



Relationship between Caregiver Burden and Psychological Well-being among the Caregivers of Cancer Patients: Mediating Role of Resilience

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Abstract

The current study was conducted to investigate the mediating effect in the relationship of caregivers' burden and psychological well-being among the caregivers of cancer patients. Correlational research was used. Survey was designed as a method of data collection accompanied with questionnaire. Purposive sampling technique was employed to select the sample of the study (n=311, Male=150, Female=160). The Zarit 4-item Burden Interview, Rapid Caregiver Well-being Scale (R-CWBS), and Brief Reliance Scale were used as research instrument to measure the study variables. Findings of the study reveal that there is no significant relationship between caregivers' burden and their psychological well-being. In addition, resilience is positively correlated with caregivers' burden. Moreover, the results depict that there is no mediation effect of resilience on the relationship of caregivers' burden and caregivers' psychological well-being. Furthermore, female caregivers reported the greater level of caregiver burden as compared to male. There is no statistically mean score difference on psychological well-being with respect to gender. Male caregivers were found with higher level of resilience than female. The mean scores differences on caregivers' burden, caregivers' psychological well-being and their level of resilience were found statistically significant with respect to participants' marital status and job status. It is suggested that caregivers of cancer patients must improve their coping strategies.

Keywords: Caregiver burden, caregiver psychological burden, resilience

1. Introduction

The burden of caregiver commonly faced by family caring for advanced patients of cancer significantly affects their well-being. Due to the intricate and persistent nature of advanced cancer, caregivers bear significant obligations including daily care, drug administration, discomfort management, and emotional support (Cui et al., 2024). These challenging duties frequently lead to physical fatigue and psychological strain, resulting in significant psychological anguish (Celik et al., 2022). The anguish experienced by caregivers is generally characterized by feelings of anxiety and sadness. This misery is worsened by the unexpected nature of the disease's progression and the accompanying pain experienced by the patient. As a result, caregivers' "quality of life" is significantly affected (Li et al., 2018). Previous studies have confirmed the high occurrence of pain amid caregivers of advanced patients (Sklenarova et al., 2015). The psychological anguish experienced by caregivers can significantly damage their quality of life, affecting their capacity to operate on a daily basis and perhaps causing negative effects on family relationships, social contacts, and work productivity (Li et al., 2018).

However, past research has mostly concentrated on examining the direct connections between caregiving load, mental distress, and life's quality offering limited understanding of the mechanisms by which caregiving burden affects quality of life (Majestic & Eddington, 2019). On the other hand, because of the inadequate public health services and the severe financial load, the majority of patients opt to undergo rehabilitation at home with caregivers provided that care when they are discharged, and attention is supplied by family caregivers (Lu et al., 2019). However, family caregivers are facing challenges in many areas, including work, money, sleep, leisure, and socializing. As a result, their life quality is being diminished, and their physiological and mental health are suffering (Kruithof et al., 2016; Albayrak et al., 2019). The care burden encompasses the physical, psychological, and social disturbances associated with the adverse experience of providing care. This burden can be categorized into objective and subjective elements. There is a significant amount of financial strain, social pressure, and mental anguish that family caregivers are experiencing (Farahani et al., 2021). The caregivers of individuals with chronic illness experience a detrimental impact on their physical and psychological well-being due to the load they carry (Ali et al., 2012).

2. Literature

A prior investigation documented a significant prevalence of adverse emotions among caregivers, such as diminished contentment with leisure activities, decreased happiness, feelings of isolation, despair, and a perception of confinement (Pendergrass et al., 2017; Seal et al., 2015). Caregivers who are under a heavy burden experience emotional tiredness and a decrease in their excitement, which ultimately has an impact on the excellence of care which they provide (An et al., 2019). Prior study has indicated caregivers who practice signs of depression are more likely to contribute to the development of depressed symptoms in patients and even elevate the chances of cancer survivors experiencing mortality within a 6-month period (Malhotra et al., 2016). Nevertheless, several caregivers who bear the weight of caregiving responsibilities do not encounter depression, highlighting the crucial significance of caring qualities, such as flexibility.

Resilience is the capacity toward successfully adjust and cope with traumatic events and/or challenging circumstances (Luthar et al., 2000). Prior research has indicated that individuals with greater resilience exhibit proactive strategies for dealing with adversity and demonstrate swift adjustment to changes (Sheerin et al., 2018; Bhatnagar, 2021). Resilience has a role in partially connecting the relationship between unfavorable life events and the mental comfort of caregivers of patients with malignancies and diabetes (Dionne-Odom et al., 2021). It is found that there was a undesirable correlation between caregiver load and psychological well-being and spirituality domains. Conversely, there was a positive correlation between psychological comfort and spirituality. The findings emphasized the impact of religiousness on the mental well-being of caregivers. This knowledge can be used to avoid negative effects, such as negative emotions, hopelessness, bad mood, anxiety, and difficulties in relationships,

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caused by caregiver burden. Additionally, it can be used to improve mental well-being through spiritual counseling (Anum & Dasti, 2016).

