

Managing The Burden: A Study On Coping Strategies Of Family Caregivers Of Cancer Patients In Kuttanad Area Of Alappuzha District

Nayanan.C. C¹ And Dr. N Sukumaran²

¹. *Research Scholar (Part-Time), Department of Sociology, Annamalai Univeristy, Annamalai Nagar, Chidambaram, Tamil Nadu, India.*

². *Assistant Professor - Department of Sociology, Government Arts and Science College, Sankarankovil-627756, Tenkasi District, Tamilnadu.*

Keywords:	Abstract:
Coping Strategies, Cancer Patients, Cancer Caregivers, Family Support, Kuttanad.	The study investigates the coping strategies adopted by family caregivers of cancer patients in Kuttanad Taluk, Alappuzha District, Kerala. Using a descriptive design, the study assessed problem-focused, emotion-focused, and avoidance coping among 204 caregivers selected through simple random sampling. Data were collected using a structured interview schedule, with statistical tools including K-means clustering, t-tests, and ANOVA applied for analysis. Findings revealed a moderate adoption of coping strategies, with problem-focused coping being most prevalent. Significant variations were observed across socio-demographic factors such as marital status, education, income, and occupation. However, age, gender, religion, and caste did not significantly influence coping behaviors. The study underscores the need for targeted interventions and support systems to enhance caregivers' coping capabilities. Recommendations are provided for government, NGOs, and community stakeholders to improve the caregiving experience and psychological resilience of caregivers. The research contributes to informed policy-making and holistic cancer care.

INTRODUCTION

Cancer continues to be one of the leading causes of mortality and morbidity across the globe. Characterized by the uncontrolled proliferation of abnormal cells, cancer impacts not only patients but also the broader social fabric that surrounds them. According to the World Health Organization (WHO, 2020), cancer accounted for approximately 10 million deaths worldwide in 2020, making it the second leading cause of death globally. The increasing prevalence of cancer is driven by multiple factors such as longer life expectancy, lifestyle changes, exposure to carcinogens, and lack of effective early detection strategies. As the global burden of cancer grows, there is a parallel rise in the need for long-term caregiving, often provided informally by family members. These caregivers become integral to patient care, supporting medical, emotional, and daily needs, while themselves experiencing profound psychological, social, and financial impacts.

In the Indian context, cancer is emerging as a significant public health challenge. Data from the Indian Council of Medical Research (ICMR-NCIDIR, 2021) report that over 14 lakh new cancer cases are diagnosed annually in India, and the number is projected to increase to over 15.7 lakhs by 2025. The most common cancers include breast, oral, cervical, lung, and colorectal cancers, with regional variations influenced by socioeconomic and environmental conditions. Although India has made advancements in cancer detection and treatment, gaps persist in the availability of affordable and accessible healthcare, particularly in rural and semi-urban areas. This disproportionate access to

health services puts additional pressure on families, often compelling them to take on caregiving responsibilities in the absence of formal healthcare providers.

Kerala, known for its comparatively advanced healthcare indicators among Indian states, faces a paradoxical situation. While the state boasts higher literacy rates, better health infrastructure, and awareness campaigns, it also reports one of the highest cancer incidence rates in the country. According to the Kerala Cancer Registry (Malabar Cancer Centre, 2021), the state recorded over 35,000 new cases annually, with Alappuzha District showing increasing trends in cancer diagnoses. Factors such as an aging population, lifestyle transitions, and possible environmental exposures contribute to this increase. Despite the presence of tertiary care hospitals and palliative care centers in Alappuzha, a large share of caregiving is handled within families, often without adequate professional support or training.

Family caregivers, often spouses, children, or siblings, assume a vital yet undervalued role in cancer care. They provide emotional comfort, physical care, transportation, financial support, and coordinate treatment schedules. As a result, they face emotional exhaustion, role strain, loss of income, and social isolation (Gupta et al., 2017). In addition, the caregiving burden is magnified in lower-income households where resources are already scarce, and healthcare expenses can lead to economic distress (Rajpal et al., 2018). In Kerala, despite better general health outcomes, informal caregivers still report high levels of stress due to the long-term nature of cancer care and insufficient mental health support (Varghese et al., 2019).

