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Edited by Ritik Kashwani

E-mail: docritikkashwani@yahoo.com

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Mental health status and lived experiences among serious mental illness caregivers in India

Srikalyani Murugan¹, Shankar Shanmugam Rajendran^{2,*}, Anbalagan Maruthan³, Srividhya Balasubramanian⁴, Baskaran Vasantha Dhanapal⁴, Lakshmi Panchamoorthy⁴ & Sylvia Samuel Jebaraj⁴

¹Department of Psychiatric Nursing, College of Nursing, Madras Medical College, The TN Dr MGR Medical University, Chennai, Tamil Nadu, India; ²Department of Nursing Research, College of Nursing, Madras Medical College, The TN Dr MGR Medical University, Chennai, Tamil Nadu, India; ³Department of Child Health Nursing, College of Nursing, Madras Medical College, The TN Dr MGR Medical University, Chennai, Tamil Nadu, India; ⁴Corresponding author

Affiliation URL:

<https://www.tnmgrmu.ac.in/>

Author contact:

Srikalyani Murugan - E-mail: sri.kalyani2727@gmail.com
Shankar Shanmugam Rajendran - E-mail: shankarshaki@yahoo.com
Anbalagan Maruthan - E-mail: anbalagan.avi@gmail.com
Srividhya Balasubramanian - E-mail: srusur@yahoo.com
Baskaran Vasantha Dhanapal - E-mail: basghee@gmail.com
Lakshmi Panchamoorthy - E-mail: aadhivarshini@gmail.com
Sylvia Samuvel Jebaraj - E-mail: sylviadaniel1987@gmail.com

Abstract:

Caregivers of individuals with severe mental illness experience substantial psychological challenges, yet their mental health and lived experiences remain insufficiently understood. Therefore, it is of interest to assess the mental health of 100 caregivers using the Warwick-Edinburgh Mental Well-being Scale and explored the lived experiences of six caregivers through phenomenological interviews. Overall, 67% of caregivers had moderate mental health, 24% had high mental health and 9% had low mental health, with significant associations observed for age, gender, caregiving duration and illness duration. Qualitative analysis identified four themes: daily caregiving realities, emotional strain, reduced social and family support and altered personal and family dynamics. Thus, data shows that mental health outcomes with caregivers' lived experiences provide comprehensive evidence to support family-centered mental health services for severe mental illness.

Keywords: Caregivers, serious mental illness, mental health status, lived experiences, mixed methods

Background:

Mental health disorders constitute a global public health crisis. According to the World Health Organization, approximately 970 million people worldwide, roughly one in eight, were living with a mental disorder in 2019, with anxiety and depressive disorders being the most prevalent [1]. The burden extends far beyond the individual: schizophrenia, bipolar disorder and major depressive disorder collectively account for a disproportionate share of years lived with disability [2]. Longitudinal data confirm that incidence rates are rising, particularly among younger people [3]. Placing mounting demands on informal caregiving networks. Family caregivers, especially spouses, parents and siblings, are the backbone of support for individuals with severe mental illness. They manage medication schedules, coordinate healthcare appointments, mediate behavioural crises and absorb social stigma, frequently without formal training, financial remuneration, or institutional recognition [4]. The caregiving role is inherently demanding: studies consistently report that between 53% and 72% of informal caregivers of people with mental illness carry a high burden and over 40% screen positive for anxiety or depression [5, 6]. A tertiary-care study found that 69.4% of caregivers had a measurable burden and 32.2% exhibited depressive symptoms [7]. A cross-sectional survey of caregivers found that 72.1% reported high burden and 53.5% had moderate-to-severe depression [8]. Demographic factors significantly modulate psychological outcomes. Female caregivers, who constitute over 70% of the caregiver population across studies [9]. Tend to internalise emotional strain more acutely. Age and caregiving duration interact in complex ways: younger caregivers may lack coping resources, while those caregiving for prolonged periods experience progressive emotional erosion [10]. A cross-sectional study found that younger caregivers and women had significantly lower mental component summary scores ($p < 0.01$), corroborating these patterns [11]. Beyond quantitative metrics,

qualitative literature reveals the human texture of caregiving. Caregivers of individuals with psychosis showed WEMWBS scores 7.3 points below population norms, with the greatest distress among partners, single caregivers and those providing over 35 hours of weekly care [12]. In community-based studies from China, caregivers described pervasive psychosocial distress, loss of social life and anxiety about the patient's future [13]. Despite this evidence base, caregiver mental health remains a secondary concern in clinical and policy frameworks. Approximately 8% of mental health studies include caregiver psychological outcomes as a primary measure [4]. Therefore, it is of interest to assess the mental health status and describe the lived experiences of caregivers of individuals with severe mental illness using a mixed-methods approach.

