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## Original Research Article

## Disability, quality of life enjoyment and satisfaction of patients with bipolar affective disorder in remission

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## ABSTRACT

**Background:** Bipolar affective disorders (BPAD) can lead to impaired quality of life (QOL) through intense personal suffering and disrupted familial, social and occupational functioning. Self-report of QOL in patients with BPAD is likely to be influenced by 'mood bias' or cognitive distortions regarding self-concept and functioning. Improving the QOL of patients with BPAD is one of the valued goals of treatment. This study is undertaken with the aim to evaluate quality of life and disability in patients with BPAD in remission.

**Materials and Methods:** Patients diagnosed with BPAD, currently in remission were taken as subjects for the study. HAM-D and YMRS were applied to assess depression and mania, respectively. Fifty patients who were in remission were included and Quality of Life Enjoyment and Satisfaction Questionnaire – short form (Q-LES-Q-SF) and IDEAS were applied to evaluate quality of life and disability, respectively.

**Results:** Mean age of the sample was  $42 \pm 3.55$  years. Of the total sample, 29 (58%) were males, and 21 (42%) were females. Statistically significant association was found between number of years spent ill and quality of life ( $p < 0.05$ ), and between number of years spent ill and disability ( $p < 0.05$ ). Short/just significant association was also found between quality of life and disability ( $p < 0.05$ ). No association was found between age at onset of illness and quality of life.

**Conclusion:** Taken together, our results have indicated that many patients with BPAD in remission have significant disability and poorer QOL. There is a need to develop interventions to reduce the disability thereby enhancing the QOL.

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## 1. Introduction

Bipolar affective disorder (BPAD) is an episodic illness affecting about 2.4 percent of the general population and is the sixth leading cause of disability among illnesses worldwide.<sup>1</sup> Bipolar affective disorders lead to impaired quality of life (QOL) through intense personal suffering and disrupted familial, social and occupational functioning.<sup>2</sup> Chacko D et al observed that patients with bipolar

affective disorder had significant disability even during the periods of remission.<sup>3</sup> A study by Bonnin CM et al. indicated that several patients with BPAD who no longer met the symptomatic criteria following recovery from an acute affective episode continue to display functional impairment.<sup>4</sup> Factors associated with poorer functional outcomes in bipolar disorder were found to be male gender, older age, presence of subsyndromal depressive symptoms and mood-incongruent psychotic features, poor sleep quality, longer illness duration, comorbid substance use and personality disorders.<sup>5</sup>

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Sylvia LG et al concluded that socially disadvantaged patients with bipolar disorder experience poor quality of life.<sup>6</sup> QOL studies revealed lower functioning and well-being even in the euthymic phase of the disorder. In a study by Thomas SP et al, the QOL was worst in the social interactions domain and was better in the physical health domain.<sup>7</sup> Self-report of QOL in patients with BPAD is likely to be influenced by ‘mood bias’ or cognitive distortions regarding self-concept and functioning. Improving the QOL of patients with BPAD by stabilizing the mood is one of the valued goals of treatment. Yet, only a few studies have reported on QOL in remitted bipolar patients.

This research is undertaken with the aim to evaluate quality of life and disability in patients with bipolar affective disorder in remission.

## 2. Materials and Methods

The present study is a cross sectional study conducted in the psychiatry department of a tertiary care hospital after obtaining approval with reference number Faculty/723/21, dated 09.11.2021, from the Institutional Ethics Committee and was done in accordance with the Declaration of Helsinki. All the consecutive patients with bipolar affective disorder, currently in remission as per ICD-10 criteria were approached. A total of 57 patients were selected. Patients in the age group of 18 to 60 years without episodes of mood disturbance over the past 2 months and willing to participate in the study were included. History of any other comorbid psychiatric disorders, including substance abuse other than nicotine dependence, acute or chronic medical disorders, and neurological disorders, was taken as exclusion criteria. Fifty patients meeting the fixed criteria were taken as subjects for the study. Written informed consent was obtained at the beginning of interview from all participants after explaining about the purpose and nature of the study in understandable language, responding to questions and concerns, providing adequate opportunity to withdraw from the study at any point of time, and verbally assuring about the confidentiality of their information. Data was collected between 1 January 2022 and 30 June 2022.

Sociodemographic details were obtained, including age, gender, region, occupation, socioeconomic status, marital status, and family type (joint/nuclear) using a semi-structured proforma developed in the department of psychiatry. Age at onset of illness, symptomatic period of life, social support, and family history of psychiatric illness were also obtained.

HAM-D and YMRS were applied to assess depression and mania, respectively. Quality of Life Enjoyment and Satisfaction Questionnaire – short form (Q-LES-Q-SF) was applied to evaluate the quality of life. Indian Disability Evaluation and Assessment Scale (IDEAS) was applied for assessing the disability.

