The relationship between religious orientation and death anxiety in patients with breast cancer

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Abstract

Background and Objectives: Breast Cancer is the most common malignancy and is the second leading cause of mortality due to cancer in women. One of the important psychological factors in these patients is death anxiety. Given the role of religious orientation to this psychological factor, this study was conducted to investigate the relationship between religious orientation and death anxiety in patients with breast cancer in Kermanshah.

Methods: In this cross-sectional study on 48 patients with breast cancer referred to the Oncology Department of Imam Reza (PBUH) Hospital, Templer Death Anxiety Scale and Allport Religious Orientation Scale were used to gather data and the data analyzed by Kruskal-Wallis and Mann-Whitney tests in SPSS 22.

Results: The highest and lowest scores of religious orientation in these patients were 76 and 48, with mean score 65.31. The highest and lowest death anxiety scores attained by these patients were 14 (8.3%) and 2 (10.4%), and 72.9% of the patients had high levels of death anxiety. Religious orientation and death anxiety were significantly correlated (correlation coefficient: 0.508), and age was significantly correlated with death anxiety but not with religious orientation.

Conclusion: Given the findings of the present study, it cannot be definitely argued that religious orientation and death anxiety are correlated in cancer patients. Therefore, this issue should be further investigated.

Keywords: Anxiety, Breast Neoplasms, Death, Religious Orientation.

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Introduction

Breast cancer represents approximately 1/3 of all cancers in women (1,2) so that it is known to be the most prevalent cancer and the second leading reason for mortality due to cancer among women (3-5). Being informed of acquisition of cancer is a surprising and worrying experience for any persons (6,7). This experience can be highly stressful for the patient in physical and mental terms such that it is described as a large stone rolling into a calm sea. After receiving cancer diagnosis, the patients develop very severe mental reactions such that one of the feelings inspired in them is the feeling of impending death and that death is near. Therefore, death anxiety is currently being described as one of the important psychological variables in cancer patients (8,9). Death anxiety can affect quality of life in cancer patients through causing psychological and even mental disorders. Therefore, it is important to detect the variables that potentially affect cancer patients' quality of life. Meanwhile, it is even more urgent to detect more vulnerable populations whose quality of life may be promoted by certain strategies (10,11). Relevantly, religious orientation is one of the death anxiety-associated, psychological variables that is being addressed as one of the ways of relieving this anxiety and fear of death. Negative religious orientations have been reported to intensify fear of death (12,13). Consequently, religion has recently being attracted attention of many experts on behavioral sciences,
especially psychologists, as one of the key variables contributing to behaviors and mental conditions such that some experts have argued that religion is the main variable in health of individuals and communities (14). Conventionally, religious orientation refers to legitimization of the structure of relationships and occasions in all of its dimensions in the light of human's relationship with God. In psychology, Allport was first to investigate religious orientation. According to Allport, religious orientation is a combination of religious beliefs, behaviors, and motivation. From Allport's perspective, religious orientation is divided into Internal religious orientation and External religious orientation (15). People with external religious orientation accept and act according to religious beliefs. They attend religious ceremonies to the extent that they manage to achieve their material purposes such as social prestige, well-being, comfort, support, and confirmation. In contrast, internal religious orientation is beyond and superior to achievement of these purposes. In internal religious orientation, belief is considered valuable and useful per se rather than a means to realize purposes (16). Religion can greatly help relieve stress in any situations and reduce psychological distress in assessment of situation, cognitive assessment of individual, coping strategies, and sources of support. Accordingly, religion and mental health have long been assumed to be positively correlated, and experts on psychology of religion have recently attracted considerable empirical support in this field (17). For example, the World Health Organization refers to physical, mental, social, and spiritual dimensions of health to define aspects of human existence, and addresses the fourth, i.e. spiritual, dimension in human evolution. Therefore, religion and realization of spirituality, as important parts of the lives of cancer patients, are expected to contribute to promoting mental health, especially relieving death anxiety (18).

Finally, it can be argued that patients with malignant diseases such as cancer, especially women with breast cancer, are considered vulnerable populations in both physical and psychological terms. These people may develop anxiety and depression due to irrational fear of death, which causes decline in social energy. Taken together, because breast cancer is a common disease in women which causes high levels of death anxiety for them, and given the role of religious beliefs in coping with associated conditions and having spiritual health as well as its association with death anxiety, this study was conducted to investigate the association between religious orientation and death anxiety in patients with breast cancer in Kermanshah in 2015.

