Relationship of Religious Orientation and Sense of Humor with Marital Satisfaction with the Mediation of Quality of Life among Women with Breast Cancer

Jehangir Karami, Parisa Heidarisharaf, Raheleh Siah Kamari, Manzar Abasi
1 Department of Psychology, Razi University of Kermanshah, Kermanshah, Iran.

Abstract

Background and Objectives: Chronic diseases, such as cancer, are among the factors seriously affecting health and marital satisfaction. Regarding this, the present study was conducted with the aim of modeling marital satisfaction among women with breast cancer in Kermanshah province, Iran.

Methods: This descriptive-correlational study was conducted on 250 females with breast cancer referring to the hospitals of Kermanshah in 2017-2018. The study population was selected through convenience sampling technique. The data were collected using the World Health Organization Quality of Life Questionnaire, Religious Orientation Scale by Allport, ENRICH Marital Satisfaction Scale, and Sense of Humor Questionnaire. Data analysis was performed by means of ANOVA and ANCOVA.

Results: According to the results, sense of humor, quality of life, and religious orientation affected marital satisfaction both directly and indirectly (with the mediation of quality of life). These variables could account for 78% of marital satisfaction variance.

Conclusion: As the findings of this study indicated, in addition to physical problems, women suffering from breast cancer deal with psychological issues. Regarding this, the psychologists and therapists working in the field of family affairs are recommended to reduce the stress and anxiety in these patients by the establishment of an environment boosting sense of humor, improving quality of life, and forming a proper religious orientation among the patients with the collaboration of the their family.

Keywords: Personal Satisfaction, Quality of life, Religious Orientation, Sense of Humor, Breast Cancer.

Introduction

Cancer is one of the chronic and non-communicable diseases that includes a wide range of problems. This disease, like all other chronic illnesses, can occur in any individual, age group, and race, and is considered as a problem affecting the health of the community (1). Cancer is the second leading cause of mortality in the developed countries behind cardiovascular diseases. In the less developed countries, this disease is the third most common cause of death preceded by cardiovascular diseases and accidents (2). Breast cancer has a significant impact on the stability of couples’ and families’ relationships because it directly involves the sexual identity of the women. Accordingly, the diagnosis of breast cancer is followed by turbulence in the individual's family and personal life, in addition to the physical problems and manifestations. Marital satisfaction is one of the factors that is seriously affected by this disease (3).

Marital satisfaction is referred to a condition in which the husband and wife often feel happy and satisfied with their marriage (4), which can vary from high satisfaction to high dissatisfaction (5). Marital satisfaction is a personal experience that can be subjectively evaluated by each spouse based on the perceived pleasure of their marital relationship. This feeling plays an important role in the normal functioning of the family and is affected by many factors (6). Couples with high perceived marital satisfaction have a great
mutual understanding and are satisfied with the type and quality of their relationship (7).

Marital satisfaction is associated with various factors, including quality of life. According to the World Health Organization, quality of life refers to the individuals’ perception of their status in life in terms of culture, value system, goals, expectations, standards, and priorities (8). Studies have shown a relationship between marital satisfaction and quality of life (9-12).

Another factor associated with marital satisfaction is the sense of humor. The Diagnostic and Statistical Manual of Mental Disorders defines the sense of humor as an advanced defense mechanism that helps people deal with emotional conflicts or external stressors with an interest in comic and entertaining aspects (13). Humorous people show good emotional management skills and are able to evaluate, express, and manage their emotions. Moreover, these individuals are more successful in their social interactions (14). The people enjoying high levels of humor tend to enjoy everyday life experiences and events (15). According to various researchers, marital satisfaction and sense of humor are two related categories (3, 16-17).

The third factor associated with marital satisfaction is religious orientation. Resorting to religious beliefs is an effective way to deal with the calamities, painful experiences, and disease symptoms. Moreover, religious beliefs affect the human relationships during difficulties and discomforts (18). The evidence are indicative of a relationship between religious orientation and marital satisfaction (19-22).

Given the importance of marital satisfaction in the lives of couples, especially for women with breast cancer, this study was conducted to model the factors affecting this feeling. Accordingly, the aim of this study was to investigate the role of sense of humor and religious orientation in marital satisfaction through the mediation of quality of life in women with breast cancer in Kermanshah, Iran.

Methods
The present applied research was conducted using a descriptive-correlational design. Data analysis was performed by means of ANOVA and ANCOVA.

The study population corresponded to a group of 250 women with breast cancer referring to the hospitals of Kermanshah, Iran, in 2017-2018. The participants were selected through convenience sampling method. To this end, out of the hospitals under the supervision of the University of Medical Sciences, four hospitals were entered to the study by convenience sampling technique. In the next step, the women with breast cancer treated in these hospitals were selected from the four hospitals using the same sampling technique.

Religious Orientation Questionnaire: This questionnaire, developed by Allport, consists of 21 items measuring two subscales of internal and external religious orientations. The reliability and validity of this questionnaire were estimated as 0.73 and 0.74 by Jun Bozorgi (23) in Iran using Cronbach’s alpha coefficient and back translation method, respectively. In the mentioned study, various modifications were made to fit this tool with the Iranian culture and religious context. In the present study, the reliability of this questionnaire was obtained as 0.85.

