

## Original Research Article

# A study on coping skills of caregivers of patients with bipolar disorder

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## ABSTRACT

**Background:** Caregivers of people with bipolar disorder experience a different quality of burden than seen with other illnesses. A better understanding of their concerns is necessary to improve the training of professionals working with this population. The aim of this study was to study the level of family burden, coping skills and psychological wellbeing among caregivers of bipolar affective disorder.

**Methods:** This was a prospective cross-sectional study conducted over a six months period from January 2014 to June 2014. Patients diagnosed as bipolar disorder as ICD-10 and their caregivers were included in the study. Purposive sampling technique was employed. Socio-demographic data were collected in preformed questionnaire. Disease burden was calculated using burden assessment schedule, psychological general well being index and brief COPE scale.

**Results:** Around 63.4% of the caregivers were males, 38.5% were illiterate, 44.2% were unskilled labourers, 57.6% were spouses, mean BAS score was 86.03, mean coping score was 55.77 and BAS was inversely related to PGWBI. Male caregivers used self-distraction and substance use as coping strategies while females used religion and denial.

**Conclusions:** The perceived burden was higher among caregivers of bipolar disorder. Coping strategies varied based on caregiver demographic characteristics. Higher the perceived burden, lower was the psychological wellbeing. Psycho-educational family intervention for caregivers has to be implemented along with pharmacological therapy in patients with bipolar affective disorder.

**Keywords:** Bipolar disorder, Burden, Caregivers, Coping

## INTRODUCTION

Bipolar disorder is the sixth leading cause of disability during middle years of life.<sup>1</sup> One in four families has at least one member with a mental disorder for whom family members are often the primary caregivers.<sup>2</sup> If a patient was diagnosed as bipolar affective disorder in his 20s and left untreated, he would miss an estimated loss of 12 years of good health, 14 years of work income and life expectancy is shortened by 9 years. Even when working,

they are more prone for problems like reduced concentration or inappropriate behaviours due to fluctuating mood episodes which results in decline in their level of employment.<sup>3</sup> Manic episodes of the illness are more disruptive to daily activities, work and family relationships.<sup>4</sup> The current prevalence of bipolar affective disorder was 0.7-15.0 per 1000 population.<sup>5</sup>

Disabilities associated with bipolar disorder were increased suicidal behaviour, joblessness and dependence on external support, lower income when employed,

reduced work efficiency and overall reduced life expectancy.<sup>6</sup> Suicidal tendency is 15 times higher than in general population and mortality rates due to suicide was 15-20% and 50% of patients attempt suicide at least once in their life.<sup>7,8</sup> Even though family involvement improves the course of bipolar disorder in the patients, the caregivers experience objective burden like break in relationships, financial difficulty, adverse physical health and subjective burden like sadness, embarrassment in social situations and stress of coping.<sup>9,10</sup> Caregiver burden was positively correlated to emotional over-involvement and negatively correlated with patient's medication adherence. Thus, family burden and patient illness can enter a vicious cycle, each negatively impacting the other.<sup>5,3</sup>

Treating professionals tend to underestimate the burden of positive and negative symptoms experienced by caregivers of patients with bipolar disorder.<sup>11</sup> Each caregiver perceives the burden of illness differently because it varies according to their way of coping.<sup>12</sup> Use of avoidance coping has been linked to greater burden while problem focused coping strategies are linked to positive outcomes. Psychological wellbeing is a health-related quality of life measure that is subjective and measures global psychological concept. This study was undertaken to evaluate burden among caregivers of bipolar disorder and to assess their patterns of coping and psychological wellbeing. This will help to employ strategies for caregivers to adapt and cope with burden.