Hamilton Rating Scale for Depression-21 was developed by Max Hamilton.<sup>8</sup> It is the most widely used assessment scale for depression. The strengths include its excellent validation and ease of administration. Total scores range from 0 to 53 (the sum of the first 17 items). A score of 0–7 is normal, scores 8–13 indicate mild depression, 14–18 indicate moderate depression, 19–22 indicate severe depression and >23 indicate very severe depression.

Young’s Mania Rating Scale (YMRS) is a clinician-rated scale to assess the severity of manic symptoms.<sup>9</sup> Information for assigning scores is gained from subjectively reported symptoms over the past 48 hours and observation during the interview. YMRS is appropriate for assessing baseline severity and response to treatment. Total score is 60 and a score of ≤12 indicates remission of symptoms.

The Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q-SF) adopted from Endicott et al, is a self-administered scale that assesses subjective QOL under seven domains: physical health, subjective feeling of well-being, leisure time activities, work, household duties, school/course work, and social relations.<sup>10</sup> Rating for its items is done on a 1 (very poor) to 5 (very good) scale; a higher score indicates greater life satisfaction and enjoyment. The test–retest reliability was 0.86 and internal consistency ranged from 0.86 to 0.90.

Indian Disability Evaluation and Assessment Scale (IDEAS) is a scale for measuring and quantifying disability in mental disorders.<sup>11</sup> It has been recommended for assessment and certification of disability by the Government of India. It measures disabilities in the domains of self-care, interpersonal activities (social relationships), communication and understanding, and work (job/housework/school/college). Each item is scored on a 0 (no disability) to 4 (profound disability) scale, and additional score is given for duration of illness (DOI). Global disability score is the sum of total disability score and DOI score.

Statistical analysis was done using SPSS 21 software. Mean and standard deviation were used to describe continuous variables, whereas frequencies and percentages were obtained for categorical data.

Probability value of less than 0.05 has been taken as statistically significant.

## 3. Results

### 3.1. Sample characteristics

The sample characteristics are summarized in Table 1.

The total sample consisted of 50 patients between 18 and 60 years of age with bipolar affective disorder in remission. The mean age of the sample was 42±3.55 years. Of the total sample, 29 (58%) were males, and 21 (42%) were females. Majority (n=32; 64%) were skilled workers and were married. Most of them hailed from urban background

(n=33; 66%), from nuclear families (n=38; 76%) and low-socioeconomic status households (n=32; 64%).

Majority of study participants were financially dependent (n=40; 80%) and had satisfactory social support (n=24; 48%). Nineteen percent (n=9.5) of the total sample had family history of psychiatric illness. Age at onset of first episode in 46% (n=23) of the total sample was less than 20 years, while it was between 21 and 40 years of age in 34% (n=17), and above 40 years of age in 20% (n=10). Of the total sample, 22% (n=11) had lived more than 20 years of their life with depressive or manic symptoms, while 4% (n=2) were symptomatic for 11 to 20 years. Thirty six percent of them (n=18) had spent 6 to 10 years of their life ill, while most of them (n=19; 38%) remained symptomatic for less than 5 years. The longest inter-episodic remission of our sample was 6±4.1 years.

The mean score of the sample on HAM-D was 6.3±1.5, while it was 10.4±2.1 on YMRS, 21.3±3.33 on Q-LES-Q-SF, and 13.81±3.9 on the IDEAS.

Statistically significant association was found between number of years spent ill and quality of life ( $p<0.05$ ), and between number of years spent ill and disability ( $p<0.05$ ), as depicted in Tables 2 and 3, respectively. No association was found between age at onset of illness and quality of life in our study, as shown in Table 4. Short/just significant association was found between quality of life and disability ( $p<0.05$ ), as shown in Table 5.

**Table 1:** Sociodemographic characteristics

	Variables	Number (%)
Gender	Male	29 (58%)
	Female	21 (42%)
Region	Rural	17 (34%)
	Urban	33 (66%)
Socioeconomic status	Low	32 (64%)
	Middle	18 (36%)
	Married	32 (64%)
Marital status	Unmarried	17 (34%)
	Separated/	1 (2%)
	Divorced	
Family type	Joint	12 (24%)
	Nuclear	38 (76%)
Occupation	Skilled	32 (64%)
	Non-skilled	18 (36%)
Earning family member	Patient self	10 (20%)
	Dependent on others	40 (80%)

#### 4. Discussion

The present study was conducted to evaluate the quality of life and disability in patients with BPAD in remission.

