

Coping In Caregivers of Chronic Schizophrenia and Bipolar Affective Disorder – A Comparative Study

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Abstract: Care giving is a chronic stressor and different coping methods are used to handle such a situation. The present study attempts to assess coping in caregivers of Chronic Schizophrenia and Bipolar Affective Disorder and make a comparison between them. The study also tries to assess the relationship between the burdens experienced by the caregivers of both these groups of patients with the coping strategies adopted by them. It was a hospital based cross sectional and comparative study, conducted in the Department of Psychiatry, Assam Medical College and Hospital with a sample size of 30 primary caregivers of equal number of patients of Chronic Schizophrenia and 30 Primary caregivers of equal number of Bipolar Affective Disorder patients. Appropriate statistical tests were used for analysis of obtained data setting significance threshold at $p < 0.05$. Caregivers of Chronic Schizophrenia experienced significantly higher burden than the caregivers of BPAD. Caregivers of Chronic Schizophrenia used mostly religious coping (90%) followed by external attribution and magical thinking. Among the caregivers of patients of BPAD the most commonly used coping strategies included help seeking (93.33%) followed by religious coping strategies and external attribution.

Keywords: Coping, Schizophrenia, Bipolar Affective Disorder, Burden.

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I. Introduction

Schizophrenia is arguably the most puzzling of psychiatric syndromes and one of its most debilitating. It is characterized by disordered cognition, including a “gain of function” in psychotic symptoms and a “loss of function” in specific cognitive functions, such as working and declarative memory, but without the progressive dementia that characterizes classical neurodegenerative disorders. Although its phenomenology is fascinating, its pathophysiology and etiology remain unclear, and people with the illness suffer greatly. ^[1] A noteworthy finding by **Weidman et al**^[1] was that despite the apparent downfall of traditional family structure, over 60% of patients with long term schizophrenia live with at least one ‘significant other’ i.e. Primary Caregiver. In India, families are always recognised as an integral part of the care system for persons with chronic mental illness, such as schizophrenia. ^[2] Bipolar Affective disorder, previously known as manic-depressive illness, is a mood disorder that causes unusual shifts in mood, energy, activity levels, and the ability to carry out day-to-day tasks. It is characterized by repeated (i.e. at least two) episodes in which the patient’s mood and activity levels are significantly disturbed, this disturbance consisting on some occasions of an elevation of mood and increased energy and activity (mania or hypomania), and on others of a lowering of mood and decreased energy and activity (depression). ^[3]

The demands of being involved in the care of a seriously mentally ill relative have both an emotional as well as practical impact on the caregiver. ^[4, 5] The costs that families incur in terms of economic hardships, social isolation and psychological strain, are referred to as family burden^[6-8]. The fact that the illness leaves a varying degree of disability in the patient and leads to disturbing behaviour means that its management is associated with a significant burden of care. It has been observed that for a given amount of burden, the individual level of distress show considerable variations ^[9], because it varies according to their ways of coping. **Folkman and Lazarus** ^[10, 11] have defined coping as a person’s constantly changing cognitive and behavioural efforts to manage an encounter appraised as stressful.

Pearlin and Schooler ^[12] defined coping as the cognitive and behavioural effort made to master, tolerate or reduce demands that tax or exceed a person’s resources. Freud (1946) ^[13] and Haan (1977) ^[14] viewed coping and defence through psychoanalytic conception or largely unconscious responses to internal conflicts. Coping has been conceptualized in terms of approach vs. avoidance ^[15] and in terms of appraisal; problem focus and emotion focus ^[16].

Care giving is a chronic stressor and different coping methods are used to handle such a situation. The use of coping strategies such as avoidance, denial and resignation is linked to greater burden^[17, 18] whereas utilization of social support and a sense of mastery over the situation are associated with lower level of burden and distress^[19].

