



A Cross-Sectional Study of Resilience in the Primary Caregivers of Patients with Schizophrenia, Bipolar affective Disorder and Alcohol Dependence Syndrome

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Abstract: Background: In psychiatry, resilience stands for one's capacity to recover from extremes of trauma and stress. It is an attribute of some people who manage to endure and recover fully, despite suffering significant traumatic conditions of extreme deprivation, serious threat, and major stress. Schizophrenia is a complex, chronic mental health disorder characterised by an array of symptoms, including delusions, hallucinations, disorganised speech or behaviour, and impaired cognitive ability. Bipolar affective disorder is a chronic and complex disorder of mood that is characterised by a combination of manic (bipolar mania), hypomanic and depressive (bipolar depression) episodes, with substantial subsyndromal symptoms that commonly present between major mood episodes. **Materials and Methods:** This is an Observational, cross-sectional and a comparative study was conducted in the Department of Psychiatry in Government Medical College and Nizamabad, Telangana. With a sample size of 90, 30 caregivers of patients with Schizophrenia, 30 caregivers of patients with Bipolar Affective Disorder and 30 caregivers of patients with Alcohol Dependence Syndrome, i.e. a total of 90 caregivers were assessed during the study period. They were assessed for resilience using appropriate scales and compared. **Results:** The mean resilience score was 68 in the children (n=8/90) and was the highest. The mean Resilience scores are highest in the Upper middle SE strata (70.8) and nearly the same in the Lower middle (63.16) and Upper lower (65.16) groups. The resilience scores seem to be the lowest in the Lower SE strata (49.8). The difference showed a high statistical significance of (p value= 0.001). **Conclusions:** Caregiver resilience is an important aspect to be assessed and addressed, and the comparison of caregiver resilience between major psychiatric illnesses has often been under-studied. There was statistically significant difference between the resilience score of caregivers of Group 1 and Group 3. Caregivers who were children of the patients were more resilient than others. Sharing the burden of care of the patient showed better resilience for the caregivers.

Keywords: Resilience, Schizophrenia, Bipolar affective Disorder, Alcohol Dependence Syndrome.

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INTRODUCTION

Major mental illness is often defined by its length of duration and the disability it produces. These illnesses include disorders that produce psychotic symptoms, such as schizophrenia and schizoaffective disorder, and severe forms of other disorders, such as major depression and bipolar disorder. Most often, the patient is discharged in the response stage and goes to live with the family. ⁽¹⁾

In psychiatry, resilience stands for one's capacity to recover from extremes of trauma and stress. It is an attribute of some people who manage to endure and recover fully, despite suffering significant traumatic conditions of extreme deprivation, serious threat, and major stress. Resilience in a person reflects a dynamic union of factors that encourages positive adaptation despite exposure to adverse life experiences. Resilience is associated with mental health and considered to be essential as a component of successful psychosocial adjustment. ⁽²⁾

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Many researchers have examined characteristics of family members of persons with mental illness that may be considered indicators of resilience, including acceptance, hardiness, hope, mastery, self-efficacy, sense of coherence, and resourcefulness. The research has consistently shown that family members who possess these positive characteristics are better able to manage and overcome adversity associated with caring for a family member diagnosed with a mental illness.⁽³⁾

Schizophrenia is a complex, chronic mental health disorder characterised by an array of symptoms, including delusions, hallucinations, disorganised speech or behaviour, and impaired cognitive ability. The early onset of the disease, along with its chronic course, make it a disabling disorder for many patients and their families^(4,5,6). Disability often results from both negative symptoms (characterised by loss or deficits) and cognitive symptoms, such as impairments in attention, working memory, or executive function. In addition, relapse may occur because of positive symptoms, such as suspiciousness, delusions, and hallucinations.⁽⁶⁾

Bipolar affective disorder is a chronic and complex disorder of mood that is characterised by a combination of manic (bipolar mania), hypomanic and depressive (bipolar depression) episodes, with substantial subsyndromal symptoms that commonly present between major mood episodes.

