Received: 18 October 2023 | Revised: 11 May 2024 | Accepted: 14 May 2024

DOI: 10.1002/hsr2.2155

ORIGINAL RESEARCH

Health Science Reports Open Access WILEY

Care burden and the predictive role of spiritual well-being and religious coping: A cross sectional study among Iranian family caregivers of patients with stroke

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Abstract

Background and Aims: The burden of care after a stroke is gaining recognition as a significant healthcare issue. Factors like religion and spirituality, encompassing religious coping and spiritual health, prove to be influential in anticipating the challenges faced by caregivers. The present study aimed to determine the relationship between care burden, spiritual health, and religious coping among caregivers of stroke patients.

Methods: This cross-sectional research was conducted with the participation of 129 caregivers of stroke patients. The data was collected using the Ellison and Paloutzian spiritual well-being instruments, Pargament Religious Coping (RCOPE) brief version, and the Zarit burden interview (ZBI). Through a census, participants were recruited for the investigation. Data were analyzed using descriptive and inferential statistics (multivariate linear regression analysis).

Results: The study results indicate a strong and statistically significant relationship between the burden of caring and spiritual health ($p < 0.001$, $\beta = 0.33$). Furthermore, specific variables were identified as indicators of an increased burden of care, including positive religious coping ($p = 0.04$, $\beta = 0.63$), the familial relationship between the caregiver and patient, specifically as a child ($p = 0.001$, $\beta = 29.26$), and a sister ($p < 0.001$, $\beta = 35.93$).

Conclusion: It is advisable to consider adopting and implementing appropriate support measures for coping strategies rooted in religion and spirituality. So, it is recommended to enhance the provision of comprehensive support, including psychological and religious interventions. This can be achieved through the collaborative efforts of support groups comprising psychiatric nurses, psychiatrists, psychologists, and religious experts.

KEYWORDS

care burden, caregiver, religious coping, spiritual well-being, stroke

1 | INTRODUCTION

The enduring negative impacts of a stroke manifest across multiple dimensions, including psychological, economic, and social aspects.[1] These repercussions extend far beyond the consequences experienced in the initial stages, even when emergency care is provided.[2] This disorder is a common health problem that has a significant prevalence in the world and Iran. So that in Iran it is 150 people per 100,000 people, so that 100,000 people suffer from it every year.[3] It is common for family to step in and provide care for stroke patients at home in countries like Iran.[4] Family caregivers' care provision for stroke patients is often understood as compassionate care,[5] despite the various difficulties faced by patients and their family caregivers over the long term.

Informal family caregivers generally shoulder a heavy load when caring for stroke patients due to the unexpected onset of the disability, the chronic nature of this disease, and the unpredictability of the recovery and rehabilitation process.[6] Caring for stroke patients can negatively impact the health of their caregivers, which in turn can negatively impact the quality of their care and, ultimately, the well-being of stroke patients.[7] The concept of "caring burden" captures the demanding and stressful situations that caregivers face as they take on the ongoing and challenging responsibility of providing long-term care for a loved one.[8] A systematic review and meta-analysis identified key predictive factors in the burden of care for caregivers of stroke patients, including daily activities, nerve function, and the manifestation of anxiety and depression symptoms in patients.[9] However, caregivers' factors, like their mental and physical health and sense of coherence, have been linked to care burden.[10]

The conceptual framework describing the adverse emotional outcomes of caregiving is elucidated by the Transactional Model of Stress and Coping, as proposed by Lazarus and Folkman. According to this model, the influence of stress on caregivers is shaped by their perception, evaluation, and handling of the caregiving experience, alongside their capacity to manage stressors inherent in caregiving.[11] Hence, a significant determinant of care burden is the coping strategies employed by caregivers to navigate challenges and stressors arising from their caregiving responsibilities.[11,12] Religious coping involves using cognitive-behavioral techniques like prayer, visiting sacred places, and trusting in a higher power to manage and overcome stressful situations effectively. It's often considered highly effective in dealing with challenges. The literature review emphasizes the importance of religious coping in helping individuals achieve their goals. Pargament's research on the psychology of religion shows that religious coping methods are distinct from nonreligious ones and have a unique effectiveness in improving overall psychosocial well-being.[13] There exist two distinct forms of religious coping: positive religious coping and negative religious coping.[14]

