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## A STUDY ON STRESS, ANXIETY AND DEPRESSION IN CAREGIVERS OF PERSONS WITH SEVERE MENTAL ILLNESS

I V L Padmini<sup>\*1</sup>, Mididoddi Vaishnavi<sup>2</sup>, M.F. Deepika<sup>2</sup>, Amena Tabassum<sup>2</sup>, Shazia Begum<sup>2</sup>, Saniya Naaz<sup>2</sup>, Kasoju Hari Krishna Chary<sup>2</sup>

<sup>1</sup>Associate Professor, Department of Pharmaceutics, Sree Dattha Institute of Pharmacy, Hyderabad, India.

<sup>2</sup>Pharm. D Intern, Smt. Sarojini Ramulamma College of Pharmacy, (Palamuru University), Seshadri Nagar, Mahbubnagar District, Telangana State, India.

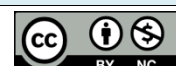
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### Abstract

This cross-sectional study aimed to assess the prevalence of stress, anxiety, and depression among caregivers of individuals diagnosed with severe mental illness. Conducted in the Department of Psychiatry at SVS Hospital, the study included caregivers of psychiatric patients who met the inclusion criteria and provided informed consent. Sociodemographic data were collected using a standardized intake proforma, and socio-economic status was assessed using the Modified Kuppuswamy Scale (2023). Psychological distress was measured using the Depression, Anxiety, and Stress Scale (DASS-21). The findings revealed that the age group of 21–30 years showed the highest prevalence of psychological issues, with 28 caregivers (27.7%) reporting moderate to severe levels of stress, anxiety, and depression. Caregivers from rural backgrounds, particularly farmers, were significantly affected, likely due to the burden of caregiving compounded by environmental stressors such as unpredictable climate conditions, financial insecurity, and limited support systems. Female caregivers were found to be more psychologically impacted than their male counterparts, possibly due to traditional caregiving roles and societal expectations. The study underscores the substantial emotional burden borne by caregivers of patients with psychiatric illnesses and highlights the need for targeted psychological support and interventions for this vulnerable population. Routine mental health screening and supportive counselling for caregivers should be integrated into psychiatric care services to improve both caregiver well-being and patient outcomes. These findings emphasize the need to recognize caregivers as secondary victims in the mental health care process and advocate for their inclusion in holistic mental health management plans.

**Keywords:** Caregivers, Stress, Anxiety, Depression, Severe mental illness, DASS-21, Rural mental health, Psychiatric burden.

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### \*Corresponding Author

I V L Padmini

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### Introduction

Caring for individuals with severe mental illness (SMI) presents a considerable psychological and emotional challenge, often placing a significant burden on caregivers. These caregivers, who are frequently family members, play a vital role in supporting patients through treatment, rehabilitation, and daily functioning. However, the chronic and demanding nature of caregiving—especially in psychiatric conditions such as schizophrenia, bipolar disorder, or severe depression—can lead to heightened levels of stress, anxiety, and depression among caregivers themselves. Unlike other chronic medical illnesses, mental disorders are often accompanied by behavioural

disturbances, social stigma, and long-term dependency, which further compound the caregiver's burden.

Research has increasingly shown that caregivers of psychiatric patients are at a high risk of developing psychological morbidities due to persistent emotional strain, lack of social support, disrupted personal and occupational life, and financial hardships. These challenges are often exacerbated in socioeconomically disadvantaged or rural populations where access to mental health resources is limited. Young adults and female caregivers are particularly vulnerable, given their simultaneous responsibilities in personal, professional, and caregiving roles.

Despite the growing recognition of mental health needs among patients, caregiver mental health is often overlooked in routine clinical practice. Understanding the prevalence and pattern of stress, anxiety, and depression among caregivers is essential for developing supportive

interventions and policies aimed at holistic mental health care. This study aims to assess the psychological burden experienced by caregivers of individuals with SMI using validated tools, and to identify demographic factors that may influence caregiver mental health outcomes.

## Materials and Methodology

### Study Design and Setting

This study was conducted as a cross-sectional observational study in the Department of Psychiatry, SVS Medical College and Hospital, Mahbubnagar. The study aimed to assess the levels of stress, anxiety, and depression among caregivers of patients diagnosed with severe mental illness.

### Sample Size

A total of 100 caregivers who accompanied psychiatric patients to the hospital were enrolled in the study over a six-month period.

### Inclusion Criteria

- Caregivers of patients diagnosed with major psychotic disorders, including schizophrenia (F20), bipolar affective disorder (F31), and persistent delusional disorders (F22) as per ICD-10 classification.
- Caregivers of either gender aged between 18 and 60 years.
- Individuals who understood the nature and purpose of the study and provided written informed consent.

