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ORIGINAL PAPER

Relationship Between Care Burden and Religious Beliefs Among Family Caregivers of Mentally Ill Patients

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Abstract

Families are considered as primary sources of care for individuals suffering from mental disorders. However, one of the major stresses in families is the infliction of a family member with mental illnesses causing dysfunction in health dimensions or generally their quality of life. Currently, most experts believe that religion can affect physical health and other aspects of human life. So, the aim of this study was to investigate "the relationship between care burden and religious beliefs among family caregivers of mentally ill patients." This cross-sectional study was carried out in Iran on 152 families with mentally ill patients who were hospitalized in psychiatric wards. The sampling method was nonprobability and consecutive sampling method. The data collection instruments included a demographic characteristic questionnaire, Religious Beliefs, and Zarit Care Burden Questionnaires. The mean score for care burden was 30.99 (SD = 16.45). 5.9% of the participants reported a low level, and 39.5% experienced a moderate level of care burden. Moreover, the mean score for religious beliefs was 115.5 (SD = 13.49), and majority of the participants (70.4%) were endowed with strong religious beliefs. There were no significant associations between care burden and intensity of religious beliefs among the study samples (P = 0.483). Considering the results of this study indicating experience of moderate-to-high levels of care burden in families with mentally ill patients, it is recommended to consider such families and their religious beliefs as contributing factors in coping with challenges of mental disorders.

Keywords Burden of illness · Religious beliefs · Family caregivers · Mental patients · Iran

Introduction

Mental disorders have always existed in human communities, and no one can claim to be immune to such problems at any time. The given disorders may also lead to reduced social functioning among affected individuals and also impose high costs on governments and support systems (Ministry of Health 2008; Mousavi et al. 2015). Mental disorders and drug-dependent ones are similarly considered as common, debilitating, and costly

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disorders. According to the World Health Organization (WHO), about 450 million people worldwide suffer from a mental or behavioral illness, and one out of three or four individuals may experience mental disorders during their lifetime (Heydari et al. 2014). Likewise, statistics published by different countries suggest the relatively high prevalence of mental disorders in such communities. For example, 26.2% of Americans aged 18 years and over, i.e., one out of four individuals, struggle with a diagnosable and obvious mental disorder (Kessler et al. 2005). Moreover, mental disorders are taken into account as one of the causes of disabilities in this country (The World Health Organization 2008). In this domain, epidemiologic studies on mental disorders in Iran have similarly reported the prevalence rate of such mental disorders between 1.9 and 26.9% (Ziaadini and Rajaeenejad 2005). For example, the results of an investigation in 1999 recounted the prevalence rate of mental disorders in the city of Tehran by 21.5% and it was reported equal to 21% in all cities in Iran (Noorbala et al. 2014). The findings of another study in 2011 also illustrated the prevalence rate of types of mental disorders by 20.8, and such value was equal to 25.7 and 15.9% in women and men, respectively (Sharifi et al. 2015).

Mental disorders are one of the common problems in communities causing various disorders including disturbances in the overall functioning of individuals and communities and creating various complications in different domains. In some cases, such complications are beyond patients' disorders, and undoubtedly, one of the domains heavily affected by such disorders are patients' families (Motamedi 2008). Families are considered as primary sources of care for individuals suffering from such mental disorders, in a way that more than 60% of clients discharged from mental health clinics come back to their own original families (Varcarolis 2013) to provide them with housing, financial support, companionship, emotional support, as well as healthcare services (Pickett-Schenk et al. 2006). However, one of the major stresses in families is the infliction of a family member with mental illnesses causing dysfunction in health dimensions or generally their quality of life (Shah et al. 2017). From the systematic perspective, family is a system in which dysfunction or illness of a family member can have effects on other family members because family acts as a unit constituting a whole through relationships (Friedman et al. 2003). Furthermore, healthcare providers have realized that mental disorders and their treatments can affect not only mentally ill patients but also other members of their family in a way that their overall quality of life is changed (Lund 1999). Additionally, care burden resulting from mental disorders is among other challenges and problems accompanying these disorders. A study conducted on burden of care showed that mental disorders had comprised 14.5% of care burden of all illnesses, and they were placed together with cardiovascular diseases at the second ranking after accidents (Ministry of Health 2008).