Positive religious coping methods reflect a strong connection with God and spiritual forces, a sense of spiritual unity with others, and a benevolent perspective toward the world. Conversely, negative religious coping methods are indicative of underlying spiritual tensions and conflicts that individuals experience in their relationships with others and with God.[14] People in Muslim societies, such as Iran, believe that God's will predetermines everything. If a patient is ill, science may assert that pathogens cause the disease, but the patient may believe their actions are to blame.[15]

Multiple studies have demonstrated that appropriate religious coping among family caregivers is associated with several variables, including lower levels of psychological distress symptoms and enhanced quality of life.[16,17] Corallo et al. highlighted the significance of religion in the role of care and related beliefs in addressing problems among caregivers of brain-damaged patients. They found that God-believing caregivers were more optimistic than their nonbelieving counterparts.[18]

Another critical factor that can exert an influence on the burden of caregiving is the state of spiritual well-being, presenting a multifaceted dimension that encompasses emotional, psychological, and existential aspects.[19] Spiritual well-being is increasingly recognized as an essential part of WHO's definition of health.[20] Relationships with others, a sense of meaning and purpose in one's life, and faith in and communion with a higher power are all essential components of a healthy spiritual life.[21] In 1983, Ellison claims that integrating people's physical, emotional, and social health is the ultimate goal of pursuing psychosocial and religious well-being (RWB).[22] Since spiritual health is understood to be an outward manifestation of spirituality, it has developed in tandem with the concept of spirituality. It is a broad category that encompasses spirituality and religion.[23] Spirituality encompasses the pursuit of deeper understanding or the realization of spiritual potential, distinct from spiritual health. Spiritual well-being is typically divided into two categories: "religious well-being" (RWB), tied to a commitment to a particular faith and a higher power, and "existential well-being" (EWB), focused on discovering life's purpose and achieving peace and satisfaction.[24]

Moreover, Islam views health and illness as having a spiritual foundation in addition to a medical and psychological structure.[25] Several studies have examined the role of spiritual health in minimizing the burden of care for patients with chronic diseases such as cancer and chronic kidney disease undergoing hemodialysis.[23,26] Spirituality and religious practice are integral concepts in Islam, often viewed in tandem. Therefore, gathering data on the interplay between religious and spiritual practices and other facets of life can guide interventions for various social groups, including patients, caregivers, and health professionals.[15]

Considering the aforementioned factors, it appears essential to assess the caregiving burden, spiritual well-being, and religious coping in the context of stroke among family caregivers. So, this study aimed to determine the relationship between care burden, spiritual health, and religious coping among Iranian caregivers of stroke patients.

2 | MATERIALS AND METHODS

2.1 | Study design, settings, and participants

The current cross-sectional study included 129 family caregivers of stroke patients in Shahroud, Iran, and was done between August 2022 and February 2023. Caregiving experience for at least 6 months,[27] a confirmed diagnosis of stroke by a neurologist

(mentioned in the patient's file), and the ability to work with a smartphone to complete online questionnaires are the minimum requirements for participation in this research. Insanity and the use of neuroleptics were considered exclusion criteria for caregivers. The census sample technique was used to include eligible caregivers in the study. Due to providing care for less than 6 months, 13 individuals were excluded from the current study (Figure 1).

2.2 | Data collection

Researchers in the present study obtained the relevant permissions and compiled a list of all stroke patients covered by health centers in Shahroud city. Caregivers were assessed the eligibility for entry and withdrawal using telephone call. Information was gathered using a demographics form and self-report questionnaires such as the Zarit burden inventory (ZBI),[28] the spiritual well-being scale (SWBS),[29] and the religious coping inventory (RCOPE)[14] in Persian language. Participants had access to the materials mentioned above through a web-based questionnaire through a link delivered via Short Message Service. It took participants approximately 7–10 min to complete the questionnaires. Subsequently, the collected data from the online submissions was compiled into the database. Once the output was obtained from the designated website, the information underwent analysis. The data collection process persisted until all eligible caregivers had been evaluated.

2.3 | Demographic profile form

The demographic profile form includes information related to caregivers (including age, sex, marital status, education, occupation, income, relationship with the patient, and daily patient care hours) and patients (including age, sex, marital status, education, occupation, coverage health insurance, type of stroke, period of stroke, and support from assistance organizations).