2.1. Research Gap

The burden of caregivers commonly faced by immediate family caring for advanced patients of cancer suggestively affects their psychological well-being. Resilience is the capacity to successfully adjust and cope with traumatic events and/or challenging circumstances. However, there have been very few studies that have specifically examined the mediating role of resilience on the relationship among burden of caregivers and their psychological well-being. This research aims to investigate the potential correlation between caregiver burden, psychological well-being and resilience amongst caregivers.

3. Theoretical framework

The core framework of this mediation model is derived from Lazarus's cognitive appraisal theory of stress. This hypothesis predicts that when caregiver load increases, psychological distress will rise as well, ultimately resulting in a decline in psychological well-being. The process of secondary assessment and coping is closely linked to family resilience, as per the cognitive appraisal theory of stress (Walsh, 2016). More specifically, by strengthening the family's worldview, caregivers can foster positive attitudes and helpful notions about cancer (Walsh, 2016). Consequently, this aids people in identifying and using the innate and potential assets and capabilities found within their family network to effectively navigate the hurdles presented by cancer. Based on the theoretical framework, this study aims to elucidate the relationships and underlying mechanisms that connect caregiver burden and psychological well-being among those who provide care for advanced cancer patients.

3.1. Conceptual framework

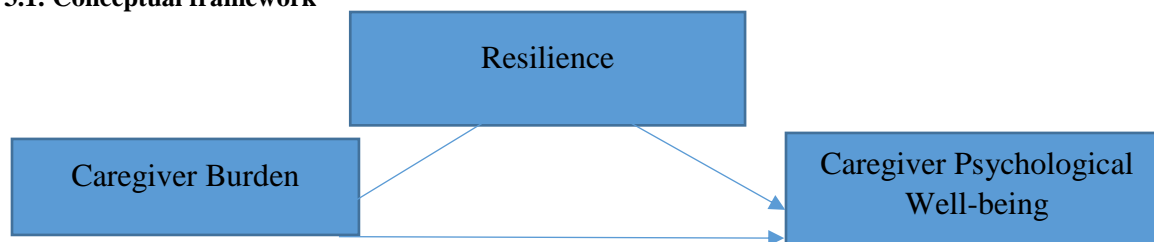


Figure 1 shows the conceptual framework where burden of caregivers is predictor (independent variable) and caregiver psychological well-being criterion variable (dependent variable). Resilience of the caregiver was taken as mediator in this model.

3.2. Objective of the Study

- To assess the correlation between resilience, psychological health, and caregiver burden
- To look into how resilience mediates the relationship between caregiver psychological well-being and caregiver burden.
- To assess how caregiver burden, psychological well-being, and resilience differ in terms of gender, marital status, and employment of the caregivers of cancer patients

3.3. Hypotheses of the Study

Ha1: There is statistically significant relationship between caregiver burden, caregiver psychological well-being and resilience

Ha2: Resilience is a statistically significant mediator for the relationship between caregivers' burden, caregiver psychological well-being

Ha3: There is significant mean difference in caregiver burden, caregiver psychological well-being and resilience based on caregivers' gender, marital status and job status

4. Method

4.1. Participants

The nature of the study was quantitative. Correlational research design was used to conduct this research. Survey was designed as a method of data collection accompanied with questionnaire. Population of was consisted on the caregivers of cancer patients. Purposive sampling technique was employed to select the sample of the study (n=311, Male=150, Female=160). Demographic information was included; gender, marital status and job status of the caregivers. The sample was drawn from Multan Institute of Nuclear Medicine and Radiotherapy and Combined Military Hospital Multan.

4.2. Instruments

The Zarit 4-item Burden Interview (Liew & Yap, 2019), Rapid Caregiver Well-being Scale (Tebb, 2015), and Brief Reliance Scale (Smith et al., 2008) were used as research instrument to measure the study variables.

4.3. Procedure

Permission was taken from higher authority for the purpose of data collection. Informed consent was received from the participants. A complete assistance was provided to respondents to take the responses. It was ensured to them that their information will be kept confidential. After collecting the data it was entered into SPSS. Inferential statistics was used to analyze the data by performing Pearson Correlation Coefficient and t-test for Independent Samples Deigns.

5. Results

Table1: Correlation Matrix among Caregivers' Burden, Psychological Well-being and Resilience

Variables	Mean	Std.Deviation	1	2	3
Caregivers' Burden	13.035	1.462	1	-.026	-.320**
Psychological Well-being	10.977	1.775		1	-.322**
Resilience	11.180	1.047			1

Table 1 shows the correlation of caregivers' burden, psychological well-being and resilience. Finding reveal that there is no significant relationship between CB and CPW ($r = -.026$). In addition there was significant negative relationship between CB and R ($r = -.320^{**}$, $p < 0.05$).