## METHODS

This was a prospective cross-sectional study conducted at the Department of Psychiatry, Thanjavur Medical College Hospital, Thanjavur, Tamilnadu, India which is a tertiary care referral centre. The study period was between January 2014 and June 2014. Patients who were diagnosed as Bipolar affective disorder as per ICD-10 and their caregivers who were actively involved in the care of the patient were included in the study. The "caregiver" was any healthy primary caregiver of the patient, aged 18 years and above, and staying with the patient during last 1 year prior to the assessment. Caregivers who had co-morbid psychiatric or personality disorder were excluded. Purposive sampling method was used to select patients and their caregivers. Patients and their caregivers were explained about the study and informed consent was obtained. Patients' and caregivers' data were collected in socio-demographic data sheet while burden of bipolar disorder was assessed with Burden Assessment Schedule (BAS), Psychological General Well Being Index (PGWBI) and Brief Cope Scale (BCS).<sup>13-15</sup>

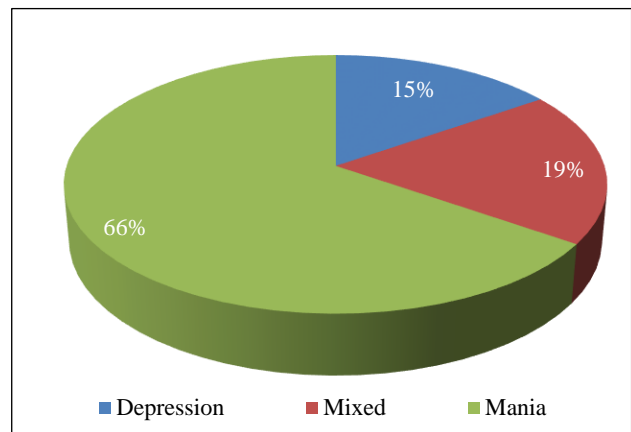
Data entry and analysis were done using SPSS software version 17.0. Descriptive data were given in summary statistics. Chi-Square test and ANOVA were used to compare categorical variables. Comparison of continuous

variables was analyzed with independent sample test.  $p < 0.05$  was considered significant.

## RESULTS

Around 55 patients with bipolar disorder and their caregivers were enrolled for the present study. Three of the caregivers were found to be suffering from co-existing psychiatric illness and were removed from the study. The final sample size was 52.

The mean age of the patients in the present study group was  $39.5 \pm 11.2$  years with a range from 18 to 63. The mean age at onset of bipolar disorder was  $29.6 \pm 8.1$  years. Most of the subjects were males (61.5%) ( $n = 32$ ). The average number of episodes experienced by the study group was  $5.25 \pm 2.8$  with a range of 2 to 14. The mean duration of illness was  $2.27 \pm 1.4$  years. Most of the patients were affected with mania during the present study (65.4%) ( $n = 34$ ) (Figure 1).



**Figure 1: Distribution of symptom profile of patients during current episode of bipolar disorder.**

Most of the caregivers in the present study were more than 50 years (42.3%) ( $n = 22$ ) but the mean age was 46.17 years. Most of the caregivers were males (63.4%) ( $n = 33$ ). Many of the caregivers were illiterate (38.5%) ( $n = 20$ ) and working as unskilled labourers (44.2%) ( $n=23$ ). Most of the caregivers belonged to the lower socio-economic class (88.5%) ( $n = 46$ ). In the present study group, Hinduism was the prevalent religion (96.2%) ( $n = 50$ ). Most of them were caring for the patients for less than 5 years (46.2%) ( $n = 24$ ) while 9.6% of the caregivers ( $n = 5$ ) were giving care for more than 20 years. Most of the caregivers were spouses rather than parents (57.60%) ( $n = 30$ ).

The average BAS score obtained was 86.03. There was no significant correlation between age, gender, education, occupation or income status of the caregiver and the burden experienced by them. In the overall BAS score assessed by the caregivers, spouse related burden was experienced more by spouses while all the other

parameters of burden were equally experienced by both spouses and family members.