Care burden is a complex and general concept, and it is also defined as a negative reaction experienced by caregivers due to providing care (Mohamed et al. 2010). Care given to mentally ill patients can disturb family life as well as individuals' vitality (Chadda 2014). Mental and psychological pressure among caregivers is also a three-dimensional concept resulting from interference in the quality of interpersonal relationships, negative impacts on role-plays and responsibilities, and consequently incidence of anxiety and worries (Navidian et al. 2001; Pahlavanzadeh et al. 2010). The findings of the study by Steele et al. also revealed that 40–55% of patient caregivers were suffering from mental and psychological pressures (Steele et al. 2010). Therefore, early detection of care burden among caregivers can play a decisive role in promoting health (Abbasi et al. 2011). Accordingly, care burden of mentally ill patients can cause numerous outcomes and complications among caregivers (Covinsky et al. 2003).

In response to symptoms of mental disorders as well as consistent and continuous care provided for mentally ill patients at home, family caregivers may suffer from numerous mental and psychological problems and experience multiple pressures in their relationships. Although some believe that playing the role of a caregiver is accompanied by rewards and positive reinforcement (Kristjanson and Aoun 2004; Navidian et al. 2010), the results of current research studies have shown that diversity and intensity of caregiving roles may lead to mental and psychological problems in family caregivers of patients (Grandon et al. 2008; Navidian and Bahari 2008). If such people are not treated and abandoned with no interventions, their physical and mental health can reduce to a hidden disease (Navidian et al. 2010).

Currently, most experts believe that religion can undoubtedly affect physical health and other aspects of human life (Musarezaie et al. 2013). Studies have also demonstrated that religious beliefs can be considered as a factor for mental relaxation and that lack of religion or lower levels of religious beliefs can result in high levels of depression and suicidal thoughts (Rabie Siahkali et al. 2014). It should be noted that religion can help humans understand the meaning of life events, especially painful and anxiety-provoking ones. It can also teach believers how to adapt with the huge collection of the world formed before their existence imposing its rules (Karimollah and Agha-Mohammadi 2003). To achieve all the goals, mental health requires the use of religious supports at all levels of primary, secondary, and tertiary prevention (Vaillant et al. 2008).

Providing support to families of mentally ill patients and meeting their needs are among the duties of all care team members. Through identifying and prioritizing needs of families with patients suffering from mental disorders, the given care team can aid families in terms of appropriate planning as well as us of nursing process to meet the needs. In light of the above-mentioned issues and considering the special context of care in Iran as well as the need for an accurate and comprehensive review of important concepts such as care burden, anxiety, and depression in families with mentally ill patients and its related factors, the researchers tried to conduct the present study to determine the relationship between care burden and religious beliefs among family caregivers of mentally ill patients.

Materials and Methods

This study was an epidemiologic cross-sectional research of descriptive-correlational type carried out in Iran for determining the relationship between religious beliefs and care burden among family caregivers of patients with mental disorders. The statistical population of this study included all family caregivers of mentally ill patients hospitalized in the departments of psychiatry and referred to psychiatric hospitals in the city of Ahvaz during the study. The study sample also consisted of 152 family caregivers selected from the statistical population considering the inclusion criteria: (1) informed consent to participate in the study, (2) no history of mental disorders, (3) age range from 18 to 50 years, and (4) sufficient literacy to answer the questions.

The data collection method in this study was in the form of a field survey conducted through distribution of questionnaires and their completion. The data collection instruments also included a demographic characteristic questionnaire, Religious Beliefs Questionnaire, and Zarit Care Burden Interview.

The demographic characteristics questionnaire for family caregivers included several items such as gender, age, marital status, level of education, employment status, family kinship with patient, and care duration, and such a questionnaire for patients contained the

variables of age, gender, marital status, level of education, employment status, duration of illness severity, and frequency of hospitalization.