2.4 | ZBI

In 1980, Zarit developed the Zarit burden interview (ZBI) to assess the level of care burden, consisting of 22 items focused on the burden experienced by caregivers when caring for a patient. It has a 5-point Likert scale with responses ranging from *never* (score 0), *rarely* (score 1), *occasionally* (score 2), *frequently* (score 3), *to always* (score 4). A score of less than 30 indicates a minor psychological burden, a score of 31–60 indicates a moderate care burden and a score of 61–88 indicates a severe care burden. In this tool, each person's lowest and maximum score will be between 0 and 88, with a higher score indicating a more significant burden of care.[28] Mirhosseini et al. assessed the reliability of the Persian version of ZBI based on internal consistency (by calculating Cronbach's α coefficient equal to 0.90).[30]

2.5 | SWBS

The Paloutzian and Ellison scale of 20 spiritual well-being items was used to assess the level of spiritual well-being in the current study. This scale has a minimum and maximum score range of 20–120, with answers based on a 6-point Likert scale (from entirely agree to disagree). This scale is divided into two categories: religious well-being, existential well-being, each with 10 statements, and a score of 10–60. Items with odd numbers imply spiritual well-being, while items with even numbers indicate existential well-being. People's spiritual well-being is classified into three

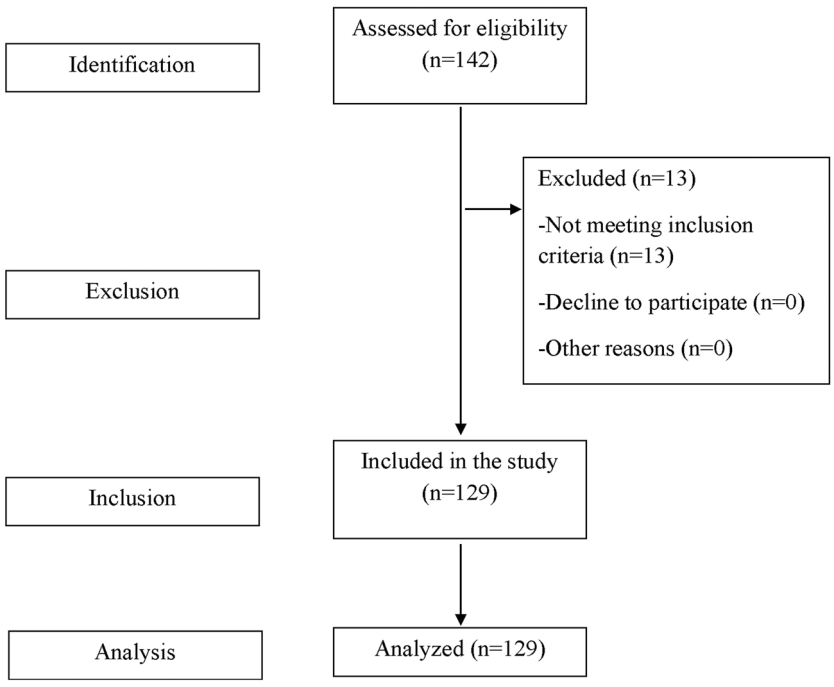

FIGURE 1 STROBE flow diagram.

categories based on their total score: low (20–40), moderate (41–99), and high (100–120).[29] Esfandiyar et al. assessed the reliability of the Persian version of this scale. Cronbach's α was found as 0.92, 0.86, and 0.87 for the SWBS, RWB subscale, and EWB subscale, respectively.[31]

2.6 | RCOPE

Pargament developed the religious coping scale (RCOPE). This scale's 14-question short form specifies positive and negative coping methods. Each positive and negative scale contains seven items from the whole religious coping scale. Questions 1–7 are on the positive scale, whereas 8–14 are on the negative scale. The highest and lowest possible scores in this questionnaire are 42 and zero. Obtaining a higher score indicates a higher utilization of religious coping methods in dealing with stressors. According to Cronbach's α, the reliability of the original version of this measure was 0.92 for positive religious coping and 0.81 for negative religious coping.[14] Rohani using Cronbach's α, determined the reliability of the Persian version of this tool to be 0.86 and 0.87 for positive and negative religious coping subscales, respectively.[32]