It is one of the top causes of worldwide disability. Bipolar 1 disorder has been frequently associated with serious medical and psychiatric comorbidity, early mortality, high levels of functional disability, and compromised quality of life. The necessary feature of bipolar 1 disorder involves the occurrence of at least one lifetime manic episode, although depressive episodes are common. Bipolar 2 disorder needs the occurrence of at least one hypomanic episode and one major depressive episode⁽⁷⁾

Alcoholism affects not only the consumer but also all their family members. In India, it has been estimated that there are 10.6 million dependent alcohol users among 62.5 million alcohol users⁽⁸⁾ While some help for them is getting initiated at least in urban areas of the country, their spouses and children continue to be the “forgotten victims.”⁽⁹⁾ The wives of persons with alcoholism (WopA) are known to have significant problems such as marital dissatisfaction, poor social interaction, communication problems, physical problems, and mental health disorders⁽¹⁰⁾ Alcohol is one of the leading causes of death and disability globally. About two billion people worldwide consume alcoholic beverages and one-third (nearly 76.3 million) is likely to have one or more diagnosable alcohol use disorders.

Alcohol is attributed to nearly 3.2% of all deaths and results in a loss of 4% of total Disability affected life years (DALYs) (58 million). It is acknowledged that countries which had low alcohol consumption levels are now witnessing an increasing consumption pattern. WHO estimates for the South East Asian countries indicate that one-fourth to one-third of male population drink alcohol with increasing trends among women.⁽¹¹⁾

Caregiver is an individual who has the responsibility of meeting the physical and psychological needs of the dependent patient. Psychiatric patients need assistance or supervision in their daily activities and this often places a major burden on their caregivers, thereby placing the caregiver at a great risk of mental and physical health problems. The term “caregiver burden” is used to describe the physical, emotional and financial toll of providing care.⁽¹²⁾

MATERIALS AND METHODS

This is an Observational, cross-sectional and a comparative study was conducted in the Department of Psychiatry in Government Medical College and Nizamabad, Telangana. With a sample size of 90, 30 caregivers of patients with Schizophrenia, 30 caregivers of patients with Bipolar Affective Disorder and 30 caregivers of patients with Alcohol Dependence Syndrome, i.e. a total of 90 caregivers were assessed during the study period. They were assessed for resilience using appropriate scales and compared.

INCLUSION CRITERIA:

1. Caregivers of the adult patient with major mental illness diagnosed by consultant psychiatrist as Alcohol Dependence Syndrome (as per ICD 10 criteria F10 - F19), Schizophrenia (as per ICD 10 criteria F20.0 to F20.9) and Bipolar affective disorder (as per ICD 10 F31.0 to F31.9) who were undergoing treatment at our department.
2. Caregivers, male and female aged 18 years to 65 years.
3. Caregivers and patients who consent to be part of the study.
4. Primary caregivers of patients in the maintenance phase of Schizophrenia, Bipolar Affective Disorder and Alcohol Dependence Syndrome.
5. The caregiver should be primarily involved with the caregiving and living with the patient for at least 6 months

EXCLUSION CRITERIA

1. Caregivers aged less than 18 years or greater than 65 years.
2. Caregivers who themselves have been diagnosed with psychiatric disorders.
3. Caregivers of patients who also have been diagnosed with other medical or psychiatric comorbidities.
4. Caregivers whose patients are in the acute phase of the Psychiatric Disorders.

TOOLS USED FOR ASSESSMENT

- MINI International Neuropsychiatric Interview (M. I. N. I PLUS)
- Connor Davidson Resilience Scale (CD RISC)

1. MINI International Neuropsychiatric Interview (M.I.N.I PLUS 5.0): MINI International Neuropsychiatric Interview (M.I.N.I PLUS 5.0) is a structured diagnostic interview compatible with DSM-IV criteria.

It was designed for clinical practice and research in psychiatric and tertiary care settings. The interview was considered comprehensive enough to cover all patient symptoms and the patient's views of the tool were positive.

The interview has questions to screen for and make diagnosis of 26 psychiatric disorders: psychotic, mood, anxiety, somatoform, substance use, panic, phobia, obsessive compulsive disorders and so on.

