RESEARCH ARTICLE

Spiritual/Religious Coping Strategies and their Relationship with Illness Adjustment among Iranian Breast Cancer Patients

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Abstract

Background: Use of spiritual/ religious resources is one important coping strategy for breast cancer patients. However, the relationship between spiritual coping and adjustment to cancer diagnosis has not been well investigated among Iranian breast cancer patients. Materials and Methods: This descriptive-correlational study was undertaken among 266 breast cancer patients referred to two educational centers in north-western Iran. They were selected using a convenience sampling method. The Iranian Religious Coping Scale and Iranian Coping Operations Preference Enquiry were used for data collection. The data were analyzed using SPSS version 13.0. Results: The study findings showed that Iranian cancer patients had a high level of spiritual coping. Also, positive religious coping strategies were used more frequently than negative approaches. In addition, there was a positive and significant correlation between spiritual coping and adjustment to cancer among study participants. Conclusions: Using spiritual coping strategies may play a vital role in adjustment process in patients with breast cancer. Therefore, having spiritual counseling and incorporating coping strategies into the treatment regimen may be effective for enhancing illness adjustment in such patients.

Keywords: Spiritual/religious coping - adjustment - breast cancer - Iran

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Introduction

Breast cancer is one of the main causes of cancer-related death among women living in less developed countries (Lyon, 2013; Abdollahzadeh et al., 2014). The diagnosis of breast cancer is accompanied by many psychological disorders for women. Depression, anxiety, tiredness, negative thought, feeling loneliness, sexual problems, impaired body image, lowered quality of life, uncertainty about cancer and its recurrence, and fear of death are some of psychological disorders of breast cancer diagnosis (Montgomery and McCrone, 2010). Breast cancer patients need different coping skills to dealing with such psychological consequences. These coping strategies including but not limited to positive cognitive restructuring, wishful thinking, emotional expression, disease acceptance, increased religious practice, family and social support, and yoga and exercise (Aldwin, 2007; Al-Azri et al., 2009).

Religion and spirituality play an essential role in patients' coping with cancer (Sajadiyan et al., 2011; Avestan et al., 2015). Also, spirituality can be important to reduce anxiety in patients with breast cancer and improve their quality of life and coping strategies, as well as the body image (Janiszewska et al., 2008; Atef-Vahid et al., 2011; Paiva et al., 2013). According to the findings of other related studies spirituality and religion play an important role in maintaining and enhancing health status in breast cancer patients (Schreiber and Brockopp, 2012). Religious/spiritual coping is an important strategy for coping with cancer, especially for the patients undergoing chemotherapy (Mesquita et al., 2013).

Religious/ spiritual coping has been defined as the use of ongoing spiritual behaviors/ perceptions that help people cope with stressful life events. These coping strategies may include prayer, making decision to have close relationship with God / higher power, and read religious texts or talking with clergyman (Pargament et al., 1998; Koenig et al., 2001). The findings of studies in UK and Iran showed that newly diagnosed breast cancer patients resorted to religion and associated belief to cope with their disease (Taleghani et al., 2006; Thune-Boyle et al., 2013). Also, the findings of systematic review showed that African Americans are more likely to use spiritual coping strategies to deal with breast cancer (Yoo et al., 2014).

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It should be noted that the findings of previous related studies did not support the beneficial effects of religious adjustment. For example, the findings of a study by Hebert et al. (2006) showed that spiritual/religious coping was accompanied by poor mental health, depression and lower life satisfaction over time (Hebert et al., 2009). Also, there is strong association between the use of negative religious coping and suicidal thoughts in patients with advanced cancer (Trevino et al., 2014). Another study showed that women who were more involved in religion and spiritual activity in pre-diagnosis period had more psychological distress during 1 year post-surgery (Gall et al., 2009).

Lack of consistency among previous studies on this topic is well shown in the findings of a systematic review study (Thune-Boyle et al., 2006). Also most of studies on spiritual coping have been conducted in western countries among Christian and Jewish people and there are few information regarding women living in the Middle East countries (Hayati F 2008; Sajadiyan et al., 2011). Accordingly, the aim of this study was to examine the spiritual/religious coping strategies and their relationship with illness adjustment among patients with breast cancer in the Iran.

