

## ORIGINAL ARTICLE

# Psychopathology among Primary Caregivers of Major Psychiatric Patients

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### ABSTRACT

**Background:** Perceived stigma and experiencing different kinds of burden for long time by primary caregivers during caring family member suffering from major psychiatric illness may affects their mental health. Present study was conducted to find out the nature of psychopathology experienced by primary caregivers of major psychiatric patients.

**Material & Method:** Forty-four caregivers of major psychiatric patients were selected from outdoor psychiatric unit of Ranchi Institute of Neuro-Psychiatry and Allied Sciences, Ranchi and forty-one normal controls were selected from different location of Ranchi district. They were assessed on Symptoms Checklist-90-Revised (SCL-90) and General Health Questionnaire – 28 (GHQ-28). Statistical analysis was done using SPSS (13.0 ver.).

**Result:** The result suggests that primary caregivers experience psychopathology, namely, somatization, obsessive compulsive symptoms, interpersonal sensitivity, depression, anxiety, anger hostility, phobic anxiety, paranoid ideation and social dysfunction while caring someone family member suffering from major psychiatric illness and the number of caregivers in family definitely has an impact on severity of the caregivers' psychopathology. Total duration of patient's treatment and total duration of patient's illness also affect caregiver's phobic anxiety and number of patient's hospitalization affects caregivers' social dysfunction as well.

**Conclusion:** Findings suggest that mental health issues of caregivers should also be addressed while formulating management plan for patients suffering from major psychiatric disorders.

**Key Words:** perceived burden, mental illness, stigma, depression.

### INTRODUCTION

Caregivers provide unpaid assistance to care recipients who have difficulty with daily functioning due to physical, cognitive, emotional or other psychiatric problem. Although giving care varies with severity of a recipient's problems.

Supporting someone with measure psychiatric illness is a difficult, lifelong effect that can be very stressful. The presence of someone with measure psychiatric illness in the home can result in many kinds of burden affect the work and social life of family members or the caregivers. Caregivers' burden can include physical, psychological, social and financial problems, embarrassment, overload and resentment. There is an ever going literature with consisting findings of the burden experienced by families of patients with psychiatric disorders<sup>1,2</sup>. 45% of primary caregivers of

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chronic psychotic patients reported high level of burden and high psychological impairment (High GHQ score) was related to family atmosphere, and previous admissions and duration of illness were also found to predict burden<sup>3</sup>.

The psychopathological severity of the patients has a negative impact on their caregivers' mental health<sup>4</sup>, family routines and general quality of life<sup>5</sup>. Studies have shown that 43% to 92% of caregivers of people with mental illness report feeling stigmatized<sup>6</sup> and that perceived stigma is associated with reports of depressive symptoms<sup>7</sup>. Taj et al. (2005)<sup>8</sup> reported that depression is high among caregivers of schizophrenic patients in their study conducted on 40 schizophrenic's caregivers. On the other hand depressive symptoms were reported by 74% of caregivers of patients with chronic mood disorders<sup>9</sup>. Perlick et al. (2007)<sup>10</sup> conducted a study on 500 primary caregivers of patients with bipolar disorder. They found that perceived stigma was positively associated with caregivers' depressive symptoms.

A study conducted by Hou et al. (2008)<sup>11</sup> on caregivers of schizophrenia patients in Taiwan to investigate the burden of the primary family caregiver and the factors that affect caregivers' burden. They reported moderate level of burden among them, and caregivers anxiety was the highest followed by dependency of the patient feeling shame and guilt, and family interference.

Sandy et al. (2007)<sup>12</sup> found that between 12% and 18% of general population of Mexican Americans meet the cut-up for being at risk depression however 40% of the caregivers of adult schizophrenic patients were to be found to meet these criteria. Further they reported that younger caregivers' age, lower level of caregivers' education and higher level of patient's mental illness symptoms were predictive of higher levels of caregivers' depressive symptoms and caregivers perceived burden mediated the relation between patient's psychiatric symptoms and caregiver's depression.

As reported by Parabiaghi et al. (2007)<sup>13</sup>, 51% of caregivers of schizophrenia experienced significant emotional distress. Further they reported that higher patients' psychopathology, higher numbers of patient-rated needs, patient's lower global functioning and patients' poorer quality of life were related to the severity of family burden.

Pinquant & Sorensen (2003)<sup>14</sup> found in a meta-analysis of 84 articles that caregivers of older had higher level of depression, perceived stress and lower levels of self-efficacy than non-caregivers.

