

## Quality of life in caregivers of patients with bipolar mood disorder with current manic episode and its correlation with severity of illness

Sanjibani Panigrahi<sup>1</sup>, Rajendra Kumar Acharya<sup>2</sup>, Mukesh K Patel<sup>3</sup>, Kalpesh V Chandrani<sup>4</sup>

<sup>1,2,3,4</sup> Department of Psychiatry, PDU Medical College, Rajkot, India

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**Abstract:** With the advent of deinstitutionalization there is increasing interest in the quality of life of caregivers of patients with bipolar mood disorder all over the world. Quality of life of 50 caregivers of bipolar mood disorder (with current manic episode) patients were evaluated using Q-LES-Q-SF. Severity of manic episode was evaluated using YMRS scale. Quality of life was found to be moderately low. Parents of patients had the poorest quality of life compared to caregivers in other relationships. Quality of life in caregivers was negatively correlated with YMRS score.

**Keywords:** Bipolar Mood Disorder, Caregivers, Manic episode, Quality of Life, YMRS Score

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### I. Introduction

The role of the mental hospital in patient population peaked in the 50's and has since declined. Over the last thirty years the world has accepted, indeed advocated, that the community rehabilitation approach provides the most appropriate means for dealing with mentally ill people. This has involved a multitude of initiatives, including the development of psychiatric units in district general hospitals, increased emphasis upon providing psychiatric services in primary care settings, the development of residential and day care facilities, and an increased emphasis on the role of voluntary groups, friends, relatives and neighbors in the provision of care for people with mental disorders in the community.

Bipolar disorder is a recurrent and long term mental illness that can seriously affect the lives of patients and their relatives. It is characterized by the alternating occurrence of manic, hypomanic, depressive and mixed episodes. Bipolar disorder has been ranked ninth among the worldwide causes of non fatal disease burden for people of all ages and ranked fifth for people between 15 and 44 years of age (World Health Organisation, 2001). There are high rates of recurrence associated with these disorders, and residual symptoms between major episodes are common [1]. This is true even for those receiving treatment.

Traditional estimates suggest bipolar disorders affect about 5.7 million Americans in any given year, or about 2.6% of the US population (National Institute of Mental Health, 2010). A recent large-scale epidemiological survey, the National Comorbidity Survey Replication [2] reported a 3.9 percent lifetime prevalence of bipolar I and II disorders. Other studies, however, have found prevalence rates as high as 8% [3]. India has a prevalence of 0.1 percent.

But very few studies from India have been done on the quality of life of caregivers of bipolar mood disorder patients [4], [5], [6], [7], [8]. Considering the increasing interest in the quality of life of caregivers of patients of bipolar mood disorder all over the world, we thought that this study will be fruitful in understanding quality of life of such caregivers in our cultural setup. The present study is an effort in this direction and is designed to assess the quality of life of caregivers of bipolar mood disorder patients and find its correlation with the severity of illness.

### II. Materials And Methods

This is a cross-sectional study in clinical setting without use of any normal control group. The study was done during the period from June 2013 to March 2014.

All the consecutive indoor patients with bipolar mood disorder (BMD) with current manic episode (diagnosed as per DSM IV- TR) in Department of Psychiatry, PDU Medical College, Rajkot (which is a tertiary care centre) and their caregivers were taken for study between the 3rd to 5th day of admission. Totally 50 patients with BMD mania and their 50 caregivers (1 caregiver for each patient) were taken. They were explained about the nature of the study. Informed written consent was taken. Quality of life of caregivers was determined using Quality of Life Enjoyment and Satisfaction Questionnaire- Short Form (Q-LES-Q-SF). Severity of manic episode was assessed using Young Mania Rating Scale (YMRS).

SPSS version 17.0 was used to analyse data. Data was analysed for statistical significance with chi square test and t-test as the case may be. Probability value less than 0.05 has been taken as statistically

significant. Pearson correlation was used to find out correlation between quality of life and severity of illness. Correlation was considered significant at the 0.01 level (2-tailed).

### III. Results

Table 1 shows the socio-demographic characteristics of BMD mania patients. Mean age of patients was 41.50 years. 68% of the patients were males while 32% were females. 42% of the patients resided in urban areas, 26% in semi-urban areas and 32% in rural areas.

**Table 1: Socio-demographic Characteristics of Schizophrenia Patients**

Patients	Bipolar Mood Disorder N = 50(%)
Age (years) Mean	41.50
Sex	N (%)
Male	34 (68)
Female	16 (32)
Domicile	N (%)
Urban	21 (42)
Semi-urban	13 (26)
Rural	16 (32)

Table 2 shows the socio-demographic characteristics of caregivers of BMD mania patients. Mean age of caregivers was 44.70 years. 68% of the caregivers were males while 32% were females. 26% of the caregivers were parents to the patients, 48% were spouses while 26% were in other relationships with the patients.

**Table 2: Socio-Demographic Characteristics of Caregivers**

Caregivers	Bipolar Mood Disorder N=50 (%)
Age (years) Mean	44.70
Sex	N (%)
Male	34 (68)
Female	16 (32)
Relationship with Patient	N (%)
Parents	13 (26)
Spouse	24 (48)
Other relationships	13 (26)

Table 3 shows the clinical variables of patients. The mean duration of illness was 11.06 years and the mean age at onset of illness was 29.98 years.