The mean coping score in the present study group was  $55.77 \pm 4.56$ . Caregivers of younger age used emotional support ( $p = 0.017$ ) and behavioural disengagement ( $p = 0.050$ ) as coping strategies than elder caregivers but there was no significant correlation of caregiver age to other coping strategies. Male caregivers used planning ( $p = 0.009$ ), humor ( $p = 0.049$ ) self-distraction ( $p = 0.032$ ) and substance abuse ( $p = 0.00$ ) as coping strategies while female caregivers used use of emotional support ( $p = 0.00$ ), use of instrumental support ( $p = 0.00$ ), denial ( $p = 0.00$ ) and venting ( $p = 0.013$ ) as coping strategies. Overall females used coping strategies better to cope with

burden (mean  $57.74 \pm 3.97$ ) ( $p = 0.017$ ) than male caregivers. Self-distraction ( $F = 4.835$ ) ( $p = 0.002$ ), active coping ( $F = 3.329$ ) ( $p = 0.018$ ) and humor ( $F = 5.841$ ) ( $p = 0.001$ ) were employed more as coping strategies by siblings of patients. Use of emotional support ( $F = 10.70$ ) ( $p = 0.000$ ) and denial ( $F = 3.79$ ) ( $p = 0.016$ ) as coping strategies was seen more in unemployed or unskilled labourers than skilled workers ( $F = 3.79$ ) ( $p = 0.016$ ). Coping strategies were better utilized by unskilled labourers than skilled labourers and this was significant ( $F = 5.609$ ) ( $p = 0.002$ ). Use of emotional support ( $F = 8.88$ ) ( $p = 0.000$ ), denial ( $F = 4.29$ ) ( $p = 0.009$ ) and venting ( $F = 2.939$ ) ( $p = 0.043$ ) as coping strategies was seen more in caregivers with lower income (less than Rs. 5000/-).

**Table 1: Gender differences in employment of coping strategies.**

Coping strategy	Gender	Mean	Std. deviation	Significance
Self-distraction	Male	4.67	1.051	T= 2.201 Df=50 p = 0.032
	Female	4	1.054	
Denial	Male	2.52	0.795	T= -5.755 Df=50 p = 0.000
	Female	4.11	1.197	
Substance use	Male	3.33	1.267	T= 4.569 Df=50 p = 0.000
	Female	2	0	
Use of emotional support	Male	2.58	0.936	T= -6.777 Df=50 p = 0.000
	Female	4.42	0.961	
Use of Instrumental support	Male	4.06	0.429	T= -5.056 Df=50 p = 0.000
	Female	4.84	0.688	
Venting	Male	4.64	1.025	T= -2.582 Df=50 p = 0.013
	Female	5.32	0.671	
Planning	Male	5.12	0.545	T= 2.710 Df=50 p = 0.009
	Female	4.58	0.902	
Humor	Male	2.18	0.392	T= 2.015 Df=50 p = 0.049
	Female	2	0	
Religion	Male	5.03	1.468	T= -1.721 Df=50 p = 0.092
	Female	5.68	1.003	

There was no significant difference between the socio demographic variables of caregivers and various parameters of PGWBI score except that vitality as a parameter was seen more in younger caregivers than in elder caregivers ( $F = 3.605$ ) ( $p = 0.020$ ). BAS was inversely related to PGWBI score and this correlation was significant ( $p = 0.01$ ).

## DISCUSSION

Mean age of the patient population was 39.5 years which was similar to the study by Peters et al, (37.94 years) and Vasudeva et al (37.59 years).<sup>16,17</sup> Most of the bipolar patients in the present study were males (61.5%). This was in contrast to the study by Nivoli et al, who showed bipolar disorder to be more common in females while Diflorio et al, reviews an almost equal gender ratio in prevalence of bipolar disorder.<sup>18,19</sup> Mean age of onset of

bipolar disorder was 29.6 years which was similar to the results obtained by Solomon et al.<sup>20</sup> Mean duration of illness was 2.27 years which was much lower than the results obtained by Peters et al (12.48 years). The average number of episodes experienced by patients was 5.25, which was much higher in the study by Peters et al (18.69).<sup>17</sup> Mania was more common than depression in the present study (65.4%) which was similar to the study by Solomon et al.<sup>20</sup>