World Health Organization Quality of Life Questionnaire. This questionnaire entails 26 items in four subscales, namely physical health, mental health, environmental health, and social health. In a study targeted toward the standardization of this questionnaire, the reliability of all domains was more than 0.7
The reliability of this questionnaire was 0.73 in the present study.

Sense of Humor Questionnaire: The Sense of Humor Questionnaire includes 25 items divided into 5 subscales. The reliability of this instrument was reported as 0.86 at the time of construction and standardization of the questionnaire (25). In the current study, the reliability of this questionnaire was calculated as 0.96.

The ENRICH Marital Satisfaction Inventory consists of four subscales, all of which have a reliability of above 0.60 (26). In the present study, the reliability of this instrument was estimated as 0.73.

In the current study, religious orientation and sense of humor were considered as the independent variables. Furthermore, quality of life and marital satisfaction were regarded as intermediary and dependent variables, respectively. The data were analyzed using several statistical methods, including ANOVA, ANCOVA, structural equation modeling, and path analysis in Lisrel software. This study was approved by the Faculty of Social Sciences of Razi University of Kermanshah with the ethics code of 1267 in 2017.

Result

According to the results, the mean age of the patients was 44±6.14 years, and the age group of 41-50 years had the highest frequency. The majority of the participants were diagnosed with breast cancer for one year or less and had a marriage duration of 5-15 years.

Structural equation modeling

A) Measurement model of research variables

The confirmatory factor analysis was used to evaluate the measurement model of the research variables. To this end, the factor load of each indicator on each structure was estimated, and the significance of the analysis was determined based on the value of t. In this research, a factor analysis was performed on the latent variables, namely marital satisfaction with its four dimensions (i.e., ideal distortion, marital satisfaction, communication, and conflict resolution), religious orientation and its two subscales (i.e., external and internal religious orientation), quality of life and its four dimensions (i.e., physical health, mental health, social health, and environmental health), and sense of humor with its five dimensions (i.e., enjoying humor, laughter, verbal joke, joking under stressful conditions, and sense of humor under stressful conditions). Table 1 presents the standardized factor loading of the indicators and their significance levels with respect to the t value.

According to Table 1, all indicators had a t value of > 1.96, signifying that the indicators could explain the relevant structures, and that the data were valid enough.

Table 1. Standardized factor loading and significance level of the indicators

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Standardized coefficient</th>
<th>Standard error</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital satisfaction</td>
<td>Marital satisfaction</td>
<td>0.70</td>
<td>0.50</td>
<td>18.45</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td>0.59</td>
<td>0.65</td>
<td>14.81</td>
</tr>
<tr>
<td></td>
<td>Conflict resolution</td>
<td>0.61</td>
<td>0.63</td>
<td>15.41</td>
</tr>
<tr>
<td></td>
<td>Ideal distortion</td>
<td>0.67</td>
<td>0.55</td>
<td>17.30</td>
</tr>
<tr>
<td>Quality of life</td>
<td>Psychological health</td>
<td>0.65</td>
<td>0.57</td>
<td>16.28</td>
</tr>
<tr>
<td></td>
<td>Social health</td>
<td>0.74</td>
<td>0.46</td>
<td>18.74</td>
</tr>
<tr>
<td></td>
<td>Environmental health</td>
<td>0.64</td>
<td>0.59</td>
<td>15.81</td>
</tr>
<tr>
<td>Sense of humor</td>
<td>Enjoying humor</td>
<td>0.75</td>
<td>0.43</td>
<td>20.93</td>
</tr>
<tr>
<td></td>
<td>Laughter</td>
<td>0.73</td>
<td>0.60</td>
<td>16.50</td>
</tr>
<tr>
<td></td>
<td>Verbal humor</td>
<td>0.84</td>
<td>0.30</td>
<td>24.35</td>
</tr>
<tr>
<td></td>
<td>Social humor</td>
<td>0.64</td>
<td>0.60</td>
<td>16.70</td>
</tr>
<tr>
<td></td>
<td>Sense of humor under stressful condition</td>
<td>0.58</td>
<td>0.67</td>
<td>14.78</td>
</tr>
<tr>
<td>Religious orientation</td>
<td>Internal</td>
<td>0.62</td>
<td>0.61</td>
<td>15.22</td>
</tr>
<tr>
<td></td>
<td>External</td>
<td>0.80</td>
<td>0.36</td>
<td>19.37</td>
</tr>
</tbody>
</table>

To test the main hypotheses of the research regarding the direct and indirect effects of research variables on marital satisfaction among the women with breast cancer, a structural equation model was established. In this study, the structural equation model of the research variables and path analysis method showed an appropriate fit. Therefore, based on the specified model, it can be concluded that the structures used to investigate the relationship between marital satisfaction and other research variables could properly reflect the theoretical basis (X2=203.44, df=71, P<0.001, RMSEA=0.073)

The standardized path coefficients and the significance level of the study are tabulated in
Table 2. The results revealed an acceptable t value and path coefficient between the research variables. Marital satisfaction had an $R^2$ of 0.78, indicating that 78% of marital satisfaction in women with breast cancer was explained by the variables of quality of life, sense of humor, and religious orientation with a confidence level of 99%.

