

Coping Strategy It's Impact on Stress and Quality of Life among Primary Care Providers of Individuals with Mental Illness Visiting Tertiary Care Centre

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Abstract

Background: Caregivers of individuals with mental illness often experience significant stress, which may affect their quality of life. Coping strategies may influence the level of burden experienced by caregivers.

Aim: To evaluate the impact of coping strategies on stress and quality of life among primary caregivers of individuals with mental illness attending a tertiary care centre.

Methods: A cross-sectional study was conducted among 200 caregivers. Data were collected using the Family Crisis-Oriented Personal Evaluation Scales (F-COPES), Zarit Burden Interview (ZBI), and WHOQOL-BREF. Statistical analysis was performed using SPSS, and Pearson correlation was used to assess associations.

Results: Caregiver burden showed a significant negative correlation with coping ($r = -0.25$, $p = 0.001$) and quality of life ($r = -0.807$, $p = 0.0001$). Coping strategies demonstrated a positive association with quality of life ($r = 0.20$, $p = 0.001$).

Conclusion: Adaptive coping strategies are associated with lower caregiver burden and improved quality of life. Strengthening coping mechanisms may help enhance caregiver wellbeing.

Keywords: Coping Strategy, Quality of Life, Primary Care Providers, Mental Illness.

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Introduction

Caring for individuals with mental illness can be highly demanding, particularly for family members who assume the role of primary caregivers without formal training or institutional support. These caregivers play a crucial role in ensuring treatment adherence and providing emotional and practical assistance, especially in tertiary mental health care settings. However, prolonged caregiving responsibilities often result in psychological, emotional, and physical strain, negatively affecting caregivers' wellbeing and quality of life.

Coping strategies refer to the cognitive and behavioural efforts used to manage stressful situations. Adaptive coping strategies such as problem-solving, emotional regulation, and seeking social support are associated with reduced psychological distress and improved health

outcomes, whereas maladaptive strategies such as denial, avoidance, and substance use may increase caregiver burden [1,2]. Chronic psychiatric conditions including schizophrenia, bipolar affective disorder, and major depressive disorder often require long-term care and supervision, making caregiver stress persistent and sometimes overwhelming [3].

High levels of caregiver stress have been linked with adverse psychological outcomes such as anxiety, depression, and burnout [4]. Quality of life, a multidimensional construct encompassing physical health, psychological wellbeing, social relationships, and environmental factors, has also been shown to decline significantly among caregivers experiencing chronic stress [5,6]. Understanding how caregivers cope with these

demands is therefore important for addressing their psychosocial needs and improving wellbeing.

In India, caregiver burden is shaped by cultural, social, and economic factors. Caregivers frequently report emotional exhaustion, social isolation, financial strain, and limited institutional support while caring for relatives with severe mental illness [7]. Studies from India indicate that caregivers with stronger coping abilities and better social support networks experience lower distress and improved quality of life [8,9]. However, caregivers in rural and resource-limited settings often rely on emotion-focused or religious coping strategies that may provide limited relief from long-term caregiving demands [10]. Additional factors such as stigma, poor mental health literacy, and financial constraints further contribute to caregiver stress [11]. Gender roles also influence caregiving experiences, as women—who commonly serve as primary caregivers—may experience greater psychological strain due to societal expectations [12].

Although caregiver burden among relatives of individuals with mental illness has been widely documented, studies examining the relationship between coping strategies, caregiver stress, and quality of life in tertiary psychiatric care settings in India remain limited. Understanding this relationship may help guide targeted interventions aimed at strengthening coping mechanisms, reducing caregiver burden, and improving quality of life.

Aim: To evaluate the impact of coping strategies on stress and quality of life (QoL) among primary caregivers of patients with mental illness attending a tertiary care hospital (IMH).

Objectives

1. To assess coping strategies among primary caregivers of individuals with mental illness attending a tertiary care centre.
2. To evaluate caregiver stress and quality of life.
3. To examine the association between coping strategies, stress, and quality of life.

Hypothesis: There is a significant relationship between coping strategies, stress levels, and quality of life among primary caregivers, with adaptive coping associated with lower stress and better quality of life.

Materials and Methods

A cross-sectional study was conducted among primary caregivers of individuals with mental

illness attending a tertiary care centre. Based on Walke et al. (2018), which reported a prevalence of severe caregiver burden of 40.9%, the sample size was calculated using the formula $n = Z^2 pq/d^2$ with $p = 0.409$, $q = 0.591$, $Z = 1.96$, and $d = 0.07$, yielding a minimum sample of ≈ 190 , which was rounded to 200 participants to account for non-response (13).