**Methods**

This descriptive study was conducted on 48 women with breast cancer referred to the Radiotherapy & Oncology Department of Imam Reza (PBUH) Hospital, Kermanshah. It is noteworthy that first, much more women volunteered to participate in this study but then some of them decided not to do this because the items of Death Anxiety Scale (DAS) directly investigate death and associated fear and apprehension and therefore the mental and physical conditions of breast cancer patients may be exacerbated by filling out DAS.

Data were gathered by a questionnaire administered to the participants. According to the research purposes, the questionnaire consisted of two sections: items of demographic characteristics consisting of age, marital status, education level, occupation, and economic status and psychology questionnaires of the DAS and Religious Orientation Scale. The DAS used to investigate death anxiety in the participants of this study was Templer DAS (19). The Templer DAS consisted of 15 Yes/No questions scored 1 and 0 depending on either choice selected by the respondent. More clearly, if the respondent's response represents the presence of death anxiety in him/her, the item is scored 1 and if not, it is scored 0. For example, the responses No and Yes to the item Are you worried about death? represent absence and presence of anxiety in the respondent and therefore are scored 0 and 1, respectively.
The minimum and maximum possible scores for the Templer DAS are 0 (absence of death anxiety) and 15 (highest level of death anxiety) with cutoff score of 6 such that the scores above and under 6 represent high and low levels of death anxiety, respectively. The Templer DAS is considered a standard scale and has been used in different studies across the world to measure death anxiety. This scale has been also translated into Persian language, investigated by factor analysis, and validated in Iran. For example, Rajabi and Bohrani administered the Templer DAS to 138 university students in Ahvaz and reported its internal consistency to be 73% (20). Masoudzadeh et al found the correlation coefficient of the Templer DAS items to be 0.95 (21).

The other instrument administered to the participants was Allport Religious Orientation Scale. This scale consists of 20 items, 11 of which investigate external religious orientation and the rest are concerned with internal religious orientation. Then, Fegin (1963) introduced one item into the Allport ROS. This item has a highly (61%) positive correlation with Allport's external religious orientation. Since then, Fegin's version has been used more frequently (15). According to Allport study, correlation between the items of external and internal religious orientation was derived -0.21. Fegin reported the correlation between external and internal religious orientation to be -0.20. In addition, Cronbach's alpha coefficient of Allport Scale's reliability was derived 0.74 and 0.71 in Janbozorgi study (22) and Mokhtari et al study (23). The questionnaires were completed by the participants as the researcher was present. The data were analyzed by descriptive statistics, mean [standard deviation (SD)], and non-parametric tests, Kruskal-Wallis and Mann-Whitney in SPSS 22.

**Result**

Forty eight women with breast cancer referred to the Radiotherapy & Oncology Department of Imam Reza (PBUH) Hospital in Kermanshah were the samples of this study. The participants' age range was 29-67 years and most (60.4%) of the participants were middle-aged. Most of the participants were married and only 6.6% single. Regarding economic status, 56.3% of the participants had poor economic status. Regarding education level, 60.4% of the participants were illiterate and only 4.2% BA/BSc holders (Table 1).

<table>
<thead>
<tr>
<th>Demographic characteristics</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSc/BA</td>
<td>2</td>
<td>4.17</td>
</tr>
<tr>
<td>Associate degree</td>
<td>3</td>
<td>6.25</td>
</tr>
<tr>
<td>High School Education Completion</td>
<td>7</td>
<td>14.58</td>
</tr>
<tr>
<td>Secondary Education Completion</td>
<td>7</td>
<td>14.58</td>
</tr>
<tr>
<td>Illiterate</td>
<td>29</td>
<td>60.42</td>
</tr>
<tr>
<td><strong>Economic status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>27</td>
<td>56.25</td>
</tr>
<tr>
<td>Moderate</td>
<td>18</td>
<td>37.50</td>
</tr>
<tr>
<td>Good</td>
<td>3</td>
<td>6.25</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>43</td>
<td>89.59</td>
</tr>
<tr>
<td>Single</td>
<td>5</td>
<td>10.41</td>
</tr>
<tr>
<td><strong>Age groups</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Older (≥66)</td>
<td>3</td>
<td>6.25</td>
</tr>
<tr>
<td>Middle-aged (41-65)</td>
<td>29</td>
<td>60.42</td>
</tr>
<tr>
<td>Young (20-40)</td>
<td>16</td>
<td>33.33</td>
</tr>
</tbody>
</table>