The Persian version of Religious Beliefs Questionnaire developed by Karimollah and Aghamohammadi (2003) included 29 items in a five-point Likert-type scale (from *strongly disagree* to *strongly agree*) in which 1 and 5 are assigned to *strongly agree* and *strongly disagree* options, respectively. Score range obtained in this questionnaire was from 29 to 145. In this respect, scores between 110 and 145 showed strong religious beliefs, scores from 69 to 109 represented moderate religious beliefs, and scores of 29–64 were associated with poor religious beliefs (Karimollah and Agha-Mohammadi 2003; Rabie Siahkali et al. 2014). The validity and the reliability of this questionnaire were also measured by Rabie Siahkali et al. (2014) through content validity method and Cronbach's alpha coefficient. Correlation between the items was similarly measured after a laboratory sampling with 34 items whose calculated coefficient for the given instrument was equal to 0.83 representing correlation between the questionnaire items (Rabie Siahkali et al. 2014).

Zarit Care Burden questionnaire was designed by Zarit et al. (1986) to measure burden of care. The given questionnaire included 22 items about personal, social, emotional, and economic pressures completed through interviews with family caregivers by the researcher. Caregivers' responses to each statement are measured in a five-point Likert-type scale (from *never* to *always*) scored from 0 to 4. In response to each item, the respondents choose one of the options of *never* (0 point), *rarely* (1 point), *sometimes* (2 points), *often* (3 points), and *always* (4 points). Accordingly, the total scores varied from 0 to 88 and lower scores showed lower burden of care. In the Persian version of the Zarit Care Burden questionnaire, total score by each caregiver also showed their level of care burden (Pahlavanzadeh et al. 2010). The lowest score for care burden, i.e., 0, meant no care burden, and the highest score, i.e., 88, meant the highest care burden. Scores from 61 to 88 reflected high care burden, and scores from 31 to 60 and those lower than 30 showed moderate and low care burden (Bagherbeik Tabrizi et al. 2015).

In accordance with its cultural conditions, the validity and the reliability of the Zarit Care Burden questionnaire in Iran were measured by Navidian et al. (2008). In this regard, the validity of the questionnaire was investigated through content validity method and its reliability was examined via test–retest method whose reliability coefficient was equal to 94% (Navidian and Bahari 2008; Pahlavanzadeh et al. 2010).

To analyze the data, descriptive statistics including frequency tables, diagrams, and central distribution indices as well as analytic statistics such as Chi-square test (X^2), Pearson or Spearman correlation coefficients, *t* test, one-way analysis of variance (ANOVA) or their nonparametric equivalents were used. The level of significance was considered less than 0.05, and data analysis was performed using SPSS version 22 software.

Ethical Considerations

After obtaining permission from the School of Nursing and Midwifery and Ahvaz Jundishapur University of Medical Sciences as well as getting the code number of IR.AJUMS.REC.1395.849 from the Research Ethics Committee of Ahvaz Jundishapur University of Medical Sciences, the sampling was conducted. Moreover, the purpose of the present study and the noncompulsory participation of the samples in this research were explained, and the respondents were ensured in terms of confidentiality of data. Informed written consent in order to participate in the study was also obtained.

Results

The findings of the study revealed that the majority of family caregivers of patients with mental disorders participating in the present study (63.8%) were male and others were female. In terms of age, 50% of the participants were between 30 and 50 years old. Other demographic characteristics of the study samples are presented in Table 1.

Considering the care burden imposed on family caregivers of mentally ill patients, the mean score for care burden among the study samples was 30.99 with a standard deviation of 16.45 and with 1 and 70 as the minimum and maximum scores, respectively. Moreover, bulk of the study samples (54.6%) reported their care burden at a low level, while the given level was reported by 5.9% of the participants at a high level. Additionally, 39.5% of the families participating in this study had experienced a moderate level of care burden (Table 2).