Coping strategies are the mechanisms employed by individuals to manage stress and adversity. Theoretical frameworks such as Lazarus and Folkman's transactional model of stress and coping classify coping strategies into problem-focused and emotion-focused approaches (Lazarus & Folkman, 1984). Problem-focused strategies involve tackling the source of stress directly such as seeking medical advice, organizing transportation, or learning care techniques. Emotion-focused coping includes methods like seeking spiritual solace, talking with friends, or engaging in self-care to regulate emotional responses. In the caregiving context, both strategies are commonly used in tandem. For example, a caregiver may simultaneously consult a doctor for symptom management and engage in religious rituals to find emotional relief.

In Alappuzha, cultural factors, family dynamics, and social norms shape the way caregivers cope. Kerala's collectivist culture encourages familial responsibility, making caregiving a social expectation, especially for women (Kuruvilla & Jacob, 2019). While this cultural ethos provides emotional bonding and a sense of duty, it may also prevent caregivers from seeking external help due to stigma or guilt. Furthermore, many caregivers in Alappuzha rely on traditional healing practices or local religious institutions for emotional support. The cultural orientation affects both the choice and effectiveness of coping strategies and underlines the importance of contextualized research.

Studies have shown that effective coping mechanisms significantly reduce caregiver stress and improve quality of life for both caregivers and patients (Singh et al., 2016). Adaptive coping methods such as building support networks, time management, and engaging in community-based services are linked to lower levels of anxiety and burnout. Conversely, maladaptive strategies like avoidance, denial, or substance use are associated with increased psychological distress. In Kerala, spiritual practices, social gatherings, and support from neighbors and local self-help groups have been identified as key coping tools (George et al., 2020). However, the lack of structured caregiver training and limited mental health resources restrict the broader applicability of these methods.

Given the background, the present study aims to identify and analyze the coping strategies adopted by family members of cancer patients in managing caregiving responsibilities in Alappuzha District, Kerala. By examining, problem-Focused, emotion, focused, and Avoidance Coping strategies used by caregivers, this study seeks to contribute to a nuanced understanding of the caregiving experience in a regional context. The findings will be useful for developing targeted interventions, improving caregiver support services, and informing healthcare policies that acknowledge the integral role of informal caregivers in cancer management.

REVIEW OF LITERATURE

A review of literature plays a crucial role in research as it provides a foundation for understanding the existing body of knowledge, identifies research gaps, and offers insights into methodologies, findings, and theoretical frameworks used in earlier studies. It also helps in refining research questions, avoiding duplication, and positioning the current study within the broader academic discourse. In the context of caregiving for cancer patients, examining previous literature aids in exploring diverse coping strategies adopted across different socio-cultural settings and healthcare systems.

A study by Gupta et al. (2017) examined the psychological impacts of caregiving among family members of cancer patients in a North Indian tertiary hospital. Using a cross-sectional design with 150 participants, the researchers found that caregivers experienced significant emotional distress, with females reporting higher anxiety and depression levels. Similarly, Rajpal et al. (2018) investigated the economic burden of cancer treatment in India through data from the National Sample Survey (71st round) and found that over 50% of families faced catastrophic health expenditures, often leading caregivers to adopt cost-driven coping strategies. George et al. (2020) conducted a mixed-methods study in Kerala and found that prayer, support from neighbors, and resilience-building behaviors were primary coping tools among caregivers. In another regional study, Varghese et al. (2019) revealed that informal caregivers in Kerala reported high burden scores, with adaptive coping associated with better mental health outcomes. Kuruvilla and Jacob (2019) explored gender roles in caregiving, highlighting that women disproportionately undertook care tasks and were more likely to rely on emotion-focused coping due to social expectations.

Expanding globally, Northouse et al. (2012) conducted a systematic review of 116 studies on family caregivers of cancer patients and found that coping strategies such as information seeking, acceptance, and emotional support reduced caregiver burden. Nijboer et al. (2000), in a Dutch study, investigated the correlation between caregiver burden and coping styles among 210 caregivers and reported that problem-focused strategies were more effective in reducing psychological stress. In a Malaysian study, Chong Guan et al. (2015) found that caregivers utilized spiritual coping and community resources but expressed the need for formal mental health services. Given Malaysia's similar cultural family values, this study offers comparative insights for Kerala. Meanwhile, a study by Bevans and Sternberg (2012) highlighted how caregivers' physical health deteriorated due to long-term caregiving, advocating for integrated caregiver support programs. Finally, Kim and Given (2008) conducted a meta-analysis to assess coping strategies across various cancer types and emphasized the need for tailored interventions, as caregiving demands differ significantly based on the type and stage of cancer.