Materials and Methods

This descriptive-correlational study was conducted in both outpatients and hospitalized wards of two hospitals affiliated to Tabriz University Medical Sciences in Tabriz, the capital of East Azerbaijan province in north eastern of Iran. The study population included all patients who were referred to the centers during the study period and met the following criteria: (a) having confirmed breast cancer diagnosis; (b) be Muslim and at least 18 years old; (c) willing to participate in the study; and (d) at least 3 months passed since they were aware of diagnosis. The sample size was estimated to be 266 patients based on findings of a previous study (13) with an alpha level of 0.05, 80% of power and correlation coefficient of 0.17. Considering a 10% attrition rate, 286 eligible patients were invited to participate in the study using convenience sampling. Finally, 266 cancer patients accepted to be enrolled (response rate = 93%).

The instrument for data collection composed of three parts. The first part was a 20-items checklist to collect the demographic/disease related characteristics of patients. The second part was Iranian Religious Coping Scale (Aflakseir and Coleman, 2011) developed by Aflakseir and Coleman (2011) based on Pargament Religious Coping Scale (1997) (Pargament et al., 1998). This scale had been validated in most of Jewish and Christian societies. The Iranian version of Religious Coping Scale was developed based on Pargament Religious Coping Scale to measure Iranian religious coping. This scale has 22 items classified according to a five-point Likert scale ranging from 0(not at all) to 4 (always true). These items were developed based on Muslims texts and Koran and also interview with Iranian Muslims who had encountered with stressful situations. This scale has five sub-scale including Religious Practice (6 items), Negative Feelings toward God (4 items), Benevolent Reappraisal (6 items), passive religious coping strategies (3 items) and active religious coping strategies (3 items). In this study the standard Persian version of this scale was used.

The third part was Coping Operations Preference Enquiry (COPE) developed by Carver et al. (1989) (22).

Table 1. Response of Participants to all Items of Iranian Religious Coping Scale

Subscale 1: Religious Practice		
Phrase	Mean	SD
Sought comfort and guidance by reading the Qur'an.	2.31	1.29
Appealed to Prophet and Imams.	2.75	1.4
Sought tranquility by remembrance of God.	2.81	1.49
Read certain prayers.	2.6	1.26
Sought help with prayer.	2.97	1.28
Attended pilgrimage when I felt upset.	2.69	1.33
Total	2.69	1.26
Subscale 2: Negative Feelings toward God		
Realized that God cannot answer all of my prayers.	1.41	1.42
Felt God had forgotten me (Wondered if God really cares).	1.46	1.52
. I was disappointed with God's grace and mercy	1.01	1.35
I expressed anger at God for letting this problem happened.	1.5	1.42
Total	1.35	1.35
Subscale 3:Benevolent Reappraisal		
Saw my situation as God's will.	2.56	1.31
Sought patience because God is with those who patiently persevere	2.61	1.3
Viewed my situation as a trial from God.	2.26	1.34
Thought suffering may bring me closer to God.	2.37	1.39
My suffering was purification of my sins.	2.23	1.27
Total	2.42	1.39
Subscale 4:Passive		
Didn't do much, just expected God to solve my problems for me.	0.88	1.19
Was destined to have this situation, so I didn't try to change it.	0.39	0.75
Didn't try to do much; just assumed God would handle it.	0.72	1.1
Total	0.66	0.89
Subscale 5:Active		
Did everything I could, then I ask God to sort out it himself?	2.85	1.2
Turned the situation over to God after doing all that I could.	2.77	1.23
Did what I could and turned the rest over to God.	2.72	1.27
Total	2.78	1.19
Total score	1.98	0.39

This scale had been validated by Jalalinejad et al. (2012) in Iran (Carver et al., 1989). COPE has five approaches including Cognitive, Behavioral, Emotion, Avoidance-Cognitive, and Avoidance-Behavioral strategies. The first approach consist of six subscales including positive reinterpretation and growth, suppression of competing activities, acceptance, restraint coping, active coping, planning for future. The second approach has three subscales including focus on & venting of emotions, seeking social support for instrumental, and seeking social support for emotional reasons. The subscale of Approach-Emotion is turning to religion. The fourth strategy subscales are mental disengagement, behavioral disengagement, and denial. The fifth strategy subscale is humor. Each of these subscales classified according to a four-point Likert scale ranging from 1(never do this) to 4 (always do this). Higher score indicating more use of that specific coping strategy. In this study the standard Persian version of this scale (Iranian Coping Operations Preference Enquiry) was used (jalalinejad et al., 2012).