Given the intensity of religious beliefs among family caregivers, the mean score for such beliefs among the study samples was 115.5 with the standard deviation of 13.49 in

Table 1 Frequency distribution and percentage of demographic characteristics of study samples

Variable	Frequency	Percentage
Gender		
Male	98	63.8
Female	55	36.2
Age		
Below 30 years of age	44	28.9
30–50 years of age	76	50
Over 50 years of age	32	21.1
Marital status		
Single	47	30.9
Married	97	63.8
Divorced	4	2.6
Widowed	4	2.6
Employment status		
Public service	52	34.2
Housewife	27	17.8
Self-employed	38	25
Unemployed	35	23
Level of education		
Illiterate	12	7.9
Junior high school	46	30.3
High school diploma	46	30.3
Associate's degree	16	10.5
Bachelor's degree and higher	32	21.0
Family kinship with patient		
Mother	13	8.6
Father	13	8.6
Sister	18	11.8
Brother	52	34.2
Other	56	36.8

Table 2 Frequency distribution of levels of care burden and religious beliefs intensity among the study samples

Variable	Level	Frequency	Percentage
Care burden intensity	Low	83	54.6
	Moderate	60	39.5
	High	9	5.9
	Total	152	100
Religious beliefs intensity	Poor	0	0
	Moderate	45	29.6
	Strong	107	70.4
	Total	152	100

Table 3 Intensity of religious beliefs and care burden imposed on families

	Care burden			Total
	Low	Moderate	High	
Religious beliefs				
Moderate	22 (48.9)	21 (46.7)	2 (4.4)	45 (100)
Strong	61 (57)	39 (36.5)	7 (6.5)	107 (100)
Total	83 (54.6)	60 (39.5)	9 (5.9)	152 (100)
P value	0.483			

which the minimum and maximum scores were 72 and 145, respectively. The majority of the participants (70.4%) were endowed with strong religious beliefs, and none of the respondents had evaluated themselves as poor in terms of religious beliefs (Table 3).

Investigating the relationship between religious beliefs and care burden among family caregivers in this study showed that most family caregivers had strong religious beliefs (57%) and that most of participants with moderate religious beliefs (48.9%) were at poor levels in terms of care burden. Moreover, the results of the Chi-square test between care burden and intensity of religious beliefs among the study samples did not show a statistically significant relationship ($P = 0.483$) (Table 3).

Finally, no significant relationship was found between care burden and the variables of age, gender, marital status, level of education, employment status, and family kinship with patients ($P > 0.05$).

Discussion

Families with mentally ill patients are always grappling with various physical, psychological, social, and familial challenges. Among the factors affecting the incidence of these problems in families can be long-term and chronic nature of mental disorders, complex and severe nature of symptoms in patients, disconnection with reality, disability to maintain jobs, as well as effective communication with society followed by problems related to treatments and their costs. Among the very important issues is mental state of family members whose ignorance can predispose the incidence of disorders in family members followed by the emergence of relevant problems. Thus, the main purpose of the present study was to investigate the relationship between religious beliefs and care burden among families with mentally ill patients referred to hospitals in the city of Ahvaz in 2016.

The findings of this study showed that more than half of the participants had reported their care burden at low levels and 45.4% of them had found care burden imposed on family caregivers taking care of patients at moderate-to-high levels. Accordingly, it seems that all family caregivers of individuals with mental disorders can experience some degree of care burden resulting from care for mentally ill patients.

Burden of care from mental disorders is considered as one of the most important challenges and problems accompanying them, which can have adverse effects on many families and their functioning in a way that care for mentally ill patients may greatly impair family life and disturb individuals' vitality (Ennis-2013). Moreover, care burden of patients with mental disorders can cause numerous consequences and adverse complications on their caregivers (Covinsky et al. 2003). In this regard, the results of the study by Abbasi et al. showed that 45% of caregivers had experienced care burden of higher than average (Abbasi et al. 2013). Likewise, the findings of the investigation by Mohammed et al. on caregivers of mentally ill patients revealed that caregivers had experienced a significant level of care burden (Mohammed et al. 2015), and the results of the studies by Riley-McHugh et al. (2016) and Garcia-Alberca et al. (2012) on families of patients with mental disorders such as schizophrenia and Alzheimer's disease showed that most of the participants had experienced high levels of mental stress and burden of care for patients with mental disorders. According to the investigation by Haresabadi et al. on families of patients with schizophrenia, 35.4 and 51.4% of these families had experienced low-to-high levels of care burden (Haresabadi et al. 2012), which was consistent with the results of the present study. This means that care for mentally ill patients in families can impose a burden with a negative impact on psychological, social, and economic relationships. This issue can also make caregivers suffer from mental and psychological stresses and tensions, and thus, they cannot properly do their duties and take care of patients which can have a negative effect on patients and exacerbate their status. It should be noted that this defective cycle can still continue.