Caregivers provide assistance with activities of daily living and emotional support to the patient. Family members living with a person with bipolar disorder report poorer physical health, limited activity and greater health service utilization. The mean age of caregivers was 46.17 years in the present study which was similar to the study by Pompili et al (46.0) and Vasudeva et al (47.39 years).<sup>17,21</sup> Most of the caregivers were males (63.4%),

which was similar to the study by Vasudeva et al (54.9%). Most of the caregivers were of lower socio-economic status in the present study (88.5%) but Vasudeva et al, observed that only 2% of patients belonged to low socio-economic status. Almost half of the caregivers were taking care of the patients for less than 5 years (46.2%) but in the study by Vasudeva et al, the mean duration of caregiving was 8.67 years.<sup>17</sup>

BAS was used in this study as it was developed in Indian setting and thus helps to understand and interpret burden in the cultural context.<sup>13</sup> The range of total score of burden in BAS is between 40 and 120, with higher scores indicating higher burden. The average BAS score obtained in the present study (n = 52) was 86.03 which was higher than the results obtained by Solomon et al (64.45).<sup>20</sup> There was no significant correlation between age, gender, education, occupation or income status of the caregiver of bipolar disorder and the burden experienced by them, as assessed by BAS score. This showed that socio demographic differences do not discriminate the burden perceived by caregivers of bipolar disorder. It was also found that the BAS score was inversely related to PGWBI. This showed that as the burden perceived increases in the caregiver, their psychological wellbeing declined.

The brief COPE scale has a range from 0 to 84 (48 in adaptive coping subscale and 36 in maladaptive coping subscale). The mean coping score in the present study group was 55.77±4.56. Caregiving for a mentally ill relative is an enduring stressor and emotion focused coping strategies, such as acceptance and religion were more likely to be adopted, as seen in the present study group. This was similar to the results obtained by Kasietal.<sup>22</sup> While male caregivers used planning and humor as adaptive coping strategies; they used self-distraction and substance use such as alcohol or tobacco as maladaptive coping strategies. Female caregivers used use of emotional support and instrumental support as adaptive coping strategies and denial and venting as maladaptive coping strategies. This was similar to the results obtained by Rammohan et al.<sup>23</sup> Caregivers who were old and from lower educational and income background were higher on religious coping. Psychological wellbeing was lower in older age group, parents and female caregivers.

Despite significant improvement in pharmacotherapy, bipolar disorder still causes difficulties for the patients, their caregivers and the society. The present study explores the level of burden experienced by caregivers of bipolar disorder, how they adapt and cope with the burden associated with the disease. The available data suggests combining pharmacological treatment with psycho-educational family intervention to achieve a comprehensive and good long-term outcome. This combination of therapy reduces subjective burden and improve coping strategies in caregivers while reducing relapses and hospital admissions of patients and

increasing compliance to pharmacological treatment. The present study focuses on the caregiver burden and various domains of coping strategies which gives and insight into caring the caregiver as these caregivers play an important role in the prognosis and outcome of chronic mentally ill patients, like bipolar disorder.