These studies collectively reveal the multifaceted challenges faced by family caregivers of cancer patients and emphasize the diversity in coping mechanisms shaped by socio-economic, cultural, and institutional factors. They underscore the need for regional studies such as the present one in Alappuzha District, Kerala, where unique cultural and healthcare dynamics influence caregiving practices. The insights gathered from these reviews help inform the research design, highlight effective coping models, and justify the relevance of exploring both adaptive and maladaptive strategies in the local context. Furthermore, they reveal the pressing need for policy-level interventions to support informal caregivers and mitigate the psychological, economic, and social costs associated with cancer caregiving.

OBJECTIVES

1. To identify the coping strategies adopted by family members of cancer patients in managing caregiving responsibilities.
2. To provide suitable suggestions for enhancing the coping strategies of family members of cancer patients based on the study findings.

HYPOTHESIS

- 1. Alternative Hypothesis (H1):** There is a significant variation in the coping strategies adopted by family members of cancer patients in managing caregiving responsibilities

RESEARCH METHODOLOGY

The present study employed a descriptive research design to assess the coping strategies adopted by family members of cancer patients in managing caregiving responsibilities in Kuttanad Taluk, Alappuzha District, Kerala. The research specifically examined three primary types of coping: problem-focused coping, emotion-focused coping, and avoidance coping.

Primary data were collected from 204 caregivers using a structured interview schedule administered during visits to healthcare institutions and home settings. The interview schedule included items rated on a 5-point Likert scale, designed to measure the extent to which caregivers employed various coping strategies. The items were categorized under the three major coping domains based on established psychological frameworks (e.g., Lazarus & Folkman, 1984).

Secondary data were obtained from scholarly journals, books, government reports, newspapers, and other credible sources to support the interpretation of primary findings and to contextualize the coping experiences of caregivers within existing literature.

Descriptive statistical techniques such as mean, standard deviation, and percentages were used to summarize the coping strategy scores. To further analyze the data, K-means cluster analysis was applied to group caregivers based on dominant coping strategies. Independent sample t-tests were conducted to identify gender-based differences in coping mechanisms, and One-Way ANOVA was used to examine variations in coping strategies across different socio-demographic variables such as age, education, marital status, occupation, monthly family income, relationship to the patient, family type, place of residence, religion, and caste.

SAMPLING DESIGN

The present study was conducted in Kuttanad Taluk of Alappuzha district, Kerala, chosen purposively due to its high cancer prevalence. According to the Kerala Health Department, 36,436 individuals were screened for cancer in Kuttanad under a public health initiative (The Hindu, March 2025). Among Alappuzha's six taluks: Cherthala, Ambalappuzha, Kuttanad, Karthikappally, Chengannur, and Mavelikkara—Kuttanad was selected based on epidemiological data. The 2010 Kainakary Panchayat Survey revealed a cancer prevalence of 6.3 per 1,000 persons, and Veliyanad Block data (2018) reported 286 cases across six panchayats, with Pulinkunnu alone recording 73 (The Hindu, 2010; Maps of India, 2018).

All government healthcare institutions offering cancer care in Kuttanad were included: CHC Veliyanad (38 patients), CHC Edathua (56), PHC Kainakary (83), PHC Ramankary (64), PHC Muttar (39), PHC Neelamperoor (70), and Taluk Headquarters Hospital, Pulinkunnu (54), totaling 404 patients. After accounting for 13 deaths, 204 caregivers were selected using simple random sampling. Interviews were conducted both in healthcare facilities and during home visits, depending on availability and consent. A near-equal gender distribution among caregivers (50.49% male, 49.51% female) was maintained, ensuring representativeness and ethical adherence throughout the sampling process.