Apart from caregivers of psychiatric patients, psychopathology was to be found among caregivers of chronic medical patients too. For example, mood and anxiety disorders were common in the primary caregivers of children with asthma. Brown et al. (2006)<sup>15</sup> reported 26.9% of caregivers were diagnosed with a current depressive episode and 20.6% of caregivers were with an anxiety disorder. Similarly, Mahoney et al. (2005)<sup>16</sup> found that 23.5% caregivers were anxious and 10.5% caregivers were depressed of Alzheimer's disease patients.

Despite the fact that caring someone with chronic psychiatric patient is difficult that may lead to psychopathology among caregivers sometimes up to diagnostic level. Still it is not elaborated the ranges and nature of psychopathology among caregivers. The present study attempted to find out the nature of psychopathology experienced by primary caregivers of major psychiatric patients and their associations with different clinical variables i.e. total duration of patient's illness, duration of last episode, number of patient's hospitalization, total duration of treatment, duration of care giving and number of caregivers in family.

## **METHODOLOGY**

**Sample** – The sample for the present study consisted of forty-four primary caregivers of major psychiatric patients (suffering from schizophrenia – 21, schizoaffective – 3, bipolar affective 'manic' – 18, and

depressive disorder -2) attending outdoor psychiatric unit at Ranchi Institute of Neuro-Psychiatry and Allied Sciences, Ranchi and forty-one normal controls (the persons who do not have psychiatric patient in the family and do not care psychiatric patient) were selected from different location of Ranchi district. The mean age of caregivers and normal control was  $39.25 \pm 9.53$  and  $36.07 \pm 6.78$  years respectively. The difference was statistically non-significant (t value= 1.75; df= 83). Other socio-demographic characteristics of caregivers are given in Table 1. Comparison shows that caregivers who participated in the study did not differ statistically from normal participants. The age range of patients (to whom caregivers were providing care) ranged between 18 years to 54 years (mean age =  $30.88 \pm 8.02$ ). Mean duration of illness was  $7.16 \pm 5.09$  years. For most of the patients apart from primary caregiver, care giving was shared by other members of the family also (27.3% patients had single caregivers, 27.3% had double caregivers, 27.3% had three caregivers, 6.8% had four caregivers, 6.8% had five caregivers 2.3% had six caregivers and 2.3% had seven caregivers consequently in their family).

**Tools** – The following tools have been used for the collection of data in the present study:

**Socio-demographic and clinical data sheet** – This data sheet was designed and used to gather information about sample characteristics and clinical variables i.e. name, age, sex, education, socioeconomic status, no. of patients hospitalization, duration of care giving, no. of caregivers, duration of patient's illness etc.

**Symptoms Checklist-90-R (SCL-90-R)** – The SCL-90-R (Derogatis, 1994) is a 90-item, multidimensional self-report inventory designed to screen for a broad range of psychological problems and symptoms of psychopathology. There are nine primary symptom dimensions that are measured: somatization (perception of bodily dysfunction), obsessive-compulsive, interpersonal sensitivity (feelings of

personal inadequacy or inferiority), depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. The respondent rates each item on 5-point scale which assesses the severity of the symptom.

**General Health Questionnaire-28(GHQ-28)** – The GHQ-28 scale was derived by factor analysis of the original 60-item version<sup>17</sup> and prepared mainly for research purposes. The GHQ-28 incorporates four subscales: somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. Rating is done on 4-point rating scale. The cut-off score is 5.

**Table 1 Socio-demographic characteristics of he participants**

**RESULT**

Socio-demographic variables		Group		$\chi^2$ (df)
		Caregivers N (%)	Normal N (%)	
Sex	Male	34 (77.3)	28 (68.3)	0.867 (1)
	Female	10 (22.7)	13 (31.7)	
Education	Primary	15 (34.1)	6 (14.6)	6.683 (3)
	Secondary	15 (34.1)	12 (29.3)	
	Higher secondary	4 (9.1)	9 (22.0)	
	Graduation and above	10 (22.7)	14 (34.1)	
Marital Status	Married	37 (84.1)	31 (75.6)	1.025 (2)
	Unmarried	6 (13.6)	9 (22.0)	
	Widow/Widower	1 (2.3)	1 (2.4)	
Source of income	Farming	17 (38.6)	7 (17.1)	6.884 (4)
	Service	14 (31.8)	14 (34.1)	
	Unemployed	0 (0.0)	2 (4.9)	
	Business	7 (15.9)	10 (24.4)	
	Others	6 (13.6)	8 (19.5)	
Socioeconomic Status	Lower	16 (36.4)	9 (22.0)	2.348 (2)
	Middle	27 (61.4)	30 (73.2)	
	Upper	1 (2.3)	2 (4.9)	
Religion	Hindu	38 (86.4)	34 (82.9)	1.261 (3)
	Islam	1 (2.3)	1 (2.4)	
	Christian	1 (2.3)	3 (7.3)	
	Sarna	4 (9.1)	3 (7.3)	
Types of Family	Nuclear	18 (40.9)	17 (41.5)	0.003 (1)
	Joint	26 (59.1)	24 (58.5)	
Living Background	Rural	26 (59.1)	17 (41.5)	2.763 (2)
	Urban	8 (18.2)	12 (29.3)	
	Semi urban	10 (22.7)	12 (29.3)	