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## REFERENCES

1. World Health Organization. Burden of Mental and Behavioral Disorders. The World Health report. Mental Health: New understanding, New hope. Geneva, World Health Organization, 2001. Available at: <http://www.who.int/whr/2001/en/>.
2. World Health Organization. Investing in Mental Health. World Health Organization report. Investing in mental health, 2003. Available from [http://www.who.int/mental\\_health/media/investing\\_mnh.pdf](http://www.who.int/mental_health/media/investing_mnh.pdf).
3. Perlick DA, Rosenheck RA, Miklowitz DJ, Chessick C, Wolff N, Kaczynski R, et al. Prevalence and correlates of burden among caregivers of patients with bipolar disorder enrolled in the Systematic Treatment Enhancement Program for bipolar Disorder. *Bipolar Dis.* 2007;9(3):262-73.
4. Pini S, de Queiroz V, Pagnin D, Pezawas L, Angst J, Cassano GB, et al. Prevalence and burden of bipolar disorders in European countries. *Eur Neuropsychopharmacol.* 2005;15(4):425-34.
5. Reddy VM, Chandrashekar CR. Prevalence of mental and behavioural disorders in India: a meta-analysis. *Indian J Psychiatry.* 1998;40(2):149-57.
6. Judd LL, Akiskal HS, Schettler JP, Endicott AC, Leon CA, Solomon AD, et al. Psychosocial disability in the course of bipolar I and II disorders, a prospective, comparative, longitudinal study. *Arch Gen Psychiatry.* 2005;62:1322-30.
7. Kochanek KD, Murphy SL, Anderson RN, Scott C. Deaths: final data for 2002. *Natl Vital Stat Rep.* 2004;53(5):1-115.
8. Miklowitz DJ, Johnson SL. The psychopathology and treatment of bipolar disorder. *Annu Rev Clin Psychol.* 2006;2:199-235.
9. Miller IW, Keitner GI, Ryan CE, Uebelacker LA, Johnson SL, Solomon DA. Family treatment for bipolar disorder: family impairment by treatment interactions. *J Clin Psychiatry.* 2008;69(5):732-40.
10. Ostman M, Hansson L. Appraisal of caregiving, burden and psychological distress in relatives of psychiatric inpatients. *Eur Psychiatry.* 2004;19(7):402-7.
11. Mueser KT, Webb C, Pfeiffer M, Gladis M, Levinson DF. Family burden of Schizophrenia and bipolar disorder: perceptions of relatives and professionals. *Psychiatr Serv.* 1996;47(5):507-11.

12. McCrae RR. Situational determinants of coping responses: Loss, threat and challenge. *J Per Soc Psychol.* 1984;46(4):919-28.
13. Thara R, Padmavati R, Kumar S, Srinivasan L. Burden Assessment Schedule. Instrument to assess burden on caregivers of chronic mentally ill. *Indian J Psychiatry.* 1998;40(1):21-9.
14. Namjoshi MA, Buesching DP. A review of the health-related quality of life literature in bipolar disorder. *Qual Life Res.* 2001;10(2):105-15.
15. Carver CS. You want to measure coping but your protocol's too long: consider the brief COPE. *Int J Behav Med.* 1997;4(1):92-100.
16. Peters AT, West AE, Eisner L, Baek JH, Deckersbach T. The burden of repeated mood episodes in bipolar I disorder: results from the National Epidemiological Survey on Alcohol and Related Conditions (NESARC). *J Nervous Mental Dis.* 2016 Feb;204(2):87.
17. Vasudeva S, Sekhar CK, Rao PG. Caregivers burden of patients with schizophrenia and bipolar disorder: A sectional study. *Indian J Psychological Med.* 2013 Oct;35(4):352.
18. Nivoli AM, Pacchiarotti I, Rosa AR, Popovic D, Murru A, Valenti M, et al. Gender differences in a cohort study of 604 bipolar patients: The role of predominant polarity. *J Affective Dis.* 2011;133(3):443-9.
19. Diflorio A, Jones I. Is sex important? Gender differences in bipolar disorder. *Int Rev Psychiatry.* 2010;22(5):437-52.
20. Solomon DA, Leon AC, Coryell WH, Endicott J, Li C, Fiedorowicz JG, et al. Longitudinal course of bipolar I disorder: duration of mood episodes. *Archives General Psychiatry.* 2010;67(4):339-47.
21. Pompili M, Harnic D, Gonda X, Forte A, Dominici G, Innamorati M, et al. Impact of living with bipolar patients: Making sense of caregivers' burden. *World J Psychiatry.* 2014 Mar 22;4(1):1.
22. Kasi PM, Naqvi HA, Afghan AK, Khawar T, Khan FH, Khan UZ, et al. Coping styles in patients with anxiety and depression. *ISRN psychiatry.* 2012 Jun 18;2012.
23. Rammohan A, Rao K, Subbakrishna DK. Burden and coping in caregivers of persons with schizophrenia. *Ind J Psychiatry.* 2002;44(3):220-7.

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