2.7 | Data analysis

Descriptive statistics were employed to depict quantitative variables, including caregiver burden, spiritual well-being, religious coping, duration of daily care, period of the stroke, and age. Mean and standard deviation were used for numerical data. Descriptive variables, encompassing marital, educational, employment, and residence status, as well as sex, underlying disease, need for assistance associations, the relationship between patient and caregiver, health insurance, and type of stroke, were presented using frequency and percentage. In this study, caregiver burden was designated as the dependent variable, while other factors, such as spiritual well-being, religious coping, and demographic variables, were considered independent variables. Subsequently, the association between predictor variables and caregiving burden was assessed through Multivariate Regression Analysis, employing a two-sided significance level of 0.5. Care burden-predicting variables were identified by first conducting an analysis using a univariate linear regression model and then including only those variables with a *p*-value of less than 0.2 in a multivariate linear regression model. The data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 21 (released in 2012).

3 | RESULTS

3.1 | Demographic characteristics of the patients

According to the present research findings, the patients' mean age was 67.68 ± 14.86 years. Almost half of the patients (56.59%) were male, and approximately one-fifth (20.16%) were covered by assistance organizations (charitable foundations or nongovernmental organizations). Table 1 contains additional results.

TABLE 1 Demographic characteristics of patients with stroke (*N* = 129).

Variable		*n*	%
Sex	Male	73	56.59
	Female	56	43.41
Marital status	Married	20	15.50
	Single	109	84.50
Educational level	Secondary school	82	63.57
	High school	25	19.38
	Academic degree	22	17.05
Type of stroke	Ischemic	89	68.99
	Hemorrhagic	40	31.01
Coverage by supportive organizations	Yes	26	20.16
	No	103	79.84
Health insurance coverage	Yes	115	89.15
	No	14	10.85
		Mean	**SD**
Age (years)		67.68	14.86
Period of the stroke (years)		3.65	2.93

Abbreviations: %, percent; SD, standard deviation.

3.2 | Demographic characteristics of the caregivers

The results of study showed that approximately a quarter of caregivers (24.03%) were single. The average age of the caregivers was 41.55 ± 13.23 years, and 51.94% were male. Table 2 displays additional demographic details about caregivers.

3.3 | Mean scores of care burden, spiritual well-being, and religious coping

According to the findings, 78 caregivers (60.47%) had moderate levels of care burden. In addition, 100 caregivers (77.52%) reported average spiritual health. Positive and negative religious coping scores averaged 19.27 ± 5.41 and 12.15 ± 3.86, respectively. See Table 3 for additional information.

3.4 | Assessment of predictive variables of care burden

Multivariate linear regression employing the backward technique revealed that model factors predict 32.2% of the total care burden score variance.

TABLE 2 Demographic information of caregivers ($N = 129$).

Variable		n	%
Sex	Male	67	51.94
	Female	62	48.06
Marital status	Married	98	75.97
	Single	31	24.03
Educational level	Secondary school	26	20.15
	High school	38	29.46
	Academic degree	65	50.39
Occupational status	Unemployed	2	1.55
	Housewife	34	26.36
	Self employed	43	33.33
	Retired	6	4.65
	Employed	33	25.58
	Student	11	8.53
		Mean	SD
Age (years)		41.55	13.23
Duration of daily care (h)		8.58	6.67

Abbreviations: %, percent; SD, standard deviation.

TABLE 3 Mean and standard deviation scores of care burden, spiritual well-being, and religious coping and their subscales.

Variable		n	%
Spiritual well-being	Low	2	1.55
	Moderate	100	77.52
	High	27	20.93
Care burden	Mild	47	36.43
	Moderate	78	60.47
	Severe	4	3.10
		Mean	SD
Religious coping	Positive religious coping	19.27	5.41
	Negative religious coping	12.15	3.86
Spiritual well-being		84.76	18.37
	Religious well-being	44.58	10.11
	Existential well-being	40.18	9.13
Care burden		57.13	12.72

Abbreviations: %, percent; SD, standard deviation.

This means that a reduction in care burden of 0.33 occurs for every unit improvement in spiritual health. Furthermore, the average care burden score increases by 0.63 units for each unit increase in the positive religious coping score. Finally, compared to grandmother caregivers, the burden of care for patients whose children or sisters provided care was higher by 26.29 and 35.93 units, respectively (Table 4).

TABLE 4 The predictive role of independent variables on caregiver burden based on multivariate regression method.