Sampling Criteria: Primary caregivers aged ≥ 20 years, residing with the patient and providing unpaid care during inpatient or outpatient psychiatric treatment were included. Caregivers of individuals with neurodevelopmental disorders, those caring for patients with severe medical comorbidities, and those unwilling to provide informed consent were excluded.

Tools Used

1. Socio-Demographic Proforma: Information on caregiver characteristics (age, sex, education, occupation, relationship to patient, co-caregivers, socio-economic status, medical illness, and self-stigma) and patient characteristics (age, sex, diagnosis, duration of illness, admissions, need for supervision, and aggression history) was collected.

2. Family Crisis-Oriented Personal Evaluation Scales (F-COPES): A 30-item scale assessing family coping strategies across five domains: acquiring social support, reframing, seeking spiritual support, mobilizing family help, and passive appraisal (14).

3. Zarit Burden Interview (ZBI): A 22-item scale measuring caregiver burden across emotional, social, and financial domains using a 5-point Likert scale (0–4), with higher scores indicating greater burden (15).

4. WHO Quality of Life-BREF (WHOQOL-BREF): A 26-item instrument assessing quality of life across physical, psychological, social, and environmental domains (16).

Statistical Analysis: Data were analysed using SPSS version 26.0. Descriptive statistics were used to summarize socio-demographic and clinical variables, expressed as frequencies and percentages for categorical variables and means \pm standard deviations for continuous variables. Pearson correlation analysis was used to assess relationships between variables, with $p < 0.05$ considered statistically significant.

Results

Table 1: Socio-Demographic Profile of Caregivers

Variable	Category	Frequency (n)	Percentage (%)
Age Group	< 30 years	17	8.5%
	31–40 years	50	25.0%
	41–50 years	38	19.0%
	51–60 years	40	20.0%
	61–70 years	30	15.0%
	> 70 years	25	12.5%
Sex	Male	130	65.0%
	Female	70	35.0%
Relationship to Patient	Parent	78	39.0%
	Husband	63	31.5%
	Wife	40	20.0%
	Sibling	15	7.5%
	Cousin	4	2.0%
Education	Illiterate	165	82.5%
	Primary Education	5	2.5%
	10th Class	13	6.5%
	Intermediate	9	4.5%
	Degree	8	4.0%
Family Type	Nuclear	193	96.5%
	Joint Family	7	3.5%
Co-Caregivers	Absent	173	86.5%
	Present (1)	22	11.0%
	Present (2)	5	2.5%
Another Family Member Needing Care	No	195	97.5%
	Yes	5	2.5%
Socio-Economic Status	Lower SES	113	56.5%
	Middle SES	81	40.5%
	Upper Class	5	2.5%
	Upper-Lower SES	1	0.5%
Medical Illness in Caregiver	None	168	84.0%
	HTN	11	5.5%
	DM	11	5.5%
	HTN + DM	7	3.5%
	PCOS	2	1.0%
	Hypothyroid	1	0.5%
Occupation	Daily Labor	103	51.5%
	Unemployed	59	29.5%
	Farmer	29	14.5%
	Family Business	9	4.5%

Table 2: Socio-Demographic Profile of Patients

Variable	Category	Frequency (n)	Percentage (%)
Age Group	< 30 years	6	3.0%
	31–40 years	98	49.0%
	41–50 years	77	38.5%
	> 51 years	19	9.5%
Sex	Male	108	54.0%
	Female	92	46.0%
Education	Illiterate	165	82.5%
	Primary Education	5	2.5%
	10th Class	13	6.5%
	Intermediate	9	4.5%
	Degree	8	4.0%
Type of Illness	Schizophrenia	65	32.5%
	BPAD	59	29.5%
	ADS	59	29.5%

	MDD	9	4.5%
	RDD	5	2.5%
	Conversion Disorder	2	1.0%
	ATPD	1	0.5%
Duration of Illness	< 1 year	7	3.5%
	1–3 years	22	11.0%
	3–6 years	74	37.0%
	6–10 years	97	48.5%
No. of Admissions	< 5 times	113	56.5%
	5–10 times	76	38.0%
	> 10 times	11	5.5%
Supervision Required	Yes	93	46.5%
	No	107	53.5%

Table 3: Frequency of Burden

Burden Level	Frequency	Percentage (%)
No–Mild Burden	58	29.0
Mild–Moderate Burden	42	21.0
Moderate–Severe Burden	37	18.5
Severe Burden	63	31.5

Among the 200 caregivers, most were male (65%), with the largest proportion aged 31–40 years (25%). Most caregivers were parents (39%), belonged to nuclear families (96.5%), and had low educational status (82.5% illiterate). A majority were from lower socioeconomic status (56.5%), and daily wage labour was the most common occupation (51.5%) (Table 1). Most patients were in the 31–50 year age group, with schizophrenia

(32.5%), bipolar affective disorder (29.5%), and alcohol dependence syndrome (29.5%) being the most common diagnoses. Many had long illness duration (6–10 years) and repeated admissions, and nearly half required supervision for self-care (Table 2). Caregiver burden assessment showed that 31.5% experienced severe burden and 18.5% moderate–severe burden, indicating substantial caregiving stress (Table 3).

