequency tables, graphs and appropriate statistical techniques were used.

#### Results

The study identified the proportion of substance abuse among patients with BMD. Among the respondents (N=151) one hundred and twenty (79.5%) were male and thirty one (20.5%) were female (Fig 1).

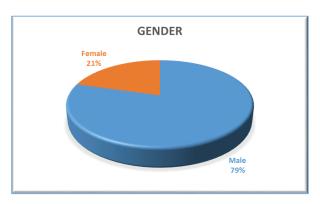


Fig 1: Sex distribution of the patient

Highest proportion (47.0%) of the respondents belonged to the age group of 20-29 years with mean age of 29.57 years. The lowest age of the respondents was recorded as 18 years and the oldest aged 60 years.. Majority of the respondents (94.0%) were follower of Islam followed by Hinduism (5.1%). More than half (58.9%) of the respondents came from rural area and the rest (41.1%) lived in the urban area. Majority of the

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respondents were unmarried (43.7%) followed by (41.1%) married and divorced (4.6%). Respondents under separation were found as 8.6%. It was found that most of the respondents' (37.1%) monthly family income was in between 5001 to 10000 taka. The lowest monthly income of family found in the study was 4500 taka and the highest was 30000 taka. Among the respondents 22.5% was day lobourer, 22.5% was service holder followed by students (21.2%) and unemployed (16.6%), 7.9% was house wife and 5.3% was businessman (Table I).

Table I: Distribution of respondents according to age, religion, habitat, marital status and monthly family income (N=151)

Variables	Frequency	Percent (%)
Age (in years)		
≤19	23	15.2
20-29	71	47.0
30-39	30	19.9
≤40	27	17.9
Religion		
Islam	142	94.0
Hindu	9	6.0
Habitat		
Urban	62	41.1
Rural	89	58.9
Marital Status		
Married	62	41.1
Unmarried	66	43.7
Widow	1	.7
Widower	2	1.3
Separated	13	8.6
Divorced	7	4.6
Monthly family income (in taka)		
≤5000	26	17.2
5001-10000	56	37.1
10001-15000	27	17.9
15001-20000	23	15.2
≤20001	19	12.6

Among the patients twenty nine (80.6%) abused cannabis, eighteen (50%) used yaba, seven (19.4%) used alcohol, two (5.6%) used heroin, two (5.6%) used sleeping tablet, one (2.8%) used glue.

Table II: Distribution of respondents according to types of substance used (N=151)

Abusing substances	Frequency	Percent (%)
Cannabis	29	80.6
Yaba	18	50.0
Alcohol	7	19.4
Heroin	2	5.6
Sleeping tablet	2	5.6
Glue	1	2.8

Among the respondents (n=151) more than two third that is 115 respondents (76.2%) did not abuse substance whereas only 36 respondents (23.8%) abused substance (Fig 2).

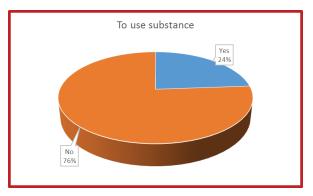


Fig 2: Distribution of respondents according to substance abuse

#### Discussion

The present study showed that nearly one forth (23.8%) of the respondents with BMD had the habit of substance abuse. Though this result is consistent with findings of other researchers, many studies showed much higher proportion of substance abuse 15 whereas others showed much lower proportion. The reason for this variation may be due to different socio-cultural background, family bonding, influence of religion, availability of substance and restriction on substance abuse, etc.

In this study 79.5% of the respondents were male and 20.5% were female. The mean age of the respondents were calculated as 29.57 years. Nearly half of the respondents (47.0%) were

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included in the age group 20-29 years which indicates that the younger population with bipolar disorder are more vulnerable to develop substance abuse and this study was consistent with the other studies.<sup>8</sup>

Among the respondents most (80.6%) abused cannabis, which was followed by yaba (50%), alcohol (19.4%), and heroin (5.6%). The highest rate of cannabis abuse may be due to its availability, cheaper rate and as its effects depends on preventing mood. Smoking was the most popular route to abuse the substance (97.2%) in this study and more than half (58.3%) of the subjects abused more than once per day.

Despite a number of limitations, this study provides baseline information about proportion of substance abuse among patients with bipolar mood disorder. A countable proportion of respondents were found to abuse substance. The findings should be addressed carefully and need evaluation extensively before drawing any conclusion due to the fact that it was a hospital based study. The findings can be used in future studies yet the researchers should view the findings provisional and approximate. When planning therapeutic approaches for patients with bipolar mood disorder, co-morbidity of substance abuse should always be taken into consideration and more efforts should be given in the assessment and management of this co-morbidity.

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