### Exclusion Criteria

- Caregivers with a history of major chronic medical or psychiatric illnesses.
- Individuals unable to provide consent or comprehend study procedures.
- Study Tools and Materials
- Patient's case sheets to verify diagnosis.
- Informed consent form for ethical participation.
- Caregiver Intake Proforma for recording demographic data.
- Modified Kuppaswamy Socioeconomic Scale (2023) for socioeconomic classification.
- DASS-21 Scale (Depression, Anxiety, and Stress Scale - 21 items) for psychological assessment.

## Procedure

Following approval from the Institutional Ethics Committee, caregivers attending the Psychiatry Department were screened daily. Those meeting inclusion criteria were recruited after obtaining informed written consent. Demographic and socioeconomic data were collected using the Caregiver Intake Proforma and the Modified Kuppaswamy Scale (2023). Psychological assessment was conducted using the DASS-21 scale, a validated self-report instrument designed to measure the severity of depression, anxiety, and stress symptoms.

## Description of Tools

The Modified Kuppaswamy Socioeconomic Scale (2023) is widely used to assess socioeconomic status in both urban and rural populations. It categorizes individuals based on

education, occupation, and monthly income. Although popular, it has some limitations in terms of evolving relevance and contextual applicability.

The DASS-21 comprises three subscales-Depression, Anxiety, and Stress-each containing seven items. The scale adopts a dimensional approach, assuming that variations in emotional distress across clinical and non-clinical populations are a matter of severity rather than kind. Responses are scored on a 4-point Likert scale, and the final score helps in categorizing the level of psychological distress.

## Duration of the Study

The study was carried out over a six-month period at SVS Medical College and Hospital, allowing adequate time for participant recruitment, data collection, and analysis.

## Results and Discussions

### Age-Wise Distribution of Caregivers

The study included a total of 100 participants. The majority were in the 21–30 years age group, comprising 27% of the sample. This was followed by participants aged 31–40 years (23%) and 41–50 years (22%). About 19% of participants were above 51 years of age, while the ≤20 years age group constituted the smallest proportion, at 6%. The overall mean age of the participants was 38.56 years, with a standard deviation of 12.39 years, indicating a moderate variation in age distribution across the sample (Table1 and Figure 1)

Table 1: Age-wise Distribution of caregivers

Age(years)	Frequency	Percent
≤20	6	6.0
21 - 30	27	27.0
31 - 40	24	23.0
41 - 50	23	22.0
51+	20	19.0
Total	100	100.0
Mean ± SD :38.56 ±12.39		

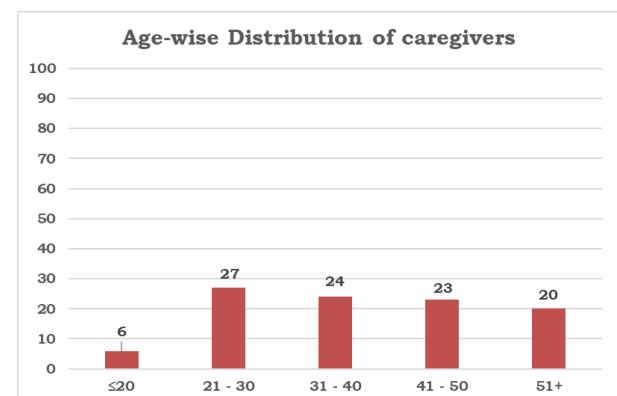


Fig.1: Age-Wise Distribution of Caregivers

### Gender-Wise Distribution of Caregivers

Out of the 100 participants in the study, 52% were female and 48% were male, indicating a nearly balanced gender distribution with a slight predominance of females (Table 2 ).

Table2: Distribution of Gender

Gender	Frequency	Percent
Female	52	52.0
Male	48	4.0
Total	100	100.0

### Distribution of Educational Qualification

The study included 100 caregivers of individuals with severe mental illness. The educational and occupational background of the caregivers varied significantly, highlighting the diverse socioeconomic status and employment sectors from which they come (Table 3).

The largest proportion of caregivers was farmers, making up 19% of the sample. This was followed by individuals involved in business (14%) and workers (12%), indicating that a considerable number of caregivers come from rural or semi-skilled employment backgrounds.

Among those with formal educational qualifications, 8% were B. Tech graduates, 6% held B.A degrees, 4% had MBA degrees, and 2% had completed post-graduation (PG). Additionally, 2% had completed intermediate education, and 1% held a diploma.

Occupationally, 7% were government teachers, and 7% were software engineers, indicating a group with relatively stable jobs. In the healthcare sector, 5% were nurses and 4% were staff nurses, which may suggest a better understanding of mental illness and caregiving roles in those with medical backgrounds.

A smaller proportion, 3%, were retired employees, and 6% listed agriculture as their main background or educational stream, overlapping with farming as an occupation.