In 1994, the consensus reported by Troop^[20] states that emotion based coping is associated with an unsatisfactory outcome whereas problem focused coping is associated with a more satisfactory outcome. Spouses reported greater emotional burden^[21]. Parents used more of denial as a coping strategy, while spouses used more of negative distraction strategies. On stepwise regression analysis, patient's age, educational level, and level of functioning and caregiver's use of denial as a coping strategy emerged as significant predictors of caregiver burden. The study highlights the fact that family intervention programs need to address the specific concerns of caregivers.

Batra et al. 2015^[22] in their study found that majority of the caregivers were male and parents above the age 50 yrs. Majority of the caregivers were non literate and unemployed. Most of the caregivers used 'seeking spiritual support' as the strongest coping strategy and 'mobilizing family to accept help' as the weakest coping strategy. There was no association found between the selected demographic variable and the caregivers' coping strategies. According to Chakrabarti et al. 2002, caregivers of bipolar patients used a wide variety of coping strategies, both problem and emotion focussed. Problem focussed coping strategies were however most commonly used. In bipolar disorder, demographic parameters, illness duration, levels of dysfunction, burden and social support, and appraisal by caregivers demonstrated significant associations with coping style of caregivers.^[14] Another study by Chadda et al. in 2007 found that caregivers of bipolar patients use problem focused coping strategies more often than seek social support and avoidance strategies.^[15] The present study is an attempt to assess coping in caregivers of Chronic Schizophrenia and Bipolar Affective Disorder and make a comparison between them. The study also tries to assess the relationship between the burdens experienced by the caregivers of both these groups of patients with the coping strategies adopted by them.

II. Materials And Methods

2.1 Study sample: Sample was randomly selected from the Caregivers of Chronic Schizophrenic and Bipolar Affective Disorder in-patients and out-patients of Department of Psychiatry, Assam Medical College and Hospital, Dibrugarh.

2.2 Sample size: Primary Caregiver of 30 Chronic Schizophrenic patients and 30 Bipolar Affective Disorder Patients.

2.3 Study design: Hospital Based Cross sectional and comparative study.

2.4 Duration of study: One year

2.5 Definition of Primary Caregiver – A person who is currently shouldering maximum responsibility and care of the patient in terms of social, physical, emotional and financial support for a considerable period of two years or more.

2.6 Inclusion and exclusion criteria:

Inclusion criteria:

- ❖ For the patient –
 - Age 18 years and above (either sex)
 - Diagnosed case of Schizophrenia and Bipolar Affective Disorder according to ICD-10 without any co-morbid psychiatric disorder
 - Duration of illness, two years and above at the time of examination
- ❖ For the caregiver –
 - Healthy adult family members staying currently with the patient and for previous two years of illness

Exclusion criteria:

- ❖ For the patient –
 - Those with co-morbid major physical illness like diabetes, hypertension, carcinoma etc.
 - Mental Retardation.
 - Substance dependence.
 - Absent from home for a period of 6 months or more.
- ❖ For the caregiver –
 - Those with psychiatric illness were excluded.

2.7 Tools:

- Coping checklist (Rao and Prabhu, 1989)^[23]: This scale comprises of 70 items describing a broad range of behavioural, emotional and cognitive responses that may be used to handle stress. Items are scored as Yes or No. This scale is reported to be useful in both clinical and research settings especially within the stress coping social support framework on the basis of the type of questions.

- Burden Assessment Schedule (Thara, 1998) ^[24]: The Burden Assessment Schedule (BAS, 98) developed by Thara et al, at the Schizophrenia Research Foundation is based on the principle of ‘stepwise ethnographic exploration’ described by Sell and Nagpal in 1992. This is a semi-quantitative, 40 items scale measuring 9 different areas of subjective and objective caregiver burden. In BAS the minimum score is 40 and the maximum score is 120.
- The ICD-10 classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines for diagnosing Schizophrenia and Bipolar Affective Disorder.
- Proforma for Socio demographic details of the caregivers, designed to collect the following details in addition to the age, sex, education, socio-economic status, family type and domiciliary status – the type of diagnosis and duration of illness of the patients. The proforma also includes caregiver details, mentioning the relationship to the patient and the duration of care.