Methodology:**Quantitative Phase:**

A descriptive cross-sectional design was employed for the quantitative component. Using a sample size formula based on a prior meta-analysis reporting a burden prevalence of 32.17% ($e = 0.38$, $Z = 1.96$), the calculated minimum sample was 97, rounded to 100 caregivers. Participants were selected via non-probability convenience sampling from the acute wards and outpatient department of the Institute of Mental Health (IMH), Kilpauk and Chennai. Caregivers aged ≥ 18 years, providing care for at least six months, able to understand Tamil or English and willing to participate were included in this study. Professional or paid caregivers, those with severe cognitive impairments and individuals enrolled in other studies were excluded. Data were collected using a structured socio-demographic questionnaire, a clinical variable checklist and the Warwick-Edinburgh Mental Well-being Scale (WEMWBS). Descriptive statistics (mean, SD and percentages) and chi-square tests were applied using SPSS version 26.

Qualitative phase:

Six caregivers were purposively selected for in-depth phenomenological interviews following the quantitative survey. Semi-structured interviews covered six domains: daily caregiving routines, emotional impact, social challenges, support systems, relational changes and health effects. Audio recordings were transcribed verbatim, translated into English and subjected to thematic analysis following Braun and Clarke's six-phase framework. Credibility was ensured through member checking and data saturation was confirmed when no new themes emerged. The study received ethical approval from the Institutional Ethics Committee of Madras Medical College (No. IEC-Approval/63042025) and the IMH Director. All participants provided written informed consent.

Results:

The mean age of the caregivers was 49.08 ± 10.32 years. Most caregivers were female, accounting for 59% and married, accounting for 92%. Parents formed the largest caregiving group at 64%. Primary education was the most common educational level at 44%. In occupation, 39% were employed in the private sector. More than half of the caregivers lived in rented houses, at 53% and the majority practised Hinduism, at 74%. Caregiving duration was most commonly between 6 months and 3 years, reported by 53%. Most caregivers belonged to economically vulnerable households, with 72% reporting a monthly income of less than ₹10,000 (**Table 1**). Regarding the clinical profile of patients, schizophrenia was the most common diagnosis at 65%. Most patients had not been hospitalised in the past year, accounting for 63%. The duration of illness was most frequently 1-5 years, reported in 45% of patients. In terms of treatment, the majority of patients were receiving medication only (83%). Sixty seven percent of caregivers had a moderate mental health status, 24% had a high mental health status and 9% had a low mental health status. The overall mean mental health status score was 45.56 ± 8.54 out of a maximum of 70, corresponding to 65.09%, which indicates a moderate level of mental health among caregivers. These findings suggest that although many caregivers were coping reasonably well, a substantial proportion continued to experience psychological strain. Analysis of associations between mental health status and selected variables revealed that age, gender and caregiving duration were significantly associated with caregiver mental health. Other demographic and clinical variables were not significantly associated. The qualitative phase explored the lived experiences of six caregivers and identified four major themes, each with related subthemes. The first theme, the daily realities of caregiving, reflected the exhausting, repetitive routines of providing care, including personal hygiene, food preparation, and supervision and medication administration. Subthemes included physical tasks and responsibility overload and medication management challenges, both of which highlighted the practical burden of care. The second one is emotional and mental strain, captured feelings of hopelessness, sadness, exhaustion and social embarrassment. The subthemes included emotional exhaustion, hopelessness, social embarrassment and

isolation. The third theme, breakdown of social and family support, revealed the absence of meaningful help from relatives, neighbours, or institutions, with subthemes of lack of family involvement and absence of community or institutional support. The fourth theme, altered personal and family dynamics, described the disruption of marital and family relationships. Subthemes included changed spousal relationships and loss of reciprocity and communication, reflecting how illness transformed family roles and emotional bonds. The integrated findings present a coherent picture of caregiver burden. Quantitatively, most caregivers had a moderate mental health status, with significant influence from age, gender, caregiving duration and illness duration. Qualitatively, these patterns were deepened by narratives of emotional exhaustion, isolation and disrupted family life. While the quantitative findings show that caregivers maintain some degree of resilience, the qualitative data reveal the hidden emotional costs behind this moderate functioning. Together, both phases show that caregiving in serious mental illness is not only a practical responsibility but also a deeply emotional and socially isolating experience.