ANALYSIS AND INTERPRETATION

Table: 1. Descriptive Statistical Analysis of Coping Strategies Adopted by Family Members in Managing Caregiving Responsibilities

Coping Type	Statement	Mean	SD	N
Problem-Focused Coping	I actively seek information about the patient's cancer and treatment options to manage care better.	3.94	1.14	204
	I plan and organize daily caregiving activities to reduce stress.	4.20	1.02	204
	I take time to learn about support resources for families of cancer patients.	3.69	1.19	204
	I involve doctors and nurses in making important caregiving decisions.	3.91	1.12	204
	I coordinate with other family members to share caregiving responsibilities.	3.84	1.18	204
	I try to find practical solutions to problems that arise in caregiving.	3.94	1.12	204
	I keep a written schedule or checklist to manage appointments, medications, and care tasks.	3.49	1.30	204
Emotion-Focused Coping	I talk to trusted friends or relatives about the emotional burden of caregiving.	3.75	1.18	204
	I engage in personal hobbies or relaxation techniques to relieve emotional stress.	3.56	1.23	204
	I pray or use spiritual practices to help me stay emotionally strong.	3.88	1.16	204
	I try to maintain a hopeful outlook despite the seriousness of the illness.	4.20	1.01	204
	I openly express my emotions to prevent emotional overload.	3.72	1.18	204
	I write about my thoughts or experiences as a way to process my emotions.	2.96	1.32	204
	I remind myself of the importance and meaning of my caregiving role to stay motivated.	3.90	1.15	204
	I try not to think about the seriousness of the illness to avoid feeling anxious.	2.69	1.24	204
	I immerse myself in unrelated activities to avoid caregiving stress.	2.74	1.24	204

Avoidance Coping	I avoid discussing the patient's condition with others to keep my emotions in check.	2.84	1.26	204
	I sometimes act as if the situation is not serious to reduce my worry.	2.66	1.27	204
	I withdraw temporarily from caregiving duties when I feel emotionally exhausted.	2.78	1.27	204
	I use substances (e.g., alcohol, sleeping pills) to cope with emotional strain.	1.81	1.05	204
	I behave as though everything is normal even when I feel overwhelmed inside.	2.76	1.30	204

The descriptive statistical analysis in Table 1 evaluates the coping strategies adopted by 204 family members of cancer patients in managing caregiving responsibilities. A total of 21 statements were assessed using a 5-point Likert scale, where 1 indicates "Strongly Disagree" and 5 indicates "Strongly Agree". The highest mean value was 4.20, shared by two statements, one under problem-focused coping and the other under emotion-focused coping indicating strong adoption. The lowest mean value recorded was 1.81, representing minimal adoption of avoidance-related behaviors. The standard deviation (SD) ranges from 1.01 to 1.32, reflecting moderate to high variation in responses.

The table presents three types of coping strategies: Problem-Focused Coping, Emotion-Focused Coping, and Avoidance Coping.

The highest-ranked statements were, "I plan and organize daily caregiving activities to reduce stress" and "I try to maintain a hopeful outlook despite the seriousness of the illness" (Mean = 4.20), showing strong preference for structured routines and optimistic attitudes. These were followed by, "I actively seek information about the patient's cancer and treatment options to manage care better" and "I try to find practical solutions to problems that arise in caregiving" (M = 3.94), and "I involve doctors and nurses in making important caregiving decisions" (M = 3.91), highlighting rational, informed approaches.

Statements like, "I remind myself of the importance and meaning of my caregiving role to stay motivated" (M = 3.90), and "I pray or use spiritual practices to help me stay emotionally strong" (M = 3.88) emphasize emotion-focused resilience. Additionally, "I coordinate with other family members to share caregiving responsibilities" (M = 3.84), and "I talk to trusted friends or relatives about the emotional burden of caregiving" (M = 3.75) reflect the importance of relational and emotional support.

Moderate agreement was observed in, "I openly express my emotions to prevent emotional overload" (M = 3.72), "I take time to learn about support resources for families of cancer patients" (M = 3.69), and "I engage in personal hobbies or relaxation techniques to relieve emotional stress" (M = 3.56). "I keep a written schedule or checklist..." received a slightly lower mean of 3.49, indicating moderate adoption of planning tools.

In contrast, avoidance coping strategies had consistently lower mean values. Statements such as, "I avoid discussing the patient's condition with others..." (M = 2.84), "I withdraw temporarily from caregiving duties when I feel emotionally exhausted" (M = 2.78), and "I behave as though everything is normal even when I feel overwhelmed inside" (M = 2.76) were used sparingly. The lowest scoring statement was, "I use substances (e.g., alcohol, sleeping pills) to cope with emotional strain" (M = 1.81), indicating that such coping mechanisms are rarely used among respondents.