Psychopathology was assessed using symptoms checklist-90-R and General Health Questionnaire-28. To compare psychopathology of caregivers and normal participants on the different variables of SCL-90-R and GHQ-28 t-test was applied. Result shows that both groups were statistically different on all variables of SCL-90-R (Table 2) and GHQ-28 (Table 3) except psychotism in SCL-90-R which suggest that primary caregivers experience psychopathology, namely, somatization, obsessive compulsive symptoms, interpersonal sensitivity, depression, anxiety, anger hostility, phobic anxiety, paranoid ideation and social dysfunction while caring family member suffering from major psychiatric illness.

**Table 2 –Comparison of caregivers and normal group on SCL-90**

SCL-90 variables	Group				t (df=83)
	Caregivers (N=44)		Normal (N=41)		
	Mean	SD	Mean	SD	
Somatization	8.636	7.767	4.048	4.398	3.318***
Obsessive-Compulsive	9.477	6.374	3.951	3.177	5.001***
Interpersonal Sensitivity	8.545	5.824	3.926	3.836	4.284***
Depression	15.590	10.399	6.609	5.774	4.873***
Anxiety	9.159	7.100	3.609	2.528	4.731***
Anger Hostility	4.045	3.277	2.219	2.067	3.046**
Phobic Anxiety	3.613	3.597	2.170	2.011	2.260*
Paranoid Ideation	7.340	6.313	3.780	4.356	3.005**
Psychotism	2.840	2.701	2.170	3.412	1.007
Additional Scale	5.704	4.958	2.682	2.454	3.520***
Total Score on SCL	74.704	49.986	34.414	25.442	4.631***

\*\*\*= p< 0.001 level (2-tailed), \*\*= p< 0.01 level (2-tailed), \* = p<0.05 level (2-tailed)

**Table 3 –Comparison of caregivers and normal group on GHQ-28**

GHQ-28 variables	Group				t (df=83)
	Caregivers (N=44)		Normal (N=41)		
	Mean	SD	Mean	SD	
Somatic Complain	2.500	2.236	1.170	1.547	3.165**
Anxiety & Insomnia	2.590	2.234	0.951	1.203	4.169***
Social Dysfunction	1.909	1.762	1.024	1.823	2.274*
Severe Depression	1.977	2.415	0.609	1.222	3.256**
Total Score on GHQ-28	8.886	7.098	3.756	3.858	4.097***

\*\*\*= p< 0.001 level (2-tailed), \*\*= p< 0.01 level (2-tailed), \* = p<0.05 level (2-tailed)

Further, the severity of the psychopathology among caregivers may be associated with different clinical variables. Results (Table 4 and Table 5) show significant negative correlation between number of caregivers in family and all variables of SCL-90-R and GHQ-28 suggesting that if care giving is shared among more caregivers it has less negative impact on caregivers' mental health. Significant negative correlation was also found between total duration of patient's illness and phobic anxiety, total duration of treatment and phobic anxiety, and number of patient's hospitalization and social dysfunction.

