# Prevalence of Residual Symptoms in Subjects with Bipolar Disorder at a Tertiary Care Hospital

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# **ABSTRACT**

**Background:** Bipolar, or manic-depressive, disorders are frequent, severe, and often chronic mental illnesses. They are associated with considerable morbidity and mortality, and for many patients, an initial episode of mania or depression evolves into a life-long illness. The present study was conducted to assess prevalence of residual symptoms in subjects with bipolar disorder.

Materials and Methods: This cross-sectional study was carried out to assess prevalence of residual symptoms in 300 subjects with bipolar disorder. Remission was defined cross-sectionally as scores of ≤7 on the HAM-D-17 and ≤7 on the YMRS. Information was obtained from patient, relatives, and review of treatment records. The patients were evaluated clinically during assessment. The recorded data was compiled, and data analysis was done using SPSS Version 20.0 (SPSS Inc., Chicago, Illinois, USA). The obtained data were analyzed using descriptive statistics, such as frequency, percentage, mean, and standard deviation (SD). P-value less than 0.05 was considered statistically significant.

**Results:** A total of 300 patients with BD currently in remission according to the selection criteria formed the study sample. In 51 subjects there were no residual symptoms. HDRS scale gives prevalence of residual depressive symptoms. The most common residual depressive symptoms in the entire sample according to the HAM-D was impairment in insight, psychic

anxiety, loss of interest in work/activities and somatic psychic. The prevalence of residual manic symptoms as per the YMRS shows that the most common residual manic symptom was poor insight, followed by sleep disturbance and irritation.

**Conclusion:** The study concluded that the most common residual depressive symptoms was impairment in insight, psychic anxiety, loss of interest in work/activities and somatic psychic. The most common residual manic symptom was poor insight, followed by sleep disturbance and irritation.

**Keywords:** HDRS, Residual Depressive Symptoms, YMRS, Residual Manic Symptom.

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#### INTRODUCTION

Bipolar disorder (BD) is a serious, commonly disabling psychiatric condition that is tragically, on occasion, fatal. It is characterized by recurrent episodes of depression and mood elevation (mania or hypomania). Bipolar spectrum illness (comprising BD in its broadest sense), including bipolar I disorder (BDI, requiring a lifetime history of at least one manic episode), bipolar II disorder (BDII, requiring a lifetime history of major depressive and hypomanic episodes, without any history of mania), and BD not otherwise specified (BDNOS, including subthreshold bipolar presentations), may affect as much as 4.4% of the US population.<sup>1</sup> Despite the availability of several treatment strategies, the longitudinal course of BD is characterized by low recovery rate, high recurrence rate, poor interepisodic functioning, and high of physicaland substance comorbidities.2,3 Residual subsyndromal depressive symptoms following recovery from a unipolar major depressive episode (MDE) are associated with a significantly faster recurrence compared with a fully symptom-free recovery (asymptomatic recovery).<sup>4,5</sup> Persisting subsyndromal symptoms of BD (SSBD) impact on patients functionality and quality of life (QoL), and put them on elevated risk of relapse<sup>6</sup>. Several studies have demonstrated that a significant proportion of patients with BD continue to have residual or subsyndromal symptoms during the interepisodic phase.<sup>7,8</sup> Residual or subsyndromal symptoms in BD have been shown to be strongly associated with social, occupational, and cognitive impairment.8-11 Residual depressive symptoms have an adverse impact on overall functioning, whereas residual manic symptoms have a negative impact on financial issues, family stigma, interpersonal relationships, sexual functioning, and occupational stigma.8 The present study was conducted to assess prevalence of residual symptoms in subjects with bipolar disorder.