<table>
<thead>
<tr>
<th>Effective variable</th>
<th>Affected variable</th>
<th>Path coefficient</th>
<th>Standard error</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of humor</td>
<td>Marital satisfaction</td>
<td>0.36</td>
<td>0.08</td>
<td>4.22</td>
</tr>
<tr>
<td>Quality of life</td>
<td>Marital satisfaction</td>
<td>0.35</td>
<td>0.07</td>
<td>4.46</td>
</tr>
<tr>
<td>Religious orientation</td>
<td>Marital satisfaction</td>
<td>0.28</td>
<td>0.08</td>
<td>3.36</td>
</tr>
</tbody>
</table>

In order to confirm the hypotheses proposing the effect of intermediary variable, the significance of the paths should be investigated. If both paths (i.e., direct and indirect paths) are meaningful in the path analysis, the hypothesis of the intermediary variable is also confirmed, and the path coefficient is obtained from the multiplication of both of the former path coefficients.

Based on the relationships illustrated in Figure 1 and the results presented in Table 2, the standardized path coefficients of marital satisfaction with the variables of sense of humor, quality of life, and religious orientation were 36% ($t=4.22$ and $γ=36$), 35% ($t=4.46$ and $γ=35$), and 28.8% ($t=3.36$, $γ=28$), respectively, which were significant at an alpha level of 1%. The standardized path coefficients indicate the strength of the relationships between the independent and dependent variables.

Based on the results of the research, it can be concluded that sense of humor, religious orientation, and quality of life could affect marital satisfaction. Figure 2 depicts the final model of the variables based on the results of the research. According to the final model, it can be stated that sense of humor and religious orientation with the path coefficients of 0.36 and 0.28 were the strongest and the weakest variables, respectively, which could be used for the evaluation of marital satisfaction.

**Discussion**

The present study investigated the effect of sense of humor, quality of life, and religious orientation on marital satisfaction in women with breast cancer. As the results demonstrated, all mentioned variables exerted positive effects both directly and indirectly on marital satisfaction. In this study, the results and output models confirmed all three research hypotheses.

The first hypothesis referred to the effect of sense of humor on marital satisfaction, which
was accepted with regard to the direct impact of this variable on marital satisfaction. This finding is consistent with the results obtained by Safari and Martin (27-28). Accordingly, studies show that sense of humor can be useful in assisting patients with mental disorders through reducing their stress, increasing their social interactions, and improving their coping skills. (29).

Moreover, Research Moghadam (30) reported a positive association between sense of humor and creativity. Sense of humor facilitates the reduction of tension, enhancement of divergent thinking capability, and improvement of the ability to negotiate and resolve conflicts. Furthermore, humor can help reduce the seriousness of situations in disagreements, and also contributes the couples to look at the problems in a different way and adopt creative strategies to solve their marital problems (31). Therefore, sense of humor can lead to the reduction of marital conflicts through increasing divergent thinking and providing creative solutions for solving marital problems.

The second hypothesis dealt with the impact of quality of life on marital satisfaction. This hypothesis was also confirmed, which is in line with the findings reported by Harju and Rentanin (32), as well as Remmerswaa and Batelaan (33). Quality of life is one of the components of positive psychology, which includes perception, cognition, happiness, interests, expectations, and positive and negative emotions. Given the effectiveness of these components in marital satisfaction, it can be argued that quality of life affects marital satisfaction.

In this respect, if considering quality of life as a subcategory of mental, physical, psychological, social, and economic well-being, then it can be concluded that the people who have a higher quality of life tend to have more marital satisfaction; as a result, they enjoy a higher level of psychological well-being. It can be also stated that marital communication and marital satisfaction are among the important elements of quality of life and are considered as preventive factors against health problems (34).

The third hypothesis examined the effect of religious orientation on marital satisfaction. In congruence with the findings obtained by David and Stafford (35), as well as Polar and Riggs (36), this hypothesis was also confirmed. A majority of the scholars believe that religious beliefs have a profound effect on the solidarity of the family. Belief in God facilitates the individuals to perceive the purposefulness of the creations.

On the other hand, failure to believe in God causes a person not to have solidarity and tranquility, which in turn weaken the relationship and cause many conflicts in family life. According to the literature, adherence to religion is an important factor in the sustainability of marriage and marital satisfaction. Meanwhile, a high contradiction in couples’ religious beliefs is associated with greater marital conflicts (37).

One of the limitations of this study was the reluctance of some participants to respond to the items seeking personal information and lengthy questionnaires. To increase the external validity of this study, researchers are suggested to conduct similar studies in different areas and on women with other diseases.

**Conclusion**

Given the importance of marital satisfaction in couples, especially in woman with breast cancer, the psychologists and therapists are recommended to facilitate the improvement of sense of humor, quality of life, and religious orientation among the families of these patients to increase the degree of satisfaction and reduce the amount of stress and anxiety that they may encounter.

**Conflict of interest**

The author declares no conflict of interest.

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References