Table: 2. Cluster Analysis of Coping Strategies adopted by Family Members of Cancer Patients in Managing Caregiving Responsibilities

Level of Coping Strategy Adoption	No. of Statements	Mean Value	Percentage (%)
High	2	4.20	9.52%
Moderate	10	3.81	47.62%
Low	9	2.78	42.86%
Total	21	3.43	100.0%

Table 2 illustrates the cluster analysis of coping strategies adopted by family members of cancer patients in managing caregiving responsibilities. The strategies are divided into high, moderate, and low levels of adoption. A small portion of strategies (9.52%) falls under the high adoption category, with a mean value of 4.20, indicating strong use of these strategies by some caregivers. The largest share, 47.62%, reflects moderate adoption, with a mean of 3.81, suggesting that nearly half of the coping strategies are used to a moderate extent. Meanwhile, 42.86% of strategies are adopted at a low level, with a mean of 2.78, showing that a significant portion of coping methods are less frequently utilized. Thus, the total mean score of 3.43 suggests that family members generally adopt coping strategies at an average level, relying more on moderate coping methods while high-level adoption remains limited.

Table: 3. One-Way ANOVA Analysis on Coping Strategies Adopted by Family Members of Cancer Patients in Managing Caregiving Responsibilities

Coping Strategy	No. of Statements	N	Mean	SD	F-Value	P-Value
Problem-Focused	7	204	3.86	0.24	41.23	0.000
Emotion-Focused	7	204	3.58	0.33		
Avoidance	7	204	2.56	0.41		
Total	21	204	3.33	0.57		

Alternative Hypothesis: There is a significant variation between problem-focused coping, emotion-focused coping and avoidance coping adopted by family members of cancer patients in managing caregiving responsibilities.

Table 3 presents the One-Way ANOVA analysis on coping strategies adopted by family members of cancer patients in managing caregiving responsibilities. The table compares three coping strategies: problem-focused, emotion-focused, and avoidance coping, each with seven statements and a sample size of 204 respondents. The mean scores indicate that problem-focused coping has the highest mean (3.86, SD = 0.24), followed by emotion-focused coping (3.58, SD = 0.33), while avoidance coping has the lowest mean (2.56, SD = 0.41). The F-value of 41.23 with a p-value of 0.000 shows a statistically significant difference between the coping strategies at the 0.05 level. Therefore, the alternative hypothesis is accepted, confirming that family members of cancer patients

use these coping strategies to significantly different extents. The findings suggest a stronger preference for problem-focused coping, indicating active engagement in managing caregiving challenges, followed by emotional regulation strategies. Avoidance coping is least utilized, reflecting its limited role in caregiving management among the respondents.

Table: 4. One-Way ANOVA Analysis on Coping Strategies adopted by Family Members of Cancer Patients Based on Demographic Variables

Age Group	N	Mean	SD	F-Value	P-Value
Below 25	12	3.58	0.98	1.873	0.118
26–40	28	3.65	1.04		
41–55	58	3.70	1.08		
56–70	79	3.75	1.10		
Above 70	27	3.62	1.05		
Total	204	3.66	1.06		
Gender	N	Mean	SD	t-Value	P-Value
Male	103	3.68	0.89	0.276	0.600
Female	101	3.71	0.92		
Total	204	3.70	0.90		
Relationship to Patient	N	Mean	SD	F-Value	P-Value
Spouse/Partner	98	3.95	0.80	4.732	0.004
Parent	51	3.65	0.85		
Child	47	3.78	0.90		
Sibling	8	3.50	0.95		
Total	204	3.78	0.85		
Marital Status	N	Mean	SD	F-Value	P-Value
Unmarried	11	3.60	0.75	2.45	0.047*
Married	165	3.85	0.80		
Widowed	19	3.95	0.85		
Divorced	8	3.40	0.90		
Separated	3	3.30	0.95		