**Table 3: Clinical Variables of Patients**

Patients	Bipolar Mood Disorder N = 50(%)
Duration of Illness (years) Mean Duration	11.06
Age at onset (years) Mean	29.98

Table 4 shows the quality of life in caregivers. The mean Q-LES-Q-SF score was 48.28.

**Table 4: Quality of Life in Caregivers**

Q-LES-Q-SF score	Bipolar Mood Disorder N=50
Mean (SD)	48.28 (8.887)

Table 5 shows caregiver's quality of life and relationship with patient. Q-LES-Q-SF score for parents was the lowest at 45.23. Q-LES-Q-SF score for spouses was 47.29 and for caregivers in other relationships it was 53.15. Parents had a statistically significant poorer quality of life when compared to caregivers in other relationships.

**Table 5: Caregiver’s Quality of Life and Relationship with Patient**

Relationship with Patient	Bipolar Mood Disorder Q-LES-Q-SF Score Mean (SD) N=50
Spouse	47.29 (9.827)
Parents	45.23 (8.115)
Others	53.15 (5.814)
Test of Significance Spouse Vs Parents	t=0.645, p=0.523, NS
Spouse Vs Others	t= -1.965, p=0.057, NS
Parents Vs Others	t= -2.861, p=0.009, S

**NS= Not Significant, S=Significant**

Table 6 shows correlation of bipolar mood disorder caregiver’s quality of life with YMRS Scores. Pearson Correlation was used to correlate Q-LES-Q-SF Score in caregivers and YMRS scores in bipolar mood disorder patients. Quality of life in caregivers of bipolar mood disorder patients had statistically significant negative correlation (p=0.000) with YMRS score.

**Table 6: Correlation of Bipolar Mood Disorder Caregiver’s Quality of Life with YMRS Score**

Variable	Correlation Type	YMRS Score
Q-LES-Q-SF Score	Pearson Correlation	-0.481 (**)
	Sig. (2-tailed)	0.000
	N	50

**\*\* - Correlation is significant at the 0.01 level (2-tailed)**

#### IV. Discussion

Quality of life in caregivers is inversely related to their burden. Alejandra Caqueo-Urizar et al [9] reported decreased QOL to be associated with caregivers' burden. Selwyn Stanley et al [10] and Annika Foldemo et al [11] obtained a significant negative correlation between the family burden and QOL scores of the caregiver indicating that these two dimensions mutually influence one another.

Mean Q-LES-Q-SF score represents quality of life in caregivers. In our study we found quality of life to be moderately low in the caregivers. This is similar to the findings by Allison M. R. Lee et al [12], Perlick DA et al [13], M. Reinares et al [14], Ogilvie AD et al [15], Heru AM et al [16], S.Chakrabarti et al [6], D Perlick et al [17] who have reported moderate to high levels of burden among caregivers of Bipolar patients.

Also when we compare the Quality of Life of parents with spouses, we find that they have a similar Quality of Life (p=0.523). This finding is consistent with the findings of K.K.Ganguly et al [4] who found that spouses and parents had similar burden. Parents had a statistically significant (p=0.009) poorer Quality of Life when compared to caregivers in other relationships (children, sibling). Similarly, Aschbrenner KA et al [18] found parents to have a very high degree of burden and Awadalla AW et al [19] found parents to have least QOL scores.

Quality of life in caregivers of bipolar mood disorder patients had statistically significant negative correlation (p=0.000) with YMRS score. Similar findings have been reported by a number of studies. Rita Bauer et al [20] found that manic symptoms of the ill family members emerged as serious burdens on the caregivers. Findings from Eduard Vieta et al [21] revealed that up to 93% of caregivers of bipolar patients suffered from a moderate or higher level of stress when the patient was admitted to an inpatient unit or outpatient clinic. Perlick DA et al [13] found that 89%, 52%, and 61% of caregivers, respectively, experienced moderate or higher burden in relation to patient problem behaviors, role dysfunction, or disruption of household routine. S.Chakrabarti et al [17], T Y G Van Der Voort et al [22] found severity of illness among patients to be correlated consistently with severity of burden in caregivers. M. Reinares et al [14] reported that caregiver’s highest subjective burden was associated with patient’s hyperactivity and irritability. Ritu Nehra et al [5] found high levels of patient-dysfunction gave rise to higher caregiver-burden. Mueser KT et al [23] reported that relatives of patients with bipolar disorder rated manic symptoms as burdensome.

## V. Conclusion

Our study suggests that quality of life is moderately low in caregivers of bipolar mood disorder patients. Quality of life of parents is poorer as compared to caregivers in other relationships. Quality of life of caregivers is inversely related to severity of illness. This study suggests that taking care of caregivers is quite important to improve their overall quality of life.

Some of the methodological limitations of the present work need to be mentioned here. The major limitation of this study is its cross-sectional nature. We have studied the quality of life only during the acute phase of the illness. As bipolar mood disorder tends to be chronic with many remissions and relapses we can't comment on the overall quality of life of the caregivers. Also we have studied only the manic phase of Bipolar Disorder. So we can't comment on the quality of life of caregivers in the depressive phase of the illness.

We have conducted the study on the caregivers of only indoor patients. These caregivers may not be representative of all the caregivers in the community, particularly those who have no access to mental health care. Also we have conducted the study only on 50 caregivers. A larger sample size is needed to comment more accurately on the quality of life of caregivers.

To get a more accurate idea of quality of life of caregivers of Bipolar Mood Disorder patients large scale community based longitudinal study of such caregivers can be helpful.

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