The patients were screened for the mental disorders and a final diagnosis was made with the M.I.N.I Plus, which was further confirmed by clinical interviews⁽¹⁵⁾.

2. Connor Davidson Resilience Scale (CD RISC)

The Connor Davidson Resilience Scale (CD-RISC) consists of 25 items, which are evaluated on a five-point Likert scale ranging from 0-4: not true at all (0), rarely true (1), sometimes true (2), often true (3), and true nearly all of the time (4) - these ratings result in a number between 0-100, and higher scores indicate higher resilience⁽¹⁶⁾.

Factor analysis of the original scale produced five factors:

- I. Personal competence, high standards, and tenacity
- II. Trust in one's instincts, tolerance of negative affect, and strengthening effects of stress.
- III. Positive acceptance of change and secure relationships
- IV. Control
- V. Spiritual influences

PROCEDURE

All consecutive caregivers were the participants and were selected according to the aforementioned selection criteria. A written informed consent was taken from the primary caregivers before including them for the study. The socio-demographic proforma was used to obtain details about the caregiver. Only those patients were selected who were diagnosed with Schizophrenia, Bipolar disorder and Alcohol Dependence Syndrome by applying the ICD 10 criteria in Government General Hospital Nizamabad, psychiatry OPD. Clinical profile of the patient and confirmation of the diagnosis was made by applying the MINI Screen Scale. Connor Davidson Resilience Scale (CD-RISC) will be applied to measure the level of resilience in the caregivers.

STATISTICAL ANALYSIS

Data entry was done using M.S. Excel and statistically analysed using Statistical package for social sciences (SPSS Version 26) for M.S Windows. Descriptive statistical analysis was carried out to explore the distribution of several categorical and quantitative variables. Categorical variables were summarised with n (%), while quantitative variables were summarised by mean \pm S.D. All results were presented in tabular form and are also shown graphically using bar diagram or pie diagram as appropriate. The difference in the two groups was tested by t test. Anova test was used to determine if there is a statistically significant difference between two or more categorical groups by testing for differences of means using variance. P-value less than 0.05 considered to be statistically significant.

RESULTS

Table 1: Distribution of Age of the caregivers in the study sample

		Frequency	Percent
Age Group	18-20 years	2	2.2%
	21-30 years	14	15.6%
	31-40 years	16	17.8%
	41-50 years	23	25.6%
	51-60 years	26	28.9%
	>61 years	9	10.0%
Mean Age		44.9	

Of the total population, caregivers were divided into 6 groups, 18-20y (n=2,), 21-30y (n=14,15.6%), 31-40y (n=16,17.8%), 41-50y (n=23,25.6%), 51-60y (n=26,28.9%), 61-65y(n=9,10%). The mean age was 44.9. A large number of the caregivers are in the 5th (25.6%) and 6th (28.9%) decades of life.

Table 2: Gender distribution of the caregivers

		Frequency	Percentage
Gender	Male	39	43.3%
	Female	51	56.7%

The number of female caregivers (n= 51/90) is evidently more than male caregivers (n= 39/90) by nearly 14%. Female caregivers form 56.7% of this sample of the caregivers of all 3 groups of patients.

Table 3: DIAGNOSIS OF THE PATIENT

		Frequency	Percent
Diagnosis	Schizophrenia	30	33.3%
	BPAD	30	33.3%
	ADS	30	33.3%
	Total	90	100.0%

The caregivers of all patient groups were taken as 30 to ensure uniform representation of each group.

Table 4: Responses of the study population to the CD RISC scale.