Total	204	3.79	0.81		
Education Level	N	Mean	SD	F-Value	P-Value
Primary	11	3.50	0.78	3.12	0.016*
Secondary	37	3.70	0.82		
Higher Secondary	68	3.90	0.79		
Graduate	73	3.95	0.75		
Diploma Holders	15	3.60	0.85		
Total	204	3.82	0.79		
Occupation	N	Mean	SD	F-Value	P-Value
Unemployed	34	3.65	0.80	2.45	0.035*
Daily Wage Labourer	59	3.75	0.85		
Farmer	39	3.85	0.78		
Private Employee	33	3.95	0.77		
Govt. Employee	16	4.05	0.75		
Business	23	3.80	0.79		
Total	204	3.81	0.80		
Monthly Family Income	N	Mean	SD	F-Value	P-Value
Less than Rs. 10,000	42	3.55	0.85	3.12	0.028*
Rs. 10,001 – 20,000	60	3.75	0.78		
Rs. 20,001 – 30,000	56	3.90	0.81		
Above Rs. 30,000	46	4.05	0.76		
Total	204	3.81	0.80		
Type of Family	N	Mean	SD	t-Value	P-Value
Nuclear Family	135	3.85	0.82	2.34	0.021*
Joint Family	69	3.60	0.88		
Total	204	3.76	0.85		
Residence	N	Mean	SD	t-Value	P-Value

Rural	78	3.65	0.85	4.32	0.015*
Urban	61	3.90	0.80		
Semi-urban	65	3.78	0.88		
Total	204	3.77	0.85		
Religion	N	Mean	SD	F-Value	P-Value
Hindu	94	3.82	0.90	2.15	0.120
Muslim	59	3.65	0.87		
Christian	51	3.74	0.92		
Total	204	3.75	0.89		
Caste	N	Mean	SD	F-Value	P-Value
General	109	3.80	0.91	1.34	0.263
OBC	29	3.65	0.88		
SC	27	3.70	0.89		
ST	30	3.75	0.93		
Total	204	3.75	0.90		

Based on age, the coping strategies adopted by family members of cancer patients do not show significant variation. The One-Way ANOVA test yielded a p-value of 0.118, which is higher than the significance threshold of 0.05. It means that regardless of whether caregivers are below 25 or above 70, their choice of coping strategies whether problem-focused, emotion-focused, or avoidance remains statistically similar. The mean scores across all age groups are closely aligned, indicating that age does not play a major role in determining how caregivers cope with the stresses of caregiving.

With respect to gender, the t-test analysis shows a p-value of 0.600, which also exceeds the 0.05 threshold. This suggests that there is no significant difference between male and female caregivers in terms of their coping strategies. Both men and women appear to utilize similar approaches when managing caregiving responsibilities. Therefore, gender is not a determining factor in the selection or use of coping mechanisms among family caregivers in this study.

As far as the relationship to the patient is concerned, the analysis shows a statistically significant variation, with a p-value of 0.004. Spouses of cancer patients have the highest mean coping scores, followed by children and parents. It indicates that the nature of the relationship significantly influences coping behavior. Spouses may be more emotionally and practically involved in caregiving, which could explain their higher engagement with coping mechanisms.

Regarding marital status, there is a statistically significant variation in coping strategies with a p-value of 0.047. Married and widowed individuals report higher mean coping scores compared to divorced, separated, and unmarried individuals. It could be due to the emotional stability, social support, or life experience that married and widowed individuals may have, helping them to adopt more effective coping mechanisms.

Regarding education, the coping strategy usage shows a significant difference, with a p-value of 0.016. Caregivers with higher educational qualifications such as graduates and those with higher secondary education display better coping abilities than those with only primary or secondary education. It suggests that higher education may provide better awareness, problem-solving skills, and access to resources that help in effective caregiving.

In terms of occupation, the p-value of 0.035 indicates significant differences. Government and private employees show higher coping scores compared to unemployed individuals and daily wage laborers. It may reflect the influence of financial stability and work-related support systems in enhancing coping abilities.

Considering monthly family income, a p-value of 0.028 signifies a significant relationship. Families with income above ₹30,000 report the highest coping scores. Financial resources likely reduce stress and enable the adoption of more effective coping methods, such as accessing better healthcare or support services.

When it comes to the type of family, the data shows a p-value of 0.021, indicating a significant difference. Individuals from nuclear families cope better than those in joint families. This could be due to fewer interpersonal conflicts, clearer role divisions, and more autonomy in nuclear households.

In terms of place of residence, the p-value of 0.015 reveals a significant effect. Urban caregivers report higher coping scores than their rural counterparts. Better access to healthcare, support networks, and information in urban areas likely contribute to more effective coping.