Table 2: Showing the Direct, Indirect effect, and Total effect in the prediction of Psychological Well-being of Caregivers' of Cancer Patients

Direct Effect	Indirect Effect	Total Effect
X on Y -.1186	.0973	.8544

Showing the mediating effect of Resilience between the relationship of Caregivers' Burden and their Psychological Well-being

Relationship	Indirect Effect	Total Effect	VAF	Assessment
CB>R>PW	.0973	.8544	11.38%	No mediation

This table shows the mediating role of resilience between the relationship of CB and R. Findings depict that there is no mediating effect of resilience on the correlation of caregiver burden and caregiver psychological well-being. It denotes that relationship of CB and CPW was not mediated by resilience.

Table 3: Mean scores of Caregiver' Burden, Psychological Well-being and Resilience between male female caregivers of cancer patients (n=311)

Variable	Gender	N	Mean	Std.Deviation	df	t-test	p-value
Caregiver Burden	Male	150	12.00	1.086	309	-16.513	.001
	Female	161	14.00	1.048			
Psychological Well-being	Male	150	10.84	1.210	309	-1.320	.188
	Female	161	11.10	2.169			
Resilience	Male	150	11.51	1.121	309	5.685	.001
	Female	161	10.86	.866			

Table 3 describes the difference of mean scores of CB, CPW and R with respect to the gender of the caregivers. Results demonstrate that there is statistically significant mean score difference on CB and R between male and female caregivers but there is mean score difference on CPW.

Table 4: Mean scores of Caregiver' Burden, Psychological Well-being and Resilience between married and unmarried caregivers of cancer patients (n=311)

Variable	MS	N	Mean	Std.Deviation	df	t-test	p-value
Caregiver Burden	Married	136	13.24	1.678	309	2.458	.015
	Unmarried	175	12.85	1.244			
Psychological Well-being	Married	136	11.50	2.264	309	4.731	.001
	Unmarried	175	10.57	1.121			
Resilience	Married	136	10.75	1.064	309	-6.706	.001
	Unmarried	175	11.50	.908			

Table 4 describes the mean score of caregiver burden, caregiver psychological well-being and resilience. Results show the statistically significant mean score difference on CB, CPW and R between married and unmarried caregiver.

Table 5: Mean scores of Caregiver' Burden, Psychological Well-being and Resilience between employed and unemployed caregivers of cancer patients (n=311)

Variable	JS	N	Mean	Std.Deviation	Df	t-test	p-value
Caregiver Burden	Employed	188	12.74	1.498	309	-4.465	.001
	Unemployed	123	13.47	1.288			
Psychological Well-being	Employed	188	10.52	1.310	309	-5.901	.001
	Unemployed	123	11.67	2.136			
Resilience	Employed	188	11.34	.942	309	3.395	.001
	Unemployed	123	10.93	1.150			

Table 5 represents the mean score of caregiver burden, caregiver psychological well-being and resilience. Results show the statistically significant mean score difference on CB, CPW and R between employed and unemployed.

5.1. Discussion

Finding reveal that there is no significant relationship between CB and CPW. In calculation there was significant negative relationship between CB and R. Prior research has indicated that individuals with greater resilience exhibit proactive strategies for dealing with adversity and demonstrate swift adjustment to changes (Sheerin et al., 2018; Bhatnagar, 2021). Findings depict that there is no mediating effect of resilience on the correlation of burden of caregivers and their psychological well-being. It denotes that relationship of CB and CPW was not mediated by resilience. Caregivers who are under a heavy burden experience emotional tiredness and a decrease in their excitement, which ultimately has an impact on the quality of care that they deliver (An et al.,

2019). Results demonstrate that there is statistically significant mean score difference on CB and R between male and female caregivers but there is mean score difference on CPW. Previous studies have confirmed the high occurrence of grief amid caregivers of advanced cancer patients (Sklenarova et al., 2015). The psychological anguish experienced by caregivers can significantly damage their psychological well-being, affecting their ability to operate on a daily basis and perhaps causing negative effects on family relationships, social contacts, and work productivity (Li et al., 2018). Results show the statistically significant mean score difference on CB, CPW and R between married and unmarried caregiver. Results show the statistically significant mean score difference on CB, CPW and R between employed and unemployed.

6. Conclusion

This research concluded that there is no significant relationship between caregivers' burden and their psychological well-being. In addition, resilience is positively correlated with caregivers' burden. Moreover, the results depict that there is no mediation impact of resilience on the relationship of caregivers' burden and caregivers' psychological well-being. Furthermore, female caregivers reported the greater level of caregiver burden as compared to male. There is no statistically mean score difference on psychological well-being with respect to gender. Male caregivers were found with advanced level of resilience than female. The mean scores differences on caregivers' burden, caregivers' psychological well-being and their level of resilience were found statistically significant with respect to participants' marital status and job status.

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