Procedure: Study subjects were thoroughly evaluated on the basis of history and mental status examination. Diagnosis of Schizophrenia and BPAD were done as per guidelines listed in ICD-10. Patients and their primary caregiver who fulfil the inclusion criteria and did not meet the exclusion criteria were selected. Written Informed consent was taken from each of the Caregivers before including them in the study. Proforma for socio demographic data was filled up for socio-demographic details of the primary caregivers. Burden Assessment Schedule and Coping Checklist were applied to all primary caregivers and scoring done. Appropriate statistical test in MS Excel were applied to analyze the obtained data setting the significance threshold at $p < 0.05$.

III. Results

Table 1: Distribution of caregivers according to socio-demographic characteristics

Caregiver variable	Sub - variable	Schizophrenia		BPAD	
		no	(%)	no	(%)
Age	1 8 - 3 0	7	2 3 . 3 3	13	43.33
	3 1 - 4 3	1 0	3 3 . 3 3	6	20.00
	4 4 - 5 6	5	1 6 . 6 7	7	23.33
	> 5 6	8	2 6 . 6 7	4	13.33
Sex	Male	1 4	4 6 . 6 7	18	60.00
	Female	1 6	5 3 . 3 3	12	40.00
Marital status	Un married	8	2 6 . 6 7	12	40.00
	Mar ried	2 2	7 3 . 3 3	18	60.00
Employment	Un employed	4	1 3 . 3 3	1	3 . 3 3
	Full time employed	4	1 3 . 3 3	5	16.67
	Part time employed	1	3 . 3 3	6	20.00
	Self employed	8	2 6 . 6 7	10	33.33
	Stu dent	0	0 . 0 0	1	3 . 3 3
	House wife	1 2	4 0 . 0 0	6	20.00
	O t h e r s	1	3 . 3 3	1	3 . 3 3
Education	Illiterate	5	1 6 . 6 7	5	16.67
	L i t e r a t e	2	6 . 6 7	4	13.33
	Primary education	5	1 6 . 6 7	2	6 . 6 7
	Middle education	8	2 6 . 6 7	11	36.67
	Matriculation/H.S	7	2 3 . 3 3	6	20.00
Family income	Graduate	3	1 0 . 0 0	2	6 . 6 7
	< 2 , 0 4 0	1 3	4 3 . 3 3	7	23.33
	2 , 0 4 1 - 6 , 1 0 0	1 3	4 3 . 3 3	19	63.33
	6 , 1 0 1 - 1 0 , 1 6 0	4	1 3 . 3 3	2	6 . 6 7
	1 0 , 1 6 1 - 1 5 , 2 8 0	0	0 . 0 0	0	0 . 0 0
Relationship to patient	1 5 , 2 8 1 - 2 0 , 3 6 0	0	0 . 0 0	2	6 . 6 7
	Spouse	5	1 6 . 6 7	5	16.67
	P a r e n t	1 3	4 3 . 3 3	8	26.67
	S i b l i n g	8	2 6 . 6 7	10	33.33
	C h i l d r e n	2	6 . 6 7	5	16.67
O t h e r s	2	6 . 6 7	2	6 . 6 7	

From Table 1 it is seen that majority of caregivers of Chronic Schizophrenia were in the age range of 31-43 years followed by >56 year age group. Mean age of caregivers was 44.03 ± 15.56 . Majority were female (53.3%), married (73.33%), housewives (40%), educated upto middle education level and belonged to poorer families. Parents constituted the predominant population among the caregivers followed by siblings and spouses. On the other hand Majority of caregivers of BPAD were in the age range of 18-30 years (43.33%) followed by those in the age group of 44-56 years. Mean age of caregivers was 38.87 ± 13.91 . Majority were males (60%), married (60%), self employed (33.33%), siblings (33.33%), educated upto middle education level and belonged

to poorer families. Siblings constituted the predominant population among the caregivers of BPAD followed by parents and spouses.