This diverse educational and occupational representation reflects that caregiving for persons with severe mental illness is not limited to any single group but spans across all levels of education and employment sectors. This diversity is important in understanding how stress, anxiety, and depression may manifest differently depending on the caregiver's background and resources.

Table 3: Distribution of Educational qualification

Educational Qualification	Frequency	Percent
Agriculture	6	6.0
B. A	6	6.0
B. Tech	8	8.0
Business	14	14.0
Diploma	1	1.0
Farmer	19	19.0
GOVT.Teacher	7	7.0
Inter	2	2.0
MBA	4	4.0
Nurse	5	5.0
PG	2	2.0
Retired Employee	3	3.0

Software Engineer	7	7.0
Staff Nurse	4	4.0
Worker	12	12.0
Total	100	100.0

### Distribution of Relation Ship between Patients

Among the 100 caregivers of individuals with severe mental illness, revealed that husbands (20%) constituted the largest group of caregivers, followed by sons (14%), mothers (12%), and wives (11%). These findings highlight the significant care giving role played by immediate family members, especially spouses and children.

Daughters accounted for 10% of the caregivers, while fathers and sisters each represented 9%. Daughters-in-law comprised 7%, and sons-in-law represented the smallest group at 5%. Brothers were the least represented, making up 3% of the caregiver population.

This distribution reflects the familial care giving burden often shared among close relatives, especially those within the nuclear family, suggesting the emotional, physical, and social impact care giving has on immediate family members. Understanding the relationship between the caregiver and the patient is crucial, as the nature of the relationship may influence the level of stress and emotional strain experienced, potentially affecting the caregiver's mental health and coping capacity (Table 4).

Table 4: Distribution of Relationship between patients

Relationship between patient	Frequency	Percent
Brother	3	3.0
Daughter	10	10.0
Daughter-In-Law	7	7.0
Father	9	9.0
Husband	20	20.0
Mother	12	12.0
Sister	9	9.0
Son	14	14.0
Son-In-Law	5	5.0
Wife	11	11.0
Total	100	100.0

### Prevalence of Stress in Caregivers According to Dass Scale

The prevalence of stress among caregivers was assessed using the DASS (Depression, Anxiety, and Stress Scale), and individual stress scores ranged from 4 to 36. Among the 100 participants, the highest proportion of caregivers (15%) recorded a stress score of 16, followed by 13% each with scores of 14 and 18. A stress score of 12 was reported by 11% of participants, while 10% had a score of 22. Scores of 8 and 10 were each reported by 6% of caregivers, and 5% had a score of 26. Less frequently reported scores included 20 (8%), 24 (4%), 28 (3%), 32 and 36 (each 2%). The lowest scores, 4 and 6, were recorded by only 1% of the participants respectively. These findings indicate that a significant proportion of

caregivers are experiencing moderate to high levels of stress, with stress scores clustering between 12 and 22, suggesting a potential burden related to caregiving responsibilities. The data underscores the need for psychological support and stress management strategies targeted at this population (Table 5).

**Table 5: Stress score**

Stress score	Frequency	Percent
4	1	1.0
6	1	1.0
8	6	6.0
10	6	6.0
12	11	11.0
14	13	13.0
16	15	15.0
18	13	13.0
20	8	8.0
22	10	10.0
24	4	4.0
26	5	5.0
28	3	3.0
32	2	2.0
36	2	2.0
Total	100	100.0

#### Prevalence of Anxiety in Caregivers According to Dass Scale

The assessment of anxiety levels among caregivers, based on the DASS (Depression, Anxiety, and Stress Scale), revealed a wide range of anxiety scores. Out of 100 participants, the most frequently observed scores were 16 (16%) and 20 (15%), indicating a substantial number of caregivers experiencing moderate to high levels of anxiety. Additionally, 14% of the participants had an anxiety score of 14, and 9% scored 18. Other notable frequencies included scores of 22 (8%) and 12 (4%). A small percentage (4%) of participants reported a score of 0, indicating no anxiety symptoms, while 5% had a minimal score of 2. The distribution suggests that anxiety is prevalent among caregivers, with the majority scoring between 14 and 22 on the DASS scale. This trend points to a significant mental health burden within this population, underscoring the importance of psychological evaluation and support for caregivers of individuals with severe mental illness (Table 6).