Highest and lowest scores for religious orientation (76 and 48, respectively) were attained by 2.1% of the participants with the mean score 65.31. Accordingly, the highest and lowest scores were 47 and 25 for external religious orientation and 36 and 22 for internal religious motivation. Regarding the cutoff point 6 of the scale, the highest score for death anxiety (14) was attained by 8.3% of the participants and the lowest score (2) by 10.4% of the participants with the mean score 9.04±3.71. The results demonstrated that 72.9% of all the participants had high levels of death anxiety, and middle aged participants (82.7%) were found to have the highest level of death anxiety and the older ones the lowest level. Of illiterate participants (n: 29), 86.2% had high levels of death anxiety, and of participants with poor economic status (n: 27), 85.1% had the highest level of death anxiety.

Because the data were not found to be normally distributed, a non-parametric test, i.e. Mann-Whitney, was used. Relationship between death anxiety and Religious orientation (correlation coefficient: 0.508, P<0.01) and external religious orientation was
significant (P<0.05), but relationship between internal religious orientation was not significantly with death anxiety. In this study, being married was significantly relationship with internal religious orientation but not with religious orientation and death anxiety (Table 2).

### Table 2. Level of significance of relationship between death anxiety and religious orientation

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Religious orientation</th>
<th>Internal Religious orientation</th>
<th>External Religious orientation</th>
<th>Death anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death anxiety</td>
<td>0.01</td>
<td>0.66</td>
<td>0.02</td>
<td>-</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.58</td>
<td>0.01</td>
<td>0.77</td>
<td>0.78</td>
</tr>
</tbody>
</table>

**Discussion**

The findings of this study demonstrated that relationship between religious orientation and death anxiety were significant, while opposite findings have been obtained in the studies conducted in the past three decades on this relationship (24). Death Anxiety Scale was developed by Templar. A study reported that people with moderate religious beliefs suffered from more severe death anxiety than those with no or highly fanatic religious beliefs (25). Dehkordi et al study conducted on university students demonstrated the effect of religious orientation in relieving death anxiety (26). Sajjadyan et al found that approximately all patients with breast cancer used spirituality and religion as coping strategies (27).

However, some studies reported that relationship between religious performance and cancer was not. For example, a study on breast cancer survivors demonstrated no significant relationship association between these two variables (28). Paiva et al reported negative relationship between religious orientation and quality of life in patients with breast cancer prior to beginning of chemotherapy, and recommended further investigation of this relationship (29). Even, religion was reported to be negatively relationship with death anxiety among Muslims (30,31). Duff and Hyong, Pfiffel and Broncomp, and Torson and Powell studies have demonstrated that religious people experienced higher levels of death anxiety (32-34). In addition, Disater et al. study demonstrated that people who have tendency toward extrinsic religious orientation, had higher levels of death anxiety (35). Leicester et al. reported that death anxiety and religion were not correlated (36-38).

Furthermore, the present study indicated that women with breast cancer had high levels of death anxiety. Consistently, some studies have demonstrated that cancer patients suffer from high levels of death anxiety such that the prevalence of anxiety was 17.9% in the group of cancer patients compared to 13.9% compared to healthy group (39,40). According to Breitbart et al study conducted in a center of cancer patients in New York, USA, after conduction of cognitive screening tests, 17% of the patients were found to desire for hastened death (41). Aghabarari et al argued that breast cancer was considered a frightening and catastrophic event by many women (42). Studies conducted by Thorson and Powell demonstrated that women and younger people suffered from higher levels of death anxiety than men and older people, respectively (34,43). In addition, middle-aged participants were found to have higher levels of death anxiety than older ones in this study, which is consistent with Gesser et al and Stevens et al findings (44). In contrast, Belsky study reported inconsistent findings (45). However, a study reported no relationship between age and death anxiety (46).

**Conclusion**

Since it cannot be definitely argued that religious orientation and death anxiety are correlated in cancer patients, which can be due to other factors such as the patients' socioeconomic, cultural, and psychological conditions, and managing death anxiety can definitely help treat and improve the conditions of cancer patients, this issue should be further investigated among cancer patients from different cultures including those in Islamic communities.

**Conflict of interest**

The authors declare no conflict of interest.
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References