Table 4: Frequency of Coping Levels Based on Fcopes

Coping Skill Level	Frequency	Percentage (%)
Best Coping Skills	39	19.5
Better Coping Skills	60	30.0
Good Coping Skills	48	24.0
Poor Coping Skills	53	26.5

Coping assessment using F-COPES showed that only 19.5% had the best coping, whereas 26.5% had poor coping skills, suggesting limited coping ability among a considerable proportion of caregivers (Table 4).

Table 5: Frequency of WHO BREF Scale (Quality of Life)

Quality of Life (QOL)	Frequency	Percentage (%)
Best QOL	49	24.5
Better QOL	50	25.0
Good QOL	49	24.5
Poor QOL	52	26.0

According to the WHOQOL-BREF scale, 26% of caregivers reported poor quality of life, while 24.5% had good quality, 25% had better quality, and another 24.5% reported the best quality of life, indicating a nearly even distribution across all levels. (TABLE 5)

Table 6: Consolidated Zarit Burden Interview Inference

Variable	Subgroup	Mild–Moderate	Moderate–Severe	No–Mild	Severe	Total	P value
Socio-Economic Status	Lower SES	26	20	28	39	113	0.67
	Middle SES	15	15	28	23	81	
	Upper Class SES	1	2	1	1	5	
	Upper Lower SES	0	0	1	0	1	
Patient Illness	ADS	17	9	15	18	59	0.5

	ATPD	0	0	1	0	1	
	BPAD	11	11	15	22	59	
	Conversion Disorder	0	0	2	0	2	
	MDD	3	1	2	3	9	
	RDD	1	2	2	0	5	
	Schizophrenia	10	14	21	20	65	
Co-Caregivers	1	4	7	3	8	22	0.223
	2	0	0	3	2	5	
	Absent	38	30	52	53	173	
Relationship to Patient	Cousins	0	0	3	1	4	0.401
	Husband	14	12	19	18	63	
	Parent	15	13	23	27	78	
	Sibling	2	5	1	7	15	
	Wife	11	7	12	10	40	

Table 7: Consolidated F-COPES Inference

Variable	Category	Best	Better	Good	Poor	Total	P-Value
SES	Lower SES	22	32	26	33	113	0.351
	Middle SES	16	26	19	20	81	
	Upper Class SES	0	2	3	0	5	
	Upper Lower SES	1	0	0	0	1	
PT Illness	ADS	11	20	11	17	59	0.161
	ATPD	1	0	0	0	1	
	BPAD	9	18	12	20	59	
	Conversion Disorder	0	2	0	0	2	
	MDD	2	3	1	3	9	
	RDD	1	0	1	3	5	
	Schizophrenia	15	17	23	10	65	
Co-Caregivers	1	4	6	7	5	22	0.746
	2	0	3	1	1	5	
	Absent	35	51	40	47	173	
Relationship to Pt	Cousins	0	3	1	0	4	0.635
	Husband	10	17	18	18	63	
	Parent	19	20	19	20	78	
	Sibling	2	5	4	4	15	
	Wife	8	15	6	11	40	

Analysis of caregiver burden and coping with demographic variables showed no statistically significant association with socioeconomic status, type of illness, co-caregivers, or caregiver relationship (Tables 6 and 7) Pearson correlation analysis demonstrated a significant negative correlation between caregiver burden and coping ($r = -0.25$, $p = 0.001$), indicating that higher burden was associated with poorer coping ability (Figure 1). A strong negative correlation was observed between caregiver burden and quality of life ($r =$

-0.807 , $p = 0.0001$), suggesting that increased burden significantly reduces caregivers' quality of life (Figure 2). Further analysis showed a significant positive correlation between overall coping (F-COPES total score) and WHOQOL-BREF total score ($r = 0.20$, $p = 0.001$).

Among coping domains, acquiring social support ($r = 0.20$, $p = 0.003$) and reframing ($r = 0.279$, $p = 0.001$) were significantly associated with better quality of life (Table 7).