Considering religious beliefs in families with mentally ill patients hospitalized in departments of psychiatry, the findings of this study demonstrated that the majority of families examined had strong religious beliefs and that none of the study samples had reported poor levels of religious beliefs. This issue was by and large expected in the cultural and social contexts of Iran as a Muslim nation and the city examined. It seems that religious beliefs can play an important role in the process of accepting patients with mental disorders and providing care for them as well as admitting damages suffered as a result of such disorders because patient care in this respect is taken into account as a very good deed and also symptoms and abnormalities in patients are seen as divine providence and pre-ordained fate within the religious culture of Muslims. In general, religious beliefs are considered as important factors to obtain mental relaxation (Rabie Siahkali et al. 2014). In fact, a religious person communicates with a creation source affecting human life and natural things. The link and the relationship that exist between human psyche and their beliefs and the role of religion as a set of practices and convictions in mental health are also undeniable. Moreover, religious beliefs and religion can give humans a sense of relaxation; they can fill moral, emotional, and spiritual gaps in individuals and communities and also establish a firm base for humans in the face of life problems and deprivations (Asgari et al. 2012). The results of the study by Murray-Swank et al. on individuals taking care of patients with mental disorders also showed that families had spent more time on spiritual support reflecting importance of religious beliefs (Murray-Swank et al. 2006). Furthermore, Rabi Siahkali et al. found that 86.6% of families examined as ones taking care of

patients hospitalized in the intensive care units had reported moderate-to-strong levels of religious beliefs which were in line with the results of the present study.

Investigating the relationship between religious beliefs and care burden among families with mentally ill patients hospitalized in departments of psychiatry in this study indicated no relationship between these two variables considering statistical tests ($P > 0.05$) in spite of the fact that the study participants had strong levels of religious beliefs and the percentage of individuals experiencing moderate levels of care burden was high. This issue could be due to the strong levels of religious beliefs in all study samples. It should be noted that family caregivers as the main providers of care for a sick or disabled family member are often subjected to negative physical and psychological consequences and different problems. Likewise, families get through different levels of care burden and burnout wherein effective coping and religious beliefs are among the most important ones. Moreover, the study by Sharifi and Fatehizadeh (2012) suggested a relationship between religious coping and patient care burnout in which religious coping could reduce burnout among caregivers. The results of the study by Murray-Swank et al. on caregivers of patients with severe mental disorders demonstrated that personal religious beliefs and supports were taken into account as important factors in the domain of coping with the disease among affected family members and lessening care burden among them (Murray-Swank et al. 2006).

Finally, this study due to practical reasons has provided an important strategy to assist in handling of care burden of caregivers for better interaction and collaboration with mentally ill patients, nurses and healthcare providers. Although the absence of large sample size limited our ability to generalize the finding of this study and might be viewed as a limitation, the most important strength of this research is the crucial and significant role of religious beliefs among family caregivers of mentally ill patients that deducted the burden of care of them.

Conclusion

The findings of this study demonstrated that 45.5% of the study samples had experienced moderate-to-high levels of care burden. In terms of religious beliefs, most of the participants had also strong religious beliefs, and there was no one with poor beliefs in this respect. Moreover, the results revealed that low levels of care burden were higher among the study samples with strong religious beliefs although this relationship was not statistically significant. Considering the results of this study indicating tolerance and experience of moderate-to-high levels of care burden in families with mentally ill patients, it is recommended to consider such families and their religious beliefs as contributing factors in healthcare processes coping with challenges of family members affected with mental disorders.

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Compliance with Ethical Standards

Conflict of interest The authors have no financial conflicts of interest relevant to this study.

Human and Animal Rights All procedures performed in studies involving human participants were in accordance with the ethical standards of the institution or practice at which the studies were conducted. This article does not contain any studies with animals performed by any of the authors.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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