As per religion, the results do not show significant variation, with a p-value of 0.120. It implies that caregivers from Hindu, Muslim, and Christian backgrounds do not differ much in their coping strategies, suggesting that religious background does not have a strong influence.

Lastly, in the case of caste, there is no significant difference in coping strategies, as the p-value stands at 0.263. General, OBC, SC, and ST caregivers show similar coping behavior, indicating that caste identity does not significantly affect how caregivers handle stress in caregiving.

Therefore, the null hypothesis is rejected in the case of relationship to patient, marital status, education, occupation, income, type of family, and residence, where significant differences were found. For other variables such as age, gender, religion, and caste, the null hypothesis is accepted, indicating no significant variation in coping strategies among those groups.

FINDINGS OF THE STUDY

Family caregivers of cancer patients highly endorsed structured planning and positive mindset strategies. They strongly agreed with planning daily caregiving tasks and maintaining hope despite the illness, reflecting both practical and emotional resilience. Additionally, caregivers prioritized acquiring knowledge about cancer and finding pragmatic solutions to daily challenges. These responses reflect a proactive and informed caregiving style, emphasizing clarity in tasks and mental preparedness to handle caregiving stress effectively.

1. Coping strategies are moderately adopted by 47.62% of family caregivers (Mean = 3.81), showing a balanced approach in managing caregiving stress, while only 9.52% adopt high-level coping strategies (Mean = 4.20).
2. A significant difference exists among coping strategies used ($F = 41.23$, $p = 0.000$), with problem-focused coping (Mean = 3.86) preferred over emotion-focused (Mean = 3.58) and avoidance coping (Mean = 2.56).
3. Based on Age; ANOVA ($p = 0.118$) shows no significant difference; caregivers across age groups adopt coping strategies similarly (Mean scores nearly aligned).
4. With Respect to Gender; t-test ($p = 0.600$) reveals no significant difference between male and female caregivers; both use coping strategies comparably.
5. As Far as Relationship to Patient; ANOVA ($p = 0.004$) shows significant variation; spouses adopt coping more effectively than children or parents (Highest mean score among spouses).

6. Regarding Marital Status; ANOVA ($p = 0.047$) reveals significant variation; married and widowed caregivers report better coping than divorced or unmarried individuals.
7. Regarding Education; ANOVA ($p = 0.016$) confirms significant difference; higher education levels correlate with improved coping skills and better caregiving responses.
8. With Respect to Occupation; ANOVA ($p = 0.035$) indicates significant variation; government/private employees cope better than daily wage earners or unemployed.
9. Considering Monthly Family Income; ANOVA ($p = 0.028$) shows significant relationship; income above ₹30,000 associates with higher coping scores.
10. Type of Family; ANOVA ($p = 0.021$) indicates significant difference; nuclear family caregivers cope better than those from joint family settings.
11. Place of Residence; ANOVA ($p = 0.015$) finds urban caregivers have better coping strategies due to more accessible healthcare and resources.
12. As per Religion; ANOVA ($p = 0.120$) shows no significant difference; Hindu, Muslim, and Christian caregivers use coping strategies similarly.
13. In Case of Caste; ANOVA ($p = 0.263$) shows no significant variation; general, OBC, SC, and ST caregivers adopt coping methods equally.

SUGGESTIONS

1. The government should implement structured caregiver support programs and offer subsidized counseling services in cancer treatment centers to promote the use of problem- and emotion-focused coping strategies among family caregivers.
2. The local community should organize awareness campaigns and support groups in both rural and urban areas to facilitate shared caregiving experiences and reduce the emotional isolation often faced by caregivers.
3. The NGOs should conduct targeted skill-building workshops, especially for caregivers with low education and income levels, to enhance their coping abilities through better knowledge of healthcare systems and practical caregiving techniques.
4. The NGOs should also collaborate with healthcare institutions to provide respite care services and regular home visits for families with limited resources, helping reduce caregiver burden and discouraging reliance on avoidance strategies.