	0		1		2		3		4	
	n	%	n	%	n	%	n	%	n	%
	Able to adapt to change	2	2.2	7	7.8	21	23.3	39	43.3	21
Close and secure relationships	2	2.2	8	8.9	12	16.7	32	35.6	33	36.7
Sometimes fate or God can help	7	7.8	9	10	14	15.6	34	37.8	26	28.9
Can deal with whatever comes	3	3.3	6	6.7	22	24.4	30	33.3	29	32.2
Past success gives confidence for new challenge	2	2.2	13	14.4	18	20	38	42.2	19	21.1
See the humorous side of things	18	20	24	26.7	28	31.1	16	17.8	4	4.4
Coping with stress	5	5.6	11	12.2	26	28.9	37	41.1	11	12.2

strengthens										
Tend to bounce back after illness or hardship	-	-	3	3.3	18	20	42	46.7	27	30
Things happen for a reason	7	7.8	15	16.7	26	28.9	28	31.1	14	15.6
Best effort no matter what	-	-	3	3.3	21	23.3	38	42.2	28	31.1
You can achieve your goals	-	-	2	2.2	34	37.8	36	40	18	20
When things look hopeless, I don't give up	1	1.1	12	13.3	20	22.2	35	38.9	22	24.4
Know where to turn for help	9	10	9	10	25	27.8	27	30	20	22.2
Under pressure, focus and think clearly	3	3.3	17	18.9	28	31.1	29	32.2	13	14.4
Prefer to take the lead in problem solving	3	3.3	14	15.6	28	31.1	37	41.1	8	8.9
Not easily discouraged by failure	2	2.2	6	6.7	38	42.2	33	36.7	11	12.2
Think of self as strong person	-	-	5	5.6	22	24.4	40	44.4	23	25.6
Make unpopular or difficult decisions	3	3.3	14	15.6	31	34.4	38	42.2	4	4.4
Can handle unpleasant feelings	2	2.2	8	8.9	22	24.4	45	5.	13	14.4
Have to act on a hunch	6	6.7	29	32.2	31	34.4	21	23.3	3	3.3
Strong sense of purpose	3	3.3	8	8.9	19	21.1	44	48.9	16	17.9
In control of your life	2	2.2	7	7.8	34	37.8	29	32.2	18	20
I like challenges	15	16.7	30	33.3	25	27.8	12	13.3	8	8.9
You work to attain your goals	-	-	6	6.7	17	18.9	44	48.9	23	25.6
Pride in your achievements	4	4.4	4	4.4	19	21.1	37	41.1	26	28.9

Not true at all (0), rarely true (1), sometimes true (2), often true (3), and true nearly all of the time (4): The total score ranges from 0–100

Table 5. Comparison of mean resilience scores across the gender groups

		Mean	SD	P Value
Gender	Male	66.28	11.952	0.05
	Female	61.20	12.495	
	Total	63.40	12.455	

The Mean resilience score in males (n= 39) is 66.28 greater than the mean resilience score in females (n= 51) which is 61.2 and is statistically significant (p value= 0.05)

Table 6: Comparison of Resilience scores based on relationship with the patient

		Mean	SD
Relationship with the patient	Spouse	66.18	10.839
	Parent	59.47	12.475
	Child	68.00	8.734
	Sibling	64.25	16.383
	Total	63.40	12.455

The majority of the caregivers were either the Spouse (n=34/90) or a Parent (n= 36/90) and their resilience scores were 66.18 and 59.47 respectively. The mean resilience score was 68 in the children (n=8/90) and was the highest.

Table 7: Comparison of mean resilience scores across Socioeconomic groups

		Mean	SD	P Value
Socioeconomic Status	Lower	49.80	10.654	0.001
	Upper Lower	65.41	9.519	
	Lower middle	63.16	13.716	
	Upper middle	70.08	7.836	
	Total	63.40	12.455	

The mean Resilience scores are highest in the Upper middle SE strata (70.8) and nearly the same in the Lower middle (63.16) and Upper lower (65.16) groups. The resilience scores seem to be the lowest in the Lower SE strata (49.8). The difference showed a high statistical significance of (p value= 0.001).

Table 8: Comparison of resilience scores based on shared burden of the patient

		Mean	SD	P value
Shared Burden	Yes	66.70	12.425	0.04
	No	61.32	12.318	
	Total	63.40	12.455	

The mean resilience scores of people that share the burden of the patient (YES - n=49/90, 54.4%) and don't share the burden (NO- n= 41/90, 45.6%) were 66.7 and 61.32. There is a statistical significance (p value= 0.04).