Before the data collection, the study proposal was approved by the regional ethics committee of Tabriz University of Medical Sciences. Next, in a period of 3 months researchers were referred to both hospitals. Patients who met criteria for the study were identified and all eligible patients were informed and invited to participate. All patients who participated in the study gave informed consent according to ethic committee guideline. To ensure whether patients knew their final diagnosis or not at first, patient relatives were asked. Then, the accuracy of responses was verified by patients during the interview. Willing patients were asked to participate in a private interview for data collection.

Data were analyzed using SPSS version 13. Descriptive statistics such as the mean and standard deviation were used to describe demographic/disease-related data. Relationship between patients' spiritual coping and adjustment to cancer was assessed by Pearson's correlation.

Table 2. Response of participants to all items of Coping Operations Preference (COPE)

Scales and subscales	Mean	SD
Approach- Cognitive Strategy	2.89	0.67
Subscale 1: Positive reinterpretation & growth	2.7	0.85
Subscale 2: Suppression of competing activities	3	0.82
Subscale 3: Acceptance	2.51	0.56
Subscale 4: Restraint coping	2.77	0.71
Subscale 5: Active coping	3.25	0.75
Subscale 6: Planning	3.15	0.85
Approach- Behavioral Strategy	2.82	0.41
Subscale 1: Focus on & venting of emotions	2.81	0.5
Subscale 2: Seeking social support for instrumental	3.12	0.79
Subscale 3: Seeking social support for emotional reasons	2.54	0.72
Approach-Emotion Strategy	3.38	0.96
Subscale: Turning to religion	3.38	0.96
Avoidance-Cognitive Strategy	2.08	0.29
Subscale 1: Mental disengagement	2.51	0.53
Subscale 2: Behavioral disengagement	1.69	1.11
Subscale 3: Denial	2.04	0.67
Avoidance-Behavioral Strategy	1.1	0.31
Subscale: humor	1.1	0.31
Total score	2.46	0.39

Results

All of the participants were female and Muslims. Also, most of them were married (79.3%), housewife (98.9%), lived with their spouses and children (80.8%), had less than a diploma education (39.1%) and had income less than cost (78.2%). The mean of participants age (years) and time passed since diagnosis (months) were 46 and 25, respectively. About 4.5% percent of patients had stage I disease, 12.4% stage IIa, and 22.6% stage IIb, 17.7% stage IIIa, 15.4% stage IIIb, 7.9% stage IIIc, and 15.5% stage IV, respectively. Also, 87%, 58% and 91% of patients received chemotherapy, radiotherapy, and surgery as part of their planned treatment.

Table 1 shows the mean (SD) of patients responses to items of Iranian Religious Coping Scale. As shown in Table 1, the mean (SD) of overall score for spiritual/religious coping was 1.98 (0.39). Also, active religious coping strategies (2.78), religious practice (2.69), and benevolent reappraisal (2.41) had higher mean scores than other subscales. Negative feelings toward God (1.35) and passive religious coping strategies (0.66) had lower mean scores than other strategies which show participants use of positive religious coping than negative approaches.

The overall mean (SD) score of patients' responses to all items of COPE questionnaire was 2.46 (0.39). The study finding showed that participants were used Approach-Emotion more than other strategies. As shown in Table 2, Emotion (3.38), Cognitive (2.89), and Behavioral (2.82) strategies had higher mean scores than Avoidance-Cognitive (2.08) and Avoidance-Behavioral (1.10) strategies.

Table 3. Correlations scores of Iranian Religious Coping Scale and Coping Operations Preference (COPE)

	Cope (total)	Approach-Cognitive	Approach-Behavioral	Approach-Emotion	Avoidance-Cognitive	Avoidance-Behavioral
Spiritual Coping	r=0.68	r=0.58	r=0.46	r=0.78	r=-0.02	r=0.10
	p=0.001	p=0.001	p=0.001	p=0.001	p=0.70	p=0.08

There was positive and significant correlation between use of spiritual/religious coping strategies and patients adjustment to breast cancer (p<0.001, r=0.68). Also, there was significant correlation between use of spiritual/religious coping strategies and Cognitive (p<0.001, r=0.58), Behavioral (p<0.001, r=0.48), and Emotion (p<0.001, r=0.78) strategies (Table 3).