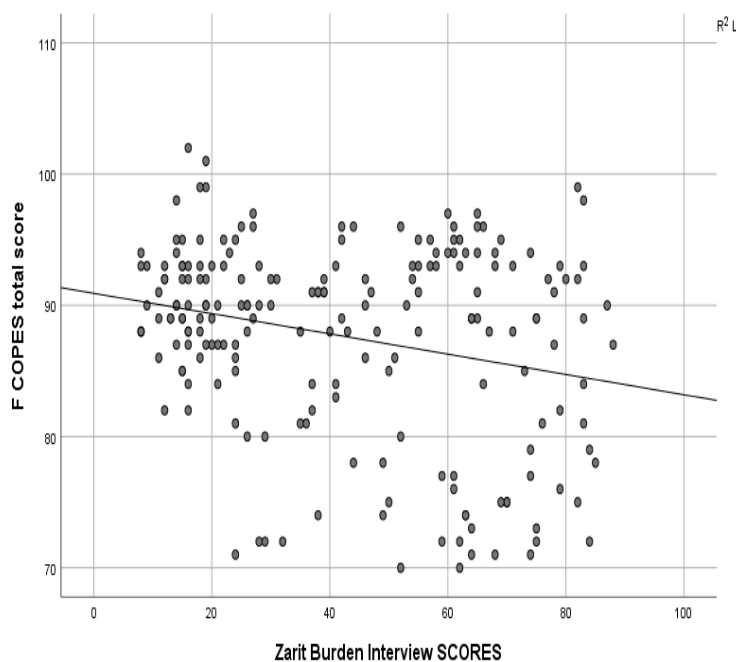


Figure 1: Pearson correlation analysis between Zarit Burden Interview scores and F-COPES

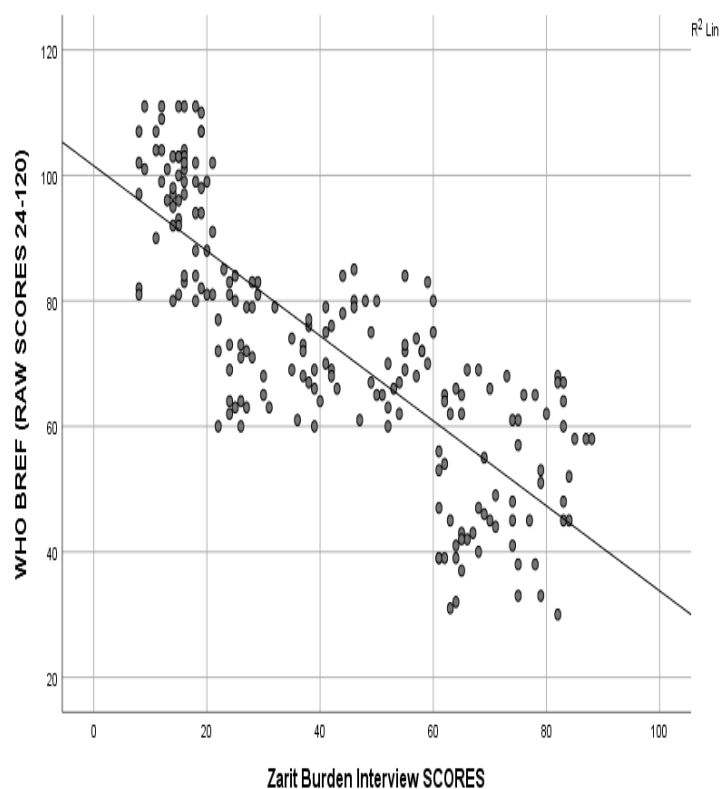


Figure 2: Pearson correlation analysis between Zarit Burden Interview scores and WHO BREF

Table 7: Correlation between F-COPES and WHOQOL-BREF Domains

Variable	WHOQOL-BREF Total Score	Physical Health	Psychological	Social Relationships	Environment
F-COPES Total Score	r = 0.20, p = 0.001	r = 0.116, p = 0.103	r = 0.106, p = 0.135	r = -0.059, p = 0.403	r = 0.807, p = 0.221
Acquiring Social Support	r = 0.20, p = 0.003	r = 0.100, p = 0.157	r = 0.143, p = 0.040	r = -0.040, p = 0.530	r = 0.040, p = 0.560
Reframing	r = 0.279, p = 0.001	r = 0.040, p = 0.530	r = 0.100, p = 0.140	r = -0.180, p = 0.008	r = 0.120, p = 0.090
Seeking Spiritual Support	r = 0.070, p = 0.290	r = 0.040, p = 0.560	r = -0.070, p = 0.300	r = -0.020, p = 0.780	r = -0.020, p = 0.750
Mobilizing Family to Acquire and Accept Help	r = 0.090, p = 0.190	r = 0.080, p = 0.210	r = -0.003, p = 0.960	r = 0.110, p = 0.110	r = 0.080, p = 0.210
Passive Appraisal	r = 0.120, p = 0.860	r = 0.120, p = 0.060	r = 0.120, p = 0.070	r = 0.090, p = 0.200	r = 0.020, p = 0.760

