



A COMPARATIVE STUDY OF SOCIO DEMOGRAPHIC AND CLINICAL PROFILE AMONG PATIENTS WITH BIPOLAR DEPRESSION AND UNIPOLAR DEPRESSION AT DEPARTMENT OF PSYCHIATRY, S.M.S MEDICAL COLLEGE, JAIPUR

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ABSTRACT

Introduction: Mood disorders represent some of the most prevalent and debilitating mental health conditions worldwide, with depression being a leading cause of disability and a significant contributor to the global burden of disease (World Health Organization [WHO], 2021). **And Objectives:- Aim:** To study & compare Socio – Demographic and Clinical Profile among patients with Bipolar Depression and Unipolar Depression. **Objectives:** To assess and compare Socio-demographic profile and Clinical profile of patients with bipolar depression and unipolar depression. **Observations and Results:** Present study was conducted with the objectives to assess and compare Socio-demographic profile and Clinical profile of patients with bipolar depression and unipolar depression and to assess and compare substance use disorders (alcohol and nicotine) among patients with bipolar depression and unipolar depression. **Conclusion:** This comparative study reinforces the importance of detailed clinical evaluation in differentiating bipolar and unipolar depression. Bipolar depression is associated with earlier onset, longer illness duration, greater functional impairment, higher episode recurrence, more hospitalizations, and significantly greater comorbid substance use particularly alcohol and nicotine.

KEYWORDS : Unipolar Depression, Bipolar Depression

INTRODUCTION

Epidemiological studies indicate significant sex differences in the prevalence of mood disorders. MDD is nearly twice as prevalent in women as in men, a disparity that has been consistently replicated across cultures and age groups (9). This gender difference is hypothesized to be due to a complex interplay of hormonal, psychosocial, and cultural factors. In contrast, bipolar disorders appear to affect men and women at similar rates, although clinical presentation may vary by sex; women are more likely to experience depressive episodes and rapid cycling, while men more commonly present with manic episodes.

Mood disorders are frequently comorbid with other psychiatric and medical conditions. Common psychiatric comorbidities include anxiety disorders, substance use disorders, and personality disorders (12). Medical conditions such as cardiovascular disease, diabetes, and chronic pain syndromes also frequently co-occur, complicating diagnosis and treatment (13). Comorbidity is associated with a more severe clinical course, increased functional impairment, and poorer treatment outcomes.

- **Amygdala Reactivity (57) Unipolar Depression (MDD):** The amygdala shows increased activation in response to sad or negative emotional stimuli, consistent with persistent negative mood and emotional bias.
- **Bipolar Depression (BD):** The amygdala may show heightened reactivity to positive (happy) stimuli, suggesting dysregulation of emotional salience and reward, which is more typical of bipolar spectrum disorders.
- **White Matter Abnormalities (58) MDD:** Diffusion tensor imaging (DTI) reveals decreased integrity (fractional anisotropy) in tracts like the left inferior longitudinal fasciculus, associated with emotional and cognitive processing.
- **BD:** Shows additional white matter disruptions, particularly in the right uncinate fasciculus and left superior longitudinal fasciculus, indicating more widespread connectivity issues.
- **Habenular Volume (59) MDD:** May show subtle volume reduction.

- **BD:** More consistently shows reduced habenular volume, a region involved in reward processing and aversion possibly linked to greater mood instability.
- **Mood Reactivity Patterns in fMRI (60) MDD:** Increased activity in brain regions when viewing negative stimuli, with persistent hypo activity in reward circuits.
- **BD:** Affects similar circuits but in a state-dependent manner with increased reactivity to positive stimuli even during depressive episodes, reflecting underlying mood lability.

AIM AND OBJECTIVES

Aim:

To study & compare Socio – Demographic and Clinical Profile among patients with Bipolar Depression and Unipolar Depression.

Objectives:

Primary Objective

To assess and compare Socio-demographic profile and Clinical profile of patients with bipolar depression and unipolar depression.

Secondary Objective

To assess and compare substance use disorders (alcohol and nicotine) among patients with bipolar depression and unipolar depression.

MATERIALS & METHODS

Study Type – Analytical study.

Study Design – Cross – sectional study.

Study Area – Department of Psychiatry, SMS Medical College & attached group of Hospital, Jaipur.

Study Duration – Data collection for the study started after approval from the institutional research and review board, till sample size was achieved, up to October 2024.

Study Universe – The study universe consists of all patients came Department of Psychiatry, SMS Medical College & attached group of Hospital, Jaipur.

Study Population – The study population consists of patients diagnosed with unipolar and bipolar depression came Department of Psychiatry, SMS Medical College & attached group of Hospital, Jaipur after applying inclusion and exclusion criteria.