Table 9: Comparison of Resilience of caregivers across all the diagnostic groups

	N	Mean	SD	95% Confidence Interval for ANOVA Mean		
				Lower Bound	Upper Bound	
				Schizophrenia	30	
BPAD	30	61.30	11.768	56.91	65.69	
ADS	30	59.23	12.235	54.66	63.80	
Total	90	63.40	12.455	60.79	66.01	

The mean resilience score in the caregivers of the schizophrenia group was 69.67 and was observed to be the highest across all 3 groups. Caregivers of patients with BPAD scored a mean of 61.3 followed closely by caregivers of patients with Alcohol dependence 59.23.

DISCUSSION

In our study the overall mean resilience of the sample is 63.4. From the sample obtained, the resilience score for caregivers of people with schizophrenia (n =30) was found to be highest with a mean resilience score of 69.67. This score is almost consistent with the findings of Jain et al⁽¹³⁾ who reported mean resilience score in caregivers of schizophrenia (70.80). But, Behrouian M, Ramezani T et al⁽¹⁴⁾ in their study, found the mean resilience score on CD RISC to be 59.94 showing a bigger difference compared to Jain A et al. ⁽¹³⁾

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This study finds the mean resilience score in caregivers of people with BPAD (n= 30) to be 61.3. These observations are nearly consistent with findings of Jain A et al⁽¹³⁾ who observed a mean resilience score of 60.8 in caregivers of patients with schizophrenia. Further the value consistent with the study by Rameshwar Manhas et al⁽¹⁵⁾

The mean resilience score in the caregivers of people with Alcohol dependence syndrome (n= 30) was found to be 59.23. The demographic data of this group is consistent with the findings by Ramanujam Vaishnavi et al⁽¹⁶⁾ The resilience score also is consistent with the findings by Johnson PR⁽¹⁷⁾ et al who found almost 82% caregivers in their study on wives of people with alcohol dependence to be having low resilience scores.

This study sample of caregivers across all three groups (N value = 90), is made up of males (n value= 39) and females are (n value = 51). The mean resilience score of the male demographic is 66.28 and females is 61.2. On performing a t test, (p value=0.05) a statistically significant difference between males and female resilience scores was observed. This finding is consistent with Manhas et al⁽¹⁵⁾ who observed mean resilience in males (120.51) and females (118.10)

The data obtained was divided into four groups of caregivers based on relationship with the patient and the mean resilience scores were obtained as follows, spouse (n=34, 66.18), parent (n=36, 59.47), child (n=8,68), sibling (n=12, 64.25). The mean resilience score was highest in the children of the patients. This may be owing to their age and better education. This finding is consistent with Camille Hall⁽¹⁸⁾ who observed that 60% of the children living with alcoholic or mentally ill parents had good resilience. According to, Werner (1999) documents how a chain of protective factors is forged over time, making it possible for high-risk children to become competent, confident, and caring individuals.⁽¹⁹⁾

The study sample was divided into 5 socioeconomic groups based on the Kuppaswamy scale and the scores obtained were, Lower SE status (n=10, 49.8), Upper lower SE status (n=29, 65.41), Lower middle SE status (n= 38, 63.16), Upper middle SE status (n=13, 70.08). These findings are consistent with the study by Vaishnavi et al⁽¹⁶⁾ and Goit BK et al⁽²⁰⁾

The study sample was divided into people who shared the burden of care with a relative and people who did not as groups that said Yes, (n=49, 66.70), No (n=61.32). The result is that the p value for the mean resilience in both the groups is p=0.04 meaning there is a statistical significance of sharing the burden resulting in positive resilience.

CONCLUSIONS

Caregiver resilience is an important aspect to be assessed and addressed, and the comparison of caregiver resilience between major psychiatric illnesses has often been under-studied. There was statistically significant difference between the resilience score of caregivers of Group 1 and Group 3. Males were found to have better resilience than females which was statistically significant. Caregivers from the Lower SE strata had the lowest resilience scores. Caregivers who were children of the patients were more resilient than others. Sharing the burden of care of the patient showed better resilience for the caregivers.

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