Discussion

The aim of this study was examine the relationship between use of spiritual/religious coping strategies and illness adjustment among Iranian breast cancer patients. According to extensive literature review, this is one of the first studies in Iran and other Middle East countries which explored this topic. One of the objectives of the current study was to determine the level of spiritual/religious coping among Iranian breast cancer patients. According to the study findings the participants were used positive religious coping strategies more than negative approaches. Yoo et al. (2014) in a systematic review also showed that African-American female with breast cancer tend to use positive forms of spiritual coping than white women (Yoo et al., 2014). The findings of a study in Brazil also revealed that most of patients who were undergoing chemotherapy were used positive spiritual coping strategies (Mesquita et al., 2013). In addition, the findings of meta-analysis showed that Acceptance and Positive Reappraisal strategies were related to higher coping with illness in breast cancer patients (Kvillemo and Branstrom, 2014). In a study in Middle East Al-Azri et al. (2009) reported that breast cancer patients used several strategies to cope with the illness, including wishful thinking, emotional expression, positive cognitive restructuring, acceptance, family and social support, religious practice, and exercise (Al-Azri et al., 2009). The findings of studies in Iran also showed Iranian cancer patients were used positive spiritual/religious coping strategies more than negative approaches (Taleghani et al., 2008; Afrooz et al., 2014). So, it is obvious that the use of positive religious coping strategies has an important role in adjustment to illness among Iranian breast cancer patients.

Another objective of the study was to determine the level of coping among Iranian breast cancer patients. In this regard, the study findings showed most of the study participants were used the Emotion strategy-which includes the subscale of turning to religion- more than other coping strategies. Other strategies that used by patients include Cognitive and Behavioral strategies. The least used approaches also include Avoidance-Cognitive and Avoidance-Behavioral strategies. Congruence to our findings, the findings of a qualitative study by Taleghani et al. (2006) also showed that Iranian breast cancer patients used positive coping strategies, especially religious strategy to adjust with their disease (Taleghani et al., 2006). The findings of another study also indicated an appropriate use of coping strategies among breast cancer patients and showed the pivotal role of spiritual resources in the illness adjustment (Kvillemo and Branstrom, 2014).

The final objective of the current study was to explore the relationship between use of spiritual/religious coping strategies and illness adjustment among Iranian breast cancer patients. Accordingly, the present study found using spiritual/religious coping strategies would be associated with better illness adjustment. As noted before, there is inconsistency in the findings of previous studies regarding the role spiritual/religious coping on patients' adjustment to cancer. Potential helpful or harmful associations between religious/spiritual coping resources and illness adjustment were examined in previous studies (Taleghani et al., 2006; Gall et al., 2009; Hebert et al., 2009; Thune-Boyle et al., 2013). For example, the finding of Hebert et al. (2009) study showed positive religious coping was not associated with any measures of well-being. However, negative religious coping was associated with poorer mental health, depression, and lower life satisfaction (16). This is also supported by Gall et al. (2009) in Canada (18). In the other hand, several studies found some evidence for the beneficial effect of religious coping and adjustment to breast cancer (Taleghani et al., 2006; Mesquita et al., 2013; Thune-Boyle et al., 2013; Yoo et al., 2014). However, Thune-Boyle et al. (2006) in a systematic review found no firm association between spiritual/religious coping and illness adjustment in cancer patients (Thune-Boyle et al., 2006).

The previous studies suffered from some methodological deficiencies, especially use of unequal samples and assuming patients attendance in religious places as a criterion for spiritual coping. Those limitations were resolved to some extent in the present study and we found a relationship between religious coping and illness adjustment among breast cancer patients. The study findings showed positive spiritual/religious coping strategies were used by Iranian cancer patients which are beneficial for adjustment to cancer. So, continually addressing patients' spiritual/religious needs and enhancing use of these resources may be effective for improving illness adjustment in breast cancer patients.

Despite the strength of this study, it also has some limitations. First, a convenience sample of patients admitted to two public educational centers in north-western of Iran is not represent variation of all the country population. In relation to future research, replicating such studies in other Iranian cultures as well as, Middle East countries is required. The present study also is limited to describing relationship only. Accordingly, the long-term effects of spiritual resources on illness adjustment among Iranian breast cancer patients require further studies.

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