Ethical Clearance – Institutional review board and ethical committee approval was taken prior to the study.

Inclusion Criteria

1. Patients aged 18 – 60 years.
2. Male, Females and others.
3. Patient diagnosed with bipolar affective disorder currently with depression and unipolar depressive spectrum fulfilling DSM – 5 TR diagnostic criteria.
4. Patients who gave written informed consent for the study.

Exclusion Criteria

1. Patients if they had a co – morbid psychiatric disorder, seizure disorder, permanent neurological deficits, cognitive impairment and intellectual developmental disorders after being diagnosed by two consultant psychiatrists.
2. Patients with history of affective illness secondary to general medical conditions or substances

OBSERVATIONS AND RESULTS**Table 1: Age distribution of the study participants**

Age	Bipolar Depression (n=100)		Unipolar Depression (n=100)		Chi square/ p value
	n	%	n	%	
≤30 years	13	13.0%	15	15.0%	0.382/0.826
31-40 years	44	44.0%	46	46.0%	
≥41 years	43	43.0%	39	39.0%	
Mean Age	38.69±7.78 years		38.04±7.46 years		t value =0.603 p value =0.547

Table 1 shows that in both Bipolar and Unipolar group most of the study participants (87% of bipolar and 85% of unipolar patients) had the age >30 years. The mean age was 38.69 years for bipolar and 38.04 years for unipolar patients and Difference between the bipolar depression and unipolar depression in terms of age was not significant (p value=0.826).

Table 2: Distribution of the Study Participants According to their Education

Education Self	Bipolar Depression (n=100)		Unipolar Depression (n=100)		Chi square/ p value
	n	%	n	%	
High School	24	24.0%	30	30.0%	1.023/0.600
Graduate	39	39.0%	34	34.0%	
Postgraduate	37	37.0%	36	36.0%	

Table 2 shows that Educational attainment was similar in both groups, with the minimum educated atleast high school in both groups and the difference between the bipolar depression and unipolar depression in terms of education was not significant (p value=0.157).

Table 3: Distribution of the Study Participants According to Marital Status

Marital Status	Bipolar Depression (n=100)		Unipolar Depression (n=100)		Chi square/ p value
	n	%	n	%	
Unmarried	22	22.0%	6	6.0%	14.438/0.006
Married	68	68.0%	84	84.0%	
Widowed	4	4.0%	5	5.0%	
Divorced	3	3.0%	5	5.0%	
Separated	3	3.0%	0	0.0%	

Table 3 shows most of the patients in both the groups were married. Widowed and Divorced patients also shown the almost similarity but unmarried patients were higher (22%) in the bipolar depression as compared with the unipolar

depression patients (6%). Difference between the bipolar depression and unipolar depression in terms of marital status was significant (p value=0.006).

CONCLUSION

This comparative study reinforces the importance of detailed clinical evaluation in differentiating bipolar and unipolar depression. Bipolar depression is associated with earlier onset, longer illness duration, greater functional impairment, higher episode recurrence, more hospitalizations, and significantly greater comorbid substance use particularly alcohol and nicotine. In contrast, unipolar depression was more prevalent among urban patients and often presented with agitation, helplessness, and anxious-depressive features, likely linked to psychosocial stressors and HPA axis dysregulation. The overall symptom severity was comparable across groups, but qualitative differences in course and comorbidities demand careful diagnostic assessment. These findings underscore the need for routine screening of bipolarity and substance use in patients presenting with depressive symptoms. These findings are supported by elevated AUDIT and Fagerström scores and highlight the bidirectional and multifactorial nature of the relationship between mood disorders and substance use. Neurobiologically, overlapping dysfunction in reward and mood regulation circuits particularly involving dopaminergic, glutamatergic, and GABAergic pathways may explain the comorbidity. Shared genetic vulnerabilities have also been identified, with overlapping genes in bipolar depression and alcohol use disorder and nicotine dependence. These genetic overlaps further suggest a common neurodevelopmental and reward-processing substrate predisposing individuals to both mood instability and substance-seeking behaviour.

Family history also emerged as an important differentiator. A significantly higher proportion of BD patients had a family history of mood disorders, supporting the role of genetic loading in the pathogenesis of bipolar disorder. Furthermore, postpartum onset was more common in bipolar females, reinforcing the need for careful screening in perinatal psychiatric evaluations. Early and accurate differentiation is crucial to avoid misdiagnosis, inappropriate treatment (e.g., antidepressant monotherapy in BD), and associated complications such as manic switches, rapid cycling, suicidality, and substance-induced exacerbations. A structured, multidimensional approach including clinical, familial, psychosocial, and genetic risk factors can improve diagnostic precision and guide timely initiation of mood stabilizers, relapse prevention strategies, and substance use interventions for better long-term outcomes.

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