Discussion

This study examined the relationship between coping strategies, caregiver burden, and quality of life among caregivers of individuals with mental illness attending a tertiary care centre. The findings highlight the significant psychological burden experienced by caregivers and the role of coping strategies in influencing their wellbeing.

Most caregivers were male and belonged to the working-age group, consistent with Indian studies where caregiving responsibilities often fall on economically active family members rather than women, as seen in Western settings [17,18]. The high proportion of illiterate caregivers (82.5%) may limit mental health literacy and access to appropriate care resources [19]. The predominance of nuclear families further concentrates caregiving responsibilities and may increase perceived burden.

Patients were predominantly diagnosed with schizophrenia, bipolar affective disorder, and alcohol dependence syndrome, conditions commonly associated with long illness duration and repeated hospitalizations. Chronic psychiatric illness requiring supervision has been strongly associated with increased caregiver stress [20].

Nearly one-third of caregivers experienced severe burden and an additional 18.5% reported moderate-severe burden, reflecting substantial caregiving stress. However, caregiver burden was not significantly associated with socio-demographic variables or type of illness, suggesting that burden may be more strongly influenced by illness chronicity and functional impairment rather than caregiver characteristics [21,22].

Coping ability among caregivers was generally limited, with only 19.5% demonstrating strong coping skills. A significant negative correlation between caregiver burden and coping ($r = -0.25$, $p = 0.001$) indicates that higher perceived burden is

associated with poorer coping ability. Similar findings have been reported in previous studies where ineffective coping increased psychological distress among caregivers [23,24]. A strong inverse relationship was observed between caregiver burden and quality of life ($r = -0.807$, $p = 0.0001$), highlighting the profound impact of caregiving stress on wellbeing. In contrast, coping strategies demonstrated a positive association with quality of life ($r = 0.20$, $p = 0.001$). Among coping domains, acquiring social support and reframing showed significant associations with improved quality of life, supporting stress-coping models that emphasize the protective role of problem-focused coping strategies [1].

Emotion-focused strategies such as passive appraisal or spiritual reliance were not significantly associated with improved quality of life, suggesting that active coping approaches may be more effective in managing caregiving stress [25].

Although not statistically significant, caregivers with lower socioeconomic status or without co-caregivers appeared to experience higher burden, consistent with studies showing that financial strain and social isolation negatively affect caregiver outcomes [26,27].

Overall, the findings emphasize the importance of strengthening coping mechanisms among caregivers through psychoeducation, support networks, and structured caregiver training programs. Integrating caregiver support into routine psychiatric services may reduce burden and improve caregiver wellbeing.

Conclusion

The present study demonstrates a significant relationship between coping strategies, caregiver burden, and quality of life among caregivers of individuals with mental illness. Higher caregiver burden was associated with poorer coping ability and significantly reduced quality of life.

Conversely, adaptive coping strategies—particularly social support seeking and cognitive reframing—were associated with improved caregiver wellbeing. Strengthening coping skills through psychosocial interventions and caregiver support programs may help reduce caregiver burden and improve quality of life.

Strengths and Limitations

This study provides a comprehensive assessment of caregiver burden, coping strategies, and quality of life among caregivers of individuals with mental illness in a tertiary care setting, using validated instruments such as the Zarit Burden Interview, WHOQOL-BREF, and F-COPES. However, several limitations should be considered. The cross-sectional design limits causal inference between coping strategies, burden, and quality of life. Data were based on self-reported measures, which may introduce response bias. The study was conducted at a single tertiary care centre with a predominantly rural and socioeconomically disadvantaged population, which may limit the generalizability of the findings. Additionally, the relatively lower representation of female caregivers may have led to underestimation of gender-related caregiving burden.

Ethical Considerations: Ethical approval was obtained from the Institutional Ethics Committee prior to data collection. Written informed consent was obtained from all participants, and confidentiality and anonymity were maintained. Participation was voluntary, and participants were informed of their right to withdraw from the study at any time.

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