Table 2: Distribution of caregivers according to duration of care

Duration of Care (in years)	Schizophrenia		BPAD	
	No	(%)	No	(%)
2	5	14	4	6.67
6	9	8	2	6.67
Equal to or more than 10	8	2	6	6.67

Table 2 shows that in both the groups of patients in terms of duration of care caregivers were equally distributed. Table 3 shows that majority of patients in both the groups had a GAF score between 31-40 (15 in case of Chronic Schizophrenia and 13 in case of BPAD).

Table 3: Distribution of caregivers according to total burden assessment schedule (BAS) score

Total BAS score	Schizophrenia		BPAD		P-Value
	No	(%)	No	(%)	
< 8	0	6	2	0.00	0.03*
> 8	0	2	4	8.00	
Mean BAS ±SD	102.86±27.04		88.80±22.31		

*p value significant at <0.05

Table 3 shows the mean BAS score in the both the groups. It was seen that the mean BAS score for Chronic Schizophrenia group was 102.86 ± 27.04 whereas the mean BAS score for the BPAD group was 88.80 ± 22.31. On applying unpaired sample t test a p-value of 0.03 was obtained which denoted that that Caregivers of Chronic Schizophrenia experienced significantly higher burden than the caregivers of Bipolar Affective Disorder

Table 4: Different types of coping used by caregivers of Schizophrenia

Coping style	Used/Not used	Schizophrenia	
		No	(%)
Positive cognitive	Used	24	80.00
	Not used	6	20.00
Negative cognitive	Used	21	70.00
	Not used	9	30.00
Problem solving	Used	25	83.33
	Not used	5	16.67
Magical thinking	Used	25	83.33
	Not used	5	16.67
Avoidance	Used	5	16.67
	Not used	25	83.33
Distraction	Used	18	60.00
	Not used	12	40.00
Religious	Used	27	90.00
	Not used	3	10.00
Help seeking	Used	26	86.67
	Not used	4	13.33
External attribution	Used	26	86.67
	Not used	4	13.33

Table 4 shows that most commonly used coping mechanisms used by caregivers of Chronic Schizophrenia were Religious Coping (90.00%) followed by Help Seeking (86.67%) and External Attribution (86.67%) whereas Table 5 shows that caregivers of Bipolar Affective Disorder most commonly resorted to Help Seeking (93.33%) followed by Religious Coping (83.33%) and External Attribution (80.00%).

Table 5: Different types of coping used by caregivers of Bipolar Affective Disorder

Coping style	Used/Not used	BPAD	
		No	(%)
Positive cognitive	Used	2	70.00
	Not used	9	30.00
Negative cognitive	Used	1	60.00
	Not used	1	40.00
Problem solving	Used	2	70.00
	Not used	9	30.00
Magical thinking	Used	2	66.67
	Not used	1	33.33
Avoidance	Used	9	30.00

	Not used	2	1	70.00
Distraction	Used	2	0	66.67
	Not used	1	0	33.33
Religious	Used	2	5	83.33
	Not used	5		16.67
Help seeking	Used	2	8	93.33
	Not used	2		6.67
External attribution	Used	2	4	80.00
	Not used	6		20.00

Table 6: Comparison of burden with coping in caregivers of Chronic Schizophrenia

C O P I N G	GROUP A (Burden <80) (n=6)		GROUP B (Burden >80) (n=24)		P value
	Mean	S D	Mean	S D	
Positive cognitive	24.00	5.87	17.00	2.43	<0.0001*
Negative cognitive	10.50	0.85	4.87	0.51	<0.0001*
Problem solving	25.00	6.01	19.79	3.85	0.0132*
Distraction	12.00	1.03	9.75	0.78	<0.0001*
Magical thinking	16.60	2.12	20.80	4.04	0.0212*
Avoidance	0.83	0.04	0.83	0.04	1.000
Religious	13.50	1.52	25.80	6.19	<0.0001*
Help seeking	21.60	4.89	20.58	4.00	0.5965
External attribution	26.00	6.59	20.58	4.00	0.0148*

[*: p value Significant at <0.05]

Table 6 shows that the caregivers with lower burden in schizophrenia had resorted to coping strategies like Positive cognitive, Negative cognitive, Problem solving, Distraction and External Attribution significantly more than the caregivers with higher burden. On the other hand those with higher burden used coping strategies like Magical Thinking and Religious coping significantly more than those with lower burden. There was no significant difference in the use of coping strategies like avoidance and help seeking between the two groups.