**Table 6: Anxiety scores**

Anxiety Scores	Frequency	Percent
0	4	4.0
2	5	5.0
4	2	2.0
6	5	5.0

8	4	4.0
10	4	4.0
12	4	4.0
14	14	14.0
16	16	16.0
18	9	9.0
20	15	15.0
22	8	8.0
24	5	5.0
26	4	4.0
28	1	1.0
Total	100	100.0

#### Prevalence of Depression in Caregivers According to Dass Scale

The prevalence of depression among caregivers was assessed using the Depression subscale of the DASS (Depression, Anxiety, and Stress Scale). The scores varied across the sample of 100 participants, indicating differing levels of depressive symptoms. A small percentage (4%) of caregivers scored as low as 2, 4, or 6, suggesting minimal symptoms. The most frequently occurring score was 24, reported by 14% of participants, followed closely by a score of 18, reported by 13% of the sample. Other notable frequencies include scores of 16 and 14, each reported by 12% and 8% of participants, respectively. Higher scores, such as 26 and 28, were observed in smaller proportions (2% and 4%, respectively), indicating more severe depressive symptoms in a limited number of individuals. Overall, the distribution suggests that a significant number of caregivers experience mild to moderate levels of depression, with a portion showing signs of severe depression. These findings emphasize the psychological burden faced by caregivers and underline the necessity for mental health screening and supportive interventions within this population (Table 7)

**Table 7: Depression Scores**

Depression Scores	Frequency	Percent
2	4	4.0
4	4	4.0
6	4	4.0
8	6	6.0
10	8	8.0
12	8	8.0
14	8	8.0
16	12	12.0
18	13	13.0
20	6	6.0
22	7	7.0
24	14	14.0
26	2	2.0
28	4	4.0
Total	100	100.0

## Distribution of Severity in Stress, Anxiety and Depression According to DASS Scale

According to the findings based on the DASS (Depression, Anxiety, and Stress Scale), the distribution of severity levels among the 100 participants showed that the majority were experiencing significant psychological distress. A considerable portion, 38%, exhibited symptoms at the moderate level, while 31% of the participants fell under the severe category. Additionally, 20% of individuals reported mild symptoms. Notably, 9% of the participants experienced extremely severe levels of stress, anxiety, or depression, indicating critical levels of mental health concern. Only 2% of the population were found to be within the normal range. These results suggest that most participants were experiencing moderate to severe symptoms, highlighting the urgent need for mental health interventions and support systems among the study group (Table 8).

Table .8: Severity Scale

Severity	Frequency	Percent
Extremely Severe	9	9.0
Mild	20	20.0
Moderate	38	38.0
Normal	2	2.0
Severe	31	31.0
Total	100	100.0

## Conclusion

This study assessed the prevalence and severity of stress, anxiety, and depression among caregivers of individuals with severe mental illness using the DASS-21 scale. The findings indicate a high psychological burden, with most caregivers experiencing moderate to severe emotional distress. Caregivers across all age groups, genders, and occupational backgrounds were found to be at risk, highlighting that caregiving challenges cut across socio-economic boundaries. Immediate family members, particularly spouses, children, and parents, emerged as the primary caregivers, reflecting the central role of family in the Indian mental health care system. The results emphasize the urgent need for structured mental health support, including regular psychological assessments, counselling, and stress management interventions for caregivers. Recognizing caregivers as a vulnerable group is crucial for both their well-being and the continued care of individuals with mental illness. Community-based support and policy-level integration of caregiver needs into mental health services are essential to mitigate caregiver burnout and enhance coping mechanisms.

## Limitations

- The study was limited to a sample size of 100 caregivers due to the short duration of the study and

limited cooperation from some participants, which may affect the generalizability of the findings.

- Some caregivers were hesitant to disclose personal information required for the DASS-21 questionnaire, leading to delays in data collection and potential underreporting of psychological symptoms.

## Recommendations

This study highlights the psychological burden experienced by caregivers of individuals with severe mental illness and emphasizes the need to incorporate caregiver mental health into psychiatric care frameworks. It is recommended that future studies be conducted on a larger scale and over an extended period to strengthen the validity of findings. Routine psychological assessment of caregivers should be included in treatment protocols to ensure holistic patient care. Additionally, caregiver education, counselling, and community-based mental health support programs are necessary to enhance caregiver resilience, reduce burnout, and improve overall treatment outcomes for psychiatric patients.

## Funding

Nil

## Conflict of Interest

Authors are declared that no conflict of interest.

## Acknowledgement

Not Declared

## Informed Consent and Ethical Statement

The study was conducted after obtaining approval from the Institutional Ethics Committee of SVS Medical College and Hospital, Mahbubnagar.

## Author Contributions

I.V.L. Padmini – Conceptualization, Methodology Design, Supervision, Final Review.  
Mididoddi Vaishnavi, M.F. Deepika, Amena Tabassum, Shazia Begum, Saniya Naaz – Data Collection, Questionnaire Administration, Data Entry.Kasoju Hari Krishna Chary – Data Analysis, Interpretation, Draft Writing. All authors contributed to the drafting and revision of the manuscript and approved the final version for submission.

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