Variables		β	SE	p Value
Constant value		70.01	5.48	<0.001
Spiritual well-being		−0.33	0.08	<0.001
Positive religious coping		0.63	0.29	0.04
Relation with patient	Grandmother	Reference		
	Father	2.57	3.55	0.47
	Mother	1.14	3.62	0.75
	Child	29.26	8.32	0.001
	Wife/husband	3.70	4.17	0.38
	Brother	11.90	6.32	0.06
	Sister	35.93	8.30	<0.001
	Grand father	2.63	4.36	0.55

Abbreviation: SE, standard error.

4 | DISCUSSION

The purpose of this study was to explore the relationship between the burden of care, spiritual well-being, and religious coping within the context of family caregivers of stroke patients. Providing care for patients who experience chronic physical conditions and multiple disabilities is a challenging process that significantly impacts various aspects of caregivers' lives. In such circumstances, the caregiver may encounter a range of consequences associated with providing care for their family member with stroke. They may also experience particular difficulties impacting their spiritual well-being and religious coping mechanisms.

The current study found that more than half of caregivers endure an average burden of care, consistent with the previous study in Brazil on the burden of care in caregivers of stroke patients.[33] However, prior research in Netherlands found that most caregivers reported a significant burden of care in stroke patients.[34] The duration of the patient's care could be the source of the discrepancy in the findings. In the previous study, caregivers were evaluated 6–12 months after taking the caring role, whereas in the current study, caregivers cared for their patients for an average of 3.65 years. In this regard, a study conducted in China demonstrated that the overall care burden caused by stroke diminishes over time.[35] Family members may not immediately adjust to the role of "a family caregiver" because they lack formal caregiving training and access to adequate support services. However, the family caregiver adjusts to their new role as they seek social, financial, and economic support resources for the patient they care for.[36]

The cultural disparities between European and Asian countries in patient care by family members are another likely factor. Many verses in the Qur'an and hadiths of the Prophet Muhammad support providing care to a sick person (especially a sick family member).[37]

This is relevant to the present study because it was conducted in an Asian country with specific religious beliefs and orientations. A common theme in Islamic writings is that adversity strengthens people and helps them become resilient. Since Islam is the most widely practiced faith in Iran, people's religious convictions will likely play a significant part in coping with difficult situations.[38] Moreover, because of families' vital role in Iranian society, caring for a sick relative is highly valued, regardless of financial compensation.[39]

The current study revealed that over three-quarters of caregivers reported moderate levels of spiritual well-being. According to research in Iran, caregivers exhibit a modest spiritual attitude.[40] Stroke caregivers endure multiple stressors that can significantly negatively affect both physical and emotional health.[41] A spiritual outlook and spirituality are highly beneficial to mental health and can be used as a coping mechanism to deal with the stresses inherent in the caregiving position.[42] Many Iranian family caregivers take a spiritual perspective on their patients' illnesses, viewing them as a test from God and a demonstration of his wisdom.[43] Religion and religiously informed coping mechanisms are often employed with spirituality in Islam. According to Pargament viewpoint, religion gives people the tools they need to deal with dangerous situations, encourages them to take a fresh look at things, and strengthens their resilience. According to his definition,[14] religious coping is looking to holiness to make sense of and manage life's stresses.

Religious coping, as said, has both positive and negative aspects. Positive religious coping was shown to have a higher mean score than negative religious coping in the current study. Similar results were found in the research on Iranian stroke caregivers.[44] Similar findings were seen in other caregivers, such as caregivers of end-stage cancer patients and moms of children with leukemia.[17,45] In the context of Muslim beliefs, particularly among Iranians, falling ill is seen as a sign of divine mercy toward the sick. There's a widespread belief that a person's sins are pardoned during sickness, whether it's short-term or long-term. Consequently, in Iranian culture, illness is viewed positively, and people often employ positive religious practices to cope with it.