Table 1: Demographic variables of the study participants

Demographic variables		Number of caregivers(n=100)	n %
Age of Caregiver	18-24 years	0	0.00%
	25-44 years	31	31.00%
	45-64 years	64	64.00%
	65 years and above	5	5.00%
Gender	Male	41	41.00%
	Female	59	59.00%
Marital Status	Single	5	5.00%
	Married	92	92.00%
	Divorced	2	2.00%
	Widowed	1	1.00%
	Separated	0	0.00%
Relationship to patients	Parent	64	64.00%
	Spouse	25	25.00%
	Sibling	11	11.00%
	Child	0	0.00%
	Other	0	0.00%
	(Specify).....		
Educational Level	No formal education	12	12.00%
	Primary education	44	44.00%
	Secondary education	25	25.00%
	Graduate and above	19	19.00%
Employment Status of caregiver	Govt. Employment	2	2.00%
	Private employment	39	39.00%
	Business	14	14.00%
	Unemployed	10	10.00%
	Homemaker	33	33.00%
Type of Housing	Retired	2	2.00%
	Owned	43	43.00%
	Rented	53	53.00%
	Living with family	4	4.00%
	Other (Specify).....	0	0.00%
Religion	Christianity	20	20.00%
	Islam	6	6.00%
	Hinduism	74	74.00%
Caregiving Duration	Less than 6 months	40	40.00%
	6 months to 3 years	53	53.00%
	3 to 5 years	7	7.00%
	More than 5 years	0	0.00%
Monthly Income (in Rupees)	Less than ₹10,000	72	72.00%
	₹10,000 to ₹20,000	16	16.00%
	₹20,001 to ₹30,000	9	9.00%
	₹30,001 to ₹50,000	3	3.00%

₹50,001 and above	0	0.00%
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Discussion:

The finding that 67% of caregivers showed moderate mental well-being aligns with previous literature indicating that caregivers of individuals with Severe Mental Illness. A multi-centre survey by Cheng *et al.* found that caregivers with lower self-esteem and higher care burden clustered in a profile consistent with moderate well-being, while a resilient minority, approximately 24%, maintained higher functioning proportions strikingly similar to the present findings [14]. Similarly, a systematic review by Lima-Rodríguez *et al.* confirmed that psychological distress, moderated by social support and self-esteem, produced this bimodal distribution in caregiver quality-of-life outcomes across diverse cultural settings [15]. The present study found that caregivers' mental health was significantly associated with age, gender, caregiving duration and illness duration. Caregivers aged 25–44 years and those above 65 years had poorer mental health scores. Female caregivers reported better mental health than males and those providing care for 6 months to 3 years showed better outcomes, possibly reflecting an adjustment period. Caregivers of patients with illness duration below one year also had better well-being than those caring for patients with long-term illness. These findings are supported by Bagheriamiri *et al.* (2024), who found better emotion regulation among female caregivers and a higher burden with longer caregiving duration [16]. Musich *et al.* (2023) likewise showed that psychological protective factors such as resilience and social support play an important role in improving caregiver mental health and quality of life [17]. The qualitative themes considerably enrich this quantitative picture. The breakdown of family support structures, in which caregiving devolved to a single person while other relatives remained disengaged or added financial pressure, aligns with a study by Obegu *et al.*, which identified the absence of coordinated care systems as an amplifier of caregiver role strain [4]. Perhaps the most profound and underreported theme concerns altered family dynamics: caregivers described marriages hollowed of intimacy, replaced by caregiving arrangements devoid of partnership.

Conclusion:

Most caregivers attending a tertiary psychiatric centre in South India had moderate mental well-being, significantly influenced by age, gender, care giving duration and illness chronicity. Qualitative findings highlighted emotional exhaustion, social isolation, caregiving burden and disruptions in family relationships. Mental health services should incorporate caregiver-focused psychological support alongside patient-centred psychiatric care.

References:

[1] <https://www.who.int/news-room/fact-sheets/detail/mental-disorders>

[2] Kessing LV *et al.* *JAMA Psychiatry*. 2023 **80**:1000. [PMID: 37436730]

[3] Momen NC *et al.* *JAMA Psychiatry*. 2025 **82**:161. [PMID: 39602130]

[4] Obegu P *et al.* *Front Health Serv*. 2025 **4**:1473235. [PMID: 39839253]

[5] Yao H *et al.* *BMC Psychiatry*. 2024 **24**:824. [PMID: 39563250]

[6] Kaewchum T *et al.* *BMC Psychol*. 2025 **13**:34. [PMID: 39806518]

[7] Nasreen HE *et al.* *BMC Geriatr*. 2024 **24**:656. [PMID: 39103767]

[8] Cham CQ *et al.* *Healthcare (Basel)*. 2022 **10**:2423. [PMID: 36553947]

[9] Atuiri C *et al.* *Cureus*. 2024 **16**:e64154. [PMID: 39119411]

[10] Yu Q *et al.* *BMC Public Health*. 2025 **25**:1021. [PMID: 40097955]

[11] Oikonomou V *et al.* *Healthcare (Basel)*. 2024 **12**:269. [PMID: 38275549]

[12] Sin J *et al.* *Clin Psychol Rev*. 2017 **56**:13. [PMID: 28578249]

[13] Pan Z *et al.* *BMJ Open*. 2024 **14**:e081364. [PMID: 38589261]

[14] Cheng WL *et al.* *BMC Psychiatry*. 2022 **22**:672. [PMID: 36316688]

[15] Lima-Rodríguez JS *et al.* *Community Ment Health J*. 2022 **58**:1361. [PMID: 35142958]

[16] Bagheriamiri Z *et al.* *BMC Psychol*. 2024 **12**:610. [PMID: 39482790]

[17] Musich S *et al.* *Geriatr Nurs*. 2023 **50**:174. [PMID: 36791542]

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