The mean age of the sample was 42±3.55 years. A similar trend in the age group of patients with BPAD, was reported by Strakowski et al in their study.<sup>6</sup> In our study,

**Table 2:** Number of years spent ill Vs Quality of life

Symptomatic period	Number (%)	p value
<5 years	19 (38%)	<0.001
6-10 years	18 (36%)	<0.0001
11-20 years	2 (4%)	<0.001
>20 years	11 (22%)	<0.001

\* $p<0.05$  is statistically significant

**Table 3:** Number of years spent ill Vs Disability

Symptomatic period	Number (%)	p value
<5 years	19 (38%)	<0.001
6-10 years	18 (36%)	<0.01
11-20 years	2 (4%)	<0.001
>20 years	11 (22%)	<0.0001

† $p<0.05$  is statistically significant

**Table 4:** Age at onset of illness Vs Quality of life

Age at onset of illness	Number (%)	p value
<20 years	23 (46%)	0.24
21-40 years	17 (34%)	0.07
>40 years	10 (20%)	0.16

‡ $p<0.05$  is statistically significant

**Table 5:** Quality of life Vs Disability

Quality of life (Mean score)	Disability (Mean score)	p value
21.3±3.33	13.81±3.9	0.05

§ $p<0.05$  is statistically significant

representation of males was higher than females which corresponds to the results of the study by Wesley MS et al.<sup>12</sup> However, previous studies have reported equal rates of BPAD in men and women, which is in contrast with our results.<sup>13,14</sup> Similar demographics pertaining to education, occupation, family type, and locality, as observed in our study, was reported by Swaroopachary RS et al.<sup>13</sup> Nineteen percent of the total participants in our study had family history of psychiatric illness. Findings of the study by Post RM et al suggested that having at least one generation that is positive for psychiatric diagnoses compared with no family history conveys vulnerability to bipolar disorder.<sup>15</sup>

The mean age at onset of illness in our sample was 27.3 ±8.7 years. Manchia M et al in their study reported a mean age at onset of 26.7±9.2 years, which is in agreement with our results.<sup>16</sup> In our study, age at onset of first episode in 23 participants was less than 20 years, while it was between 21 and 40 years of age in 17, and above 40 years of age in 10. Studies in patients with bipolar disorder have reported similar age at onset distributions, as observed in our study.<sup>16–18</sup>

Participants of our study have spent a substantial period of time with mood symptoms which is in line with the results of a prospective, longitudinal study of percentage

of time spent ill in patients with bipolar disorder by Joffe RT et al.<sup>19</sup> The longest inter-episodic remission of our sample was 6±4.1 years. Longitudinal outcome studies of bipolar disorder showed that most patients encounter affective recurrences and that sustained remissions influence long-term illness course.<sup>20</sup>

A significant proportion of our patients with bipolar disorder in remission had disability and poor QOL. This is consistent with report from study by Sylvia LG et al which observed that disability was significantly associated with poorer QOL score.<sup>6</sup> Our study found a significant association between number of years spent ill and quality of life and between number of years spent ill and disability. A study by Swaroopachary RS et al reported severe disability in bipolar patients with duration of illness <10 years.<sup>13</sup> Disability was significantly associated with poorer quality of life in our study which is in parallel to the results of the studies by Thomas SP et al and Tharoor H et al which propounded the need to identify disability and quality of life issues among bipolar patients in remission.<sup>7,21</sup> Our study found no association between age at onset of illness and quality of life. However, studies have reported greater impairment in functioning and quality of life in patients with early-onset bipolar disorder.<sup>22</sup>

#### 4.1. Strengths of the study

Patients with comorbid psychiatric disorders, including substance abuse other than nicotine dependence, acute or chronic medical disorders, and neurological disorders were excluded; hence, most other possible causes of poor quality of life and disability are avoided. Scales used to evaluate quality of life and disability are validated.

#### 4.2. Limitations of the study

This study was hospital-based, done in a single-center with less number of patients. The cross-sectional study design is also one of the limitations. Hence, further research with greater number of participants and a longitudinal research design is vital to develop interventions to reduce the disability thereby enhancing the QOL.

### 5. Conclusion

Taken together, our results have indicated that many patients with BPAD in remission have significant disability and poorer QOL. Planning and implementing measures to empower bipolar patients to meet the demands of day to day living and identifying the reversible physical and psychological causes of poor outcome may help to improve outcome in these patients. Examining and evaluating interventions to reduce disability and to improve QOL are crucial in the successful management of patients with bipolar illness. While much has been achieved in reducing symptoms using psychotropic medications, a lot more is

needed to be done to reduce disability and to improve QOL in people with bipolar disorder.

### 6. Source of Funding

None.

### 7. Conflicts of Interest

There are no conflicts of interest.

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