#### MATERIALS AND METHODS

This cross-sectional study was carried out to assess prevalence of residual symptoms in 300 subjects with bipolar disorder. Before the commencement of the study ethical approval was taken from the Ethical Committee of the institute and written consent was taken from the patient after explaining the study. Patients included in the study were the participants who fulfil the diagnosis of BD as per the DSM-IV criteria<sup>12</sup> assessed using the Mini International Neuropsychiatric Interview-Extended Version (MINI-PLUS 6.0 version).<sup>13</sup> Participants were required to be aged 18 years or more, having illness duration of at least 2 years, and minimum of two lifetime episodes (BD-I or BD-II). They had to be in remission for a minimum of 3 months before induction. Remission was defined cross-sectionally as scores of ≤7 on the HAM-D-17<sup>14</sup> and ≤7 on the YMRS.<sup>15</sup> In addition, participants had to be "clinically

stable" for the past 3 months, defined as no change in medications or dosages of medications in the past 3 months. Patients with medical or substance-induced BD, those with intellectual disability, and those not willing to participate in the study were excluded from the study. Information was obtained from patient, relatives, and review of treatment records. The patients were evaluated clinically during assessment. The recorded data was compiled, and data analysis was done using SPSS Version 20.0 (SPSS Inc., Chicago, Illinois, USA). The obtained data were analyzed using descriptive statistics, such as frequency, percentage, mean, and standard deviation (SD). Parametric statistics such as ANOVA and Student's t-test and nonparametric statistics such as Chi-square test and Mann—Whitney-U-test were used for comparison. P-value less than 0.05 was considered statistically significant.

Table 1: Prevalence of residual depressive and manic symptoms

HDRS scale - residual depressive symptoms	Frequency (n=249),
Depressed mood	27
Feelings of guilt	12
Suicide	15
Insomnia - early	45
Insomnia – middle	26
Insomnia – late	29
Work/activities	78
Retardation	5
Agitation	34
Anxiety-psychic	81
Anxiety-somatic	56
Somatic symptoms - gastrointestinal	23
Somatic symptoms – general	19
Genital symptoms	8
Hypochondriasis	5
Weight loss	9
Insight	87
YMRS - residual manic symptoms	Frequency in the entire sample (n=249)
Elevated mood	34
Increased motor activity/energy	16
Sexual interest	5
Sleep	97
Irritability	48
Speech (rate/amount)	45
Language-thought disorder	44
Content	3
Disruptive/aggressive behaviour	7
Appearance	45
Insight	98

## **RESULTS**

A total of 300 patients with BD currently in remission according to the selection criteria formed the study sample. In 51 subjects there were no residual symptoms. HDRS scale gives prevalence of residual depressive symptoms. The most common residual depressive symptoms in the entire sample according to the HAMD was impairment in insight, psychic anxiety, loss of interest in work/activities and somatic psychic. The prevalence of residual manic symptoms as per the YMRS shows that the most common residual manic symptom was poor insight, followed by sleep disturbance and irritation.

## **DISCUSSION**

Neurotransmitter systems probably involved in the pathophysiology of bipolar illnesses include serotonergic pathways, as well as the hypothalamic–pituitary–thyroid and – adrenal systems. 16-19 Family studies have consistently demonstrated the genetic liability of bipolar disorders. First-degree relatives of affected individuals have a 10-fold increased risk for developing the disease compared to relatives of unaffected controls. 20

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Data from STEP-BD trial which evaluated residual symptoms on MADRS reported sadness, lassitude, inability to feel, and pessimistic thoughts,<sup>25</sup> whereas other studies have reported depressed mood, somatic anxiety, impact on work and activities, psychic anxiety, and gastrointestinal and somatic symptoms to be the common residual symptoms.<sup>26</sup>

Sleep disturbances were one of the most common manic residual symptoms in the previous literature.<sup>27-29</sup> Keller et al found that low serum lithium levels in 94 bipolar individuals were significantly associated with the presence of subsyndromal affective symptoms and a higher risk for major affective episode recurrence.<sup>30</sup>

#### CONCLUSION

The study concluded that the most common residual depressive symptoms was impairment in insight, psychic anxiety, loss of interest in work/activities and somatic psychic. The most common residual manic symptom was poor insight, followed by sleep disturbance and irritation.

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