**Table 4 –Correlation between clinical variables and SCL-90**

### DISCUSSION

Clinical variables → SCL-90 variables ↓	Total duration of patient's illness (in year)	Duration of last episode (in month)	Number of patient's hospitalization	Total duration of treatment (in month)	Duration of caregiving (in year)	Number of caregivers in family
Somatization	-.217	-.155	.089	-.190	-.085	-.390**
Obsessive-Compulsive	-.169	-.134	-.117	-.098	-.038	-.568**
Interpersonal Sensitivity	-.146	-.268	-.302*	-.061	-.043	-.489**
Depression	-.259	-.167	-.142	-.204	-.043	-.542**
Anxiety	-.239	-.310*	-.151	-.181	-.192	-.468**
Anger Hostility	.004	-.206	-.109	.097	.081	-.440**
Phobic Anxiety	-.441**	-.333*	-.129	-.409**	-.295	-.421**
Paranoid Ideation	.021	-.158	-.142	.123	.134	-.525**
Psychotism	-.003	-.275	-.331*	.030	.099	-.386**
Additional Scale	-.220	-.208	-.147	-.193	-.059	-.426**
Total Score on SCL	-.211	-.245	-.153	-.138	-.058	-.564**

\*\*= p< 0.01 level (2-tailed), \* = p<0.05 level (2-tailed)

**Table 5 –Correlation between clinical variables and GHQ-28**

Clinical variables → GHQ-28 variables ↓	Total duration of patient's illness (in year)	Duration of last episode (in month)	Number of patient's hospitalization	Total duration of treatment (in month)	Duration of caregiving (in year)	Number of caregivers in family
Somatic Complain	-.021	-.153	-.333*	-.055	.067	-.565**
Anxiety & Insomnia	-.107	-.225	-.259	-.025	-.035	-.545**
Social Dysfunction	.007	-.225	-.389**	.119	.180	-.443**
Severe Depression	-.117	-.162	-.160	.030	.095	-.460**
Total Score on GHQ-28	-.068	-.158	-.326*	.019	.096	-.611**

\*\*= p< 0.01 level (2-tailed), \* = p<0.05 level (2-tailed)

The present study examined the nature of psychopathology experienced by primary caregivers during caring someone family member suffering from major psychiatric illness. The data demonstrated that despite belonging from similar socio-demographic status caregivers experienced enormous amounts of psychopathology than normal participants. The caregivers experienced more somatization, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, anger hostility, phobic anxiety, paranoid ideation, and socially dysfunction than normal participants. Previous studies also reported that depressive symptoms was higher among caregivers of schizophrenic patients<sup>8, 12</sup>, caregivers of mood disorders<sup>9, 10</sup>, and caregivers of people with mental illness<sup>7, 3</sup>. Similarly, anxiety<sup>11</sup> and other emotional distress<sup>13</sup> were reported among caregivers of schizophrenia patients.

The present study suggested that the number of caregivers in family definitely has an impact on severity of the psychopathology found in primary caregivers. The possibility of such psychopathology among single or lesser caregivers of psychiatric patient might be because of single or lesser caregivers feel more stigmatized and have to bear more burden compare to multiple caregivers in the same condition. However, no review literature could be found such finding and need further study to elaborate the reason. Although previous studies suggested that perceived stigma is associated to depressive symptoms<sup>7, 10</sup>. Perceived burden is associated to caregivers' anxiety and depression<sup>12, 11</sup>. Apart from this, total duration of patient's treatment, and total duration of patient's illness also affect caregiver's phobic anxiety. And number of patient's hospitalization affects caregivers' social dysfunction.

Since cross-sectional assessment was done in the present study, causal inferences could not be drawn. However, literature suggests that stigmatization, caregivers' burden might engender feelings of depression<sup>7, 6, 10</sup>, anxiety<sup>11</sup> and psychological impairment<sup>3</sup>. Nature of psychopathology among

primary caregivers found in the present study may be explained. One of the possible explanations for the findings of the present study could be the very nature of the sample. The majority of the patients (care-recipients) in the present study were bipolar affective disorder 'mania' (18) and schizophrenia (21) that experiences a number of psychological problems that might have enhanced the caregivers' distress. Secondly, it has been argued in the literature that sharing the same household as the patient may increase the burden on caregivers<sup>18</sup>. Given that the all of caregivers in the present study were close relatives, it is more likely that they were living in the same house as the patient, thereby feeling more distressed.

## CONCLUSION

Findings suggest that primary caregivers experience psychopathology, namely, somatization, obsessive compulsive symptoms, interpersonal sensitivity, depression, anxiety, anger hostility, phobic anxiety, paranoid ideation and social dysfunction in the process of taking care of mentally ill family member. Findings also suggest that apart from primary caregivers, if other family members also participate in caregiving, it reduces the severity of psychopathology of primary caregiver. However, further studies are needed to ascertain causal factors responsible for the psychopathology of caregivers. Most important clinical implication of this study is that clinicians should be aware of the high rates of psychopathology in primary caregivers of patients having major psychiatric disorder so that they can make appropriate plan for caregivers also.

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