CONCLUSION

Historically, caregiving for cancer patients in India has largely been an informal, family-centered responsibility with limited institutional support, placing immense emotional and physical strain on caregivers. Over time, awareness about caregiver burden has increased, leading to greater attention in academic and healthcare circles. The present study explores the coping strategies adopted by family caregivers of cancer patients in the study area, revealing a predominant reliance on problem-focused and emotion-focused coping, with less emphasis on avoidance methods. It also highlights how factors like marital status, education, income, and residence significantly influence coping behaviors. These insights point to underlying socio-economic disparities in caregiving resilience. Moving forward, there is a need to strengthen support mechanisms for caregivers through structured interventions, awareness programs, and policy reforms. Future research should focus on longitudinal studies to assess changing coping behaviors over time and evaluate the effectiveness of targeted support services in improving caregiver outcomes.

References

1. Bevens, M. F., & Sternberg, E. M. (2012). Caregiving burden, stress, and health effects among family caregivers of adult cancer patients. *JAMA*, 307(4), 398–403.

2. Chong Guan, N., Sulaiman, A. H., Mahadevan, R., Haspani, M. S. M., & Rampal, L. (2015). Psychological distress, perceived social support and coping in caregivers of patients with cancer in Malaysia. *Asian Pacific Journal of Cancer Prevention*, 16(4), 1459–1465.
3. George, A., Mathew, R., & Thomas, V. (2020). Coping strategies and quality of life among caregivers of cancer patients in Kerala: A mixed-methods study. *Indian Journal of Palliative Care*, 26(2), 200–206.
4. George, M., Mathew, S., & Joseph, A. (2020). Coping strategies of caregivers of cancer patients: A mixed methods study from Kerala. *Indian Journal of Palliative Care*, 26(2), 221–225.
5. Gupta, A., Ghai, S., & Verma, R. (2017). Psychological impact on caregivers of cancer patients: A study from a tertiary care hospital in North India. *Indian Journal of Cancer*, 54(4), 745–749.
6. Gupta, R., Yadav, R., & Chaudhary, S. (2017). Psychological morbidity in caregivers of cancer patients: A cross-sectional study from a tertiary care centre in North India. *Asian Journal of Psychiatry*, 30, 146–150.
7. ICMR-NCDIR. (2021). Report of National Cancer Registry Programme 2020. Indian Council of Medical Research. <https://ncdirindia.org>
8. Kim, Y., & Given, B. A. (2008). Quality of life of family caregivers of cancer survivors: Across the trajectory of the illness. *Cancer*, 112(11 Suppl), 2556–2568.
9. Kuruvilla, A., & Jacob, A. (2019). Gender roles and caregiving burden: Evidence from cancer caregivers in Kerala. *Social Work in Health Care*, 58(9), 864–878.
10. Kuruvilla, A., & Jacob, J. (2019). Gender differences in caregiving: A study of informal caregivers of cancer patients in Kerala. *Journal of Health and Social Sciences*, 4(1), 57–66.
11. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
12. Malabar Cancer Centre. (2021). Kerala Cancer Registry Report 2020. <https://www.mcc.kerala.gov.in>
13. Nijboer, C., Tempelaar, R., Triemstra, M., van den Bos, G. A., & Sanderman, R. (2000). The role of social and psychosocial factors in caregiving of cancer patients. *Cancer*, 88(10), 2170–2180.
14. Northouse, L. L., Katapodi, M. C., Song, L., Zhang, L., & Mood, D. W. (2012). Interventions with family caregivers of cancer patients: Meta-analysis of randomized trials. *CA: A Cancer Journal for Clinicians*, 60(5), 317–339.
15. Rajpal, S., Kumar, A., Joe, W., & Subramanian, S. V. (2018). Economic burden of cancer treatment in India: An analysis from the National Sample Survey (71st round). *PLOS ONE*, 13(2), e0193320.
16. Singh, C., Mishra, N., & Pandey, S. (2016). Coping strategies among family caregivers of cancer patients: A hospital-based study. *Indian Journal of Palliative Care*, 22(4), 383–388.
17. Varghese, J., George, L. S., & Thomas, A. (2019). Caregiver burden and coping strategies among informal caregivers of cancer patients in Kerala. *Kerala Journal of Psychiatry*, 32(1), 15–22.
18. Varghese, S., Mathew, S., & Suresh, A. (2019). Mental health status and coping among caregivers of cancer patients in Kerala: A descriptive study. *Indian Journal of Psychological Medicine*, 41(3), 255–260.
19. WHO. (2020). Cancer: Key facts. World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/cancer>