The study found that using positive religious coping methods leads to higher levels of caregiver burden. This contrasts with previous research on Turkish stroke caregivers, which showed that religious coping reduced burden.[46] Despite this contradiction, the caregiver's religious or spiritual beliefs can still provide social support and help in adapting to the situation.[47] In Islam, it's highly valued to apply religious teachings and show compassion, especially to family members who are sick. Caregivers draw guidance from the Quran and the actions of Prophet Muhammad to ease the social, psychological, and physical suffering of patients. Both Muslim and non-Muslim friends and neighbors are spiritually inspired to visit and assist those in need, which helps in their recovery process.[48] The study looked at informal caregivers who might need formal education about the psychological and social aspects of patient care. It found that these caregivers often use positive religious approaches, but they may not fully consider the negative financial and physical effects of caregiving because of strong religious beliefs in their community. The burden they feel is seen as a moral obligation under Sharia law. The research suggests that people rely on religious coping methods when dealing with tough situations.[12] In situations like these, religion can profoundly influence by effectively bolstering and magnifying positive emotions and experiences during stress and the weight of caregiving. Its function centers on elevating well-being rather than directly shielding caregivers from adverse consequences.

Religion can provide support for caregivers, helping them find purpose and meaning in difficult situations. For instance, caregivers of terminally ill cancer patients who used religious beliefs as coping mechanisms experienced greater caregiving burden but also reported higher satisfaction with the care they provided.[49] The study suggests that community mental health providers should pay attention to caregivers who often use religious coping methods, as they might need extra training. The findings don't blame religious coping for differences in outcomes. Instead, they suggest that educating and reaching out to these caregivers could improve their situation. The smaller sample size in this study compared to previous ones could also explain the differences.

The present study found that caregivers with worse spiritual health reported heavier care burdens. Consistent with the current conclusion, recent research by Torabi Chafjiri et al. found that caregivers of elderly individuals with stroke in Iran experienced less stress when they had a spiritual outlook.[40] Previous studies has also found a negative correlation between spiritual well-being and caregiving responsibilities.[26,50] One aspect of spirituality illustrated here is that of spiritual wellness. Care providers for chronic patients, in particular, can benefit from attending to their spiritual well-being to cope with the stresses inherent in their duties.[20] Participation in religious or spiritual activities gives an interpretive framework for seeking meaning and opens doors to social support networks.[51] Spirituality plays a crucial role in mitigating the effects of caregiving for family caregivers of patients with neurological impairments. The relationship between spirituality and resilience among family caregivers following SCI and traumatic brain injury has been demonstrated in recent research.[52,53] Spiritual health is essential to reduce caregiver burden and improve their physical health. Consequently, the results of the study in Brazil demonstrated that people with high spirituality experience less care burden.[54] In light of the results, it becomes clear that interventions grounded in spirituality exhibit substantial potential as impactful measures to alleviate and reduce the burden of care among individuals in caregiving roles.

The study discovered that caregivers who were the patient's sister or children experienced a greater burden of care compared to those who were the patient's grandmother. This suggests that the caregiver-patient relationship type is another factor influencing care burden. It's not surprising that older individuals, like grandmothers, have more experience in caring for stroke patients, as they are better able to handle environmental stimuli and discomfort while providing care with less personal strain. According to research by Mirhosseini et al., the stress on Iranian caregivers who are the patient's father or grandmother is higher than on caregivers who are the patient's child, parent, or sibling.[30] Differences in diseases contribute to research

discrepancies, with stroke patients and their caregivers facing longer treatment and rehabilitation compared to COVID-19 patients, leading to a higher care burden. Older individuals may experience a lighter burden due to greater adaptability. Caregivers, especially in chronic conditions, may suffer negative psychological impacts like mental fatigue. COVID-19's contagiousness and potential lethality significantly affect caregivers' lives, particularly for older adults who are more vulnerable. Hence, younger individuals may need to take on the responsibility of caring for COVID-19 patients, leading to temporary disruptions in their economic, social, and vocational affairs.[55] Penning and Wu showed that the burden of care was most significant for those who cared for their children and parents, respectively in Canada.[56] Each family member's productivity is impacted by the prevalence of chronic disorders like stroke and their subsequent effects.[57] Nursing care is essential for families dealing with the psychosocial effects of chronic disease. Therefore, it is of utmost importance to support the family members of individuals who have experienced a stroke.[58] Recognizing the unique challenges faced by younger female family caregivers, there's a growing need for targeted educational interventions to address their specific needs. Tailored educational programs can offer valuable guidance, equipping them with the necessary knowledge, skills, and support to navigate the complexities of caregiving responsibilities.[59] By recognizing and attending to the specific needs of female caregivers and young individuals in this role, educational interventions contribute to enhancing their overall well-being, bolstering resilience, and fostering effective caregiving practices.