Table 7: Comparison of burden with coping in caregivers of Bipolar Affective Disorder

C O P I N G	GROUP A (Burden <80) (n=6)		GROUP B (Burden >80) (n=24)		P value
	Mean	S D	Mean	S D	
Positive cognitive	18.70	3.05	13.00	1.49	<0.0001*
Negative cognitive	2.00	0.93	14.57	1.98	<0.0001*
Problem solving	21.00	4.82	13.00	1.49	<0.0001*
Distraction	13.33	1.50	13.33	1.50	1.0000
Magical thinking	13.33	1.50	13.33	1.50	1.0000
Avoidance	1.00	0.89	3.43	0.41	<0.0001*
Religious	25.00	6.01	19.05	3.43	0.0030*
Help seeking	24.88	5.89	26.67	6.67	0.5534
External attribution	13.33	1.50	22.85	4.97	<0.0001*

[*: p value Significant at <0.05]

Table 7 shows that the caregivers with lower burden in BPAD had resorted to coping strategies like Positive cognitive, Problem solving and Religious coping strategies significantly more than the caregivers with higher burden. On the other hand those with higher burden used coping strategies like negative coping, external attribution and avoidance significantly more than those with lower burden. There was no significant difference in the use of coping strategies like distraction, magical thinking and help seeking between the two groups.

IV. Discussion

The present study assessed the coping strategies adopted by caregivers of patients of two major psychiatric illnesses – Schizophrenia and Bipolar Affective Disorder and also analysed the relationship between coping and the burden experienced by them. It was seen from this study that caregivers of Chronic Schizophrenia experienced significantly higher burden than the caregivers of BPAD. Our findings were in line with the findings of Gautam and Nijhawan 1984^[25] and Roy Choudhury et al. 1995^[26]. Higher burden among caregivers of Chronic Schizophrenia could be due the chronic nature of the illness. Giel et al. 1983^[27] had mentioned that a chronic illness with severe loss of insight would significantly increase the extent of burden. Coping mechanisms most commonly used by caregivers of Chronic Schizophrenia were Religious Coping (90.00%) followed by Help Seeking (86.67%) and External Attribution (86.67%). Caregivers of Chronic Schizophrenia who had lower burden most commonly used problem solving coping than the higher burden group who used more of religious and magical thinking as coping strategies. This finding was in keeping with the findings of Credo and Parker in 2006, Sczufca and Kuipers in 1999 and Chandrasekaran et al. 2002.^[28-30] Among the caregivers of patients of BPAD the most commonly used coping strategies included help seeking (93.33%) followed by religious coping strategies and external attribution. Our findings are in accordance with

the findings of Ganguly et al. and Chakrabarti et al.^[31, 32] Caregivers with lower burden had resorted to coping strategies like Positive cognitive, Problem solving and Religious coping strategies significantly more than the caregivers with higher burden. On the other hand those with higher burden used coping strategies like negative coping, external attribution and avoidance significantly more than those with lower burden.

V. Conclusion

Caregivers of Chronic Schizophrenia used mostly religious coping followed by external attribution and magical thinking. Those with lower burden most commonly used problem solving coping strategies while those with higher burden used more of religious coping and magical thinking as coping strategies. It was also seen that those with lower burden used coping mechanisms like Positive coping, Negative coping, Distraction, Problem solving and External Attribution significantly more than those with higher burden. On the other hand those with higher burden used coping strategies like magical thinking and religious coping significantly more than those with lower burden. Among the caregivers of patients of BPAD the most commonly used coping strategies included help seeking (93.33%) followed by religious coping strategies and external attribution. Caregivers with lower burden had resorted to coping strategies like Positive cognitive, Problem solving and Religious coping strategies significantly more than the caregivers with higher burden. On the other hand those with higher burden used coping strategies like negative coping, external attribution and avoidance significantly more than those with lower burden.

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