When a loved one faces a severe illness, families often need to adapt to a new social and spiritual reality. This typically involves reorganizing their structure, responsibilities, and emotional bonds.[60] In regions like Asia and underdeveloped countries, including Iran, where Islam is widely practiced, families are traditionally expected to care for sick members.[61] Family stability is crucial for societal success, especially in cultures with strong familial ties. Cross-cultural research reveals differences in caregiving practices between Western and Eastern nations.[62] In Asian countries, limited formal facilities and social services lead family caregivers to rely on familial resources and support.[63] In Iran, cultural teachings, religious beliefs, and strong family bonds drive significant care provided by family members. Social structures further reinforce the essential role of families in patient care.[64]

4.1 | Limitations and strengths

The study faced several limitations. Given that the present research was conducted in Iran within a specific cultural and religious context, the generalization of results to other contexts may be limited. Although a sampling method based on census data was employed, the sample size was restricted, and the study was carried out within a limited time frame. Hence, future research endeavors are recommended to consider implementing a longitudinal design and incorporate a larger sample size. Additionally, it is crucial to acknowledge that the data related to care burden, spiritual health, and religious coping in this research was obtained through self-report measures provided by the participants. Therefore, it is important to recognize that the data in this study may be susceptible to response bias, potentially limiting the external validity of the research findings. Despite these limitations, this study represents the only research conducted in Iran examining the impact of religious coping and spiritual health, two significant variables deeply rooted in religion and spirituality within the Iranian cultural context, in predicting the burden of care experienced by caregivers of stroke patients.

5 | CONCLUSION

Caregivers of stroke patients endured a significant level of care burden that was predicted by lower spiritual well-being, positive religious coping, and their relation with patients. To effectively support both caregivers and patients, it's essential to implement specific interventions such as psychoeducational based on resilience enhancement, spiritual therapy, and coping strategies. Involving caregivers in discussions about patient care can help reduce potential negative impacts on home care such as care burden. Moreover, interventions should integrate spirituality and religion, given their significant influence on the burden of care. Tailored support groups addressing caregivers' spiritual and emotional needs can offer valuable assistance in navigating the challenges of caregiving. Prioritizing caregiver support and involving them in care discussions can optimize home care outcomes and improve the overall well-being of both patients and caregivers.

AUTHOR CONTRIBUTIONS

Seyedmohammad Mirhosseini: Conceptualization; methodology; project administration; writing—review and editing; writing—original draft. **Fatemeh Sadat Hosseini Nezhad**: Conceptualization; investigation; writing—original draft; writing—review and editing. **Ali Haji Mohammad Rahim**: Conceptualization; writing—original draft; investigation. **Mohammad Hasan Basirinezhad**: Formal analysis; investigation. **Amirheidar Bakhshiarab**: Investigation; writing—review and editing; writing—original draft. **Maryam Saeedi**: Writing—original draft; investigation. **Hossein Ebrahimi**: Methodology; supervision; writing—review and editing.

ACKNOWLEDGMENTS

The current research was derived from a research project approved by Shahroud University of Medical Sciences (Code: 14010025). We would like to thank the caregivers, their patients, and the deputy of Shahroud University of Medical Sciences for their contributions to conducting the study.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ETHICS STATETMENT

This study followed the principles outlined in the Declaration of Helsinki, which prioritizes the safety and well-being of participants. Participants were allowed to withdraw from the study at any point, and their participation was entirely voluntary. Additionally, measures were taken to ensure the confidentiality of their personal information. The confidentiality of caregivers' information was preserved through coding, rendering it unidentifiable. Verbal and written informed consent was obtained from all participants. Furthermore, the authors of this study aim to diligently follow the (Committee on Publication Ethics) COPE guidelines while disseminating their findings. The Ethics Committee of Shahroud University of Medical Sciences has authorized the current study under the code (IR.SHMU.REC.1401.111).

TRANSPARENCY STATEMENT

The lead author Hossein Ebrahimi affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

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How to cite this article: Mirhosseini S, Hosseini Nezhad FS, Haji Mohammad Rahim A, et al. Care burden and the predictive role of spiritual well-being and religious coping: a cross sectional study among Iranian family caregivers of patients with stroke. *Health Sci Rep*. 2024;7:e2155. doi:10.1002/hsr2.2155