The relationship between spiritual well-being and stress coping strategies in hemodialysis patients

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Abstract

Background and Objectives: Spiritual well-being has been recognized as an important resource to cope with illness and life stresses. The aim of this study is to determine the Spiritual well-being status as well as stress coping strategies in hemodialysis patients.

Methods: This descriptive-analysis study included 95 randomly selected patients undergoing treatments with hemodialysis in hemodialysis centers of Qom hospitals. Data collection instruments were the Spiritual Well-Being Scale and Jalowiec Coping Scale Data were analyzed via SPSS 16 software, by using descriptive statistics, Pearson correlation coefficient and independent t-test.

Results: The mean and standard deviation score of spiritual well-being of patients were 91.98±15.09 while the mean and standard deviation of existential and religious well-being were 50.76±8.06 and 41.22±8.91, respectively. 52.6% got scores higher than the average score in spiritual well-being. The most common coping strategies in patients were Evasive and Supportant copings. Spiritual well-being and problem-oriented coping strategies had a significant positive correlation (r = 0.41, p = 0.008). But there was no significant relationship between spiritual well-being and emotion-focused coping strategies.

Conclusion: Results showed that hemodialysis patients mostly use emotion-oriented strategies when facing disease and treatment's challenges. There was a positive relation between spiritual well-being and problem-oriented coping strategies; therefore, in order to increase levels of coping with the disease, the care plan should be written with an emphasis on patients' spiritual needs.

Keywords: Compatibility, Hemodialysis, Spiritual Well-Being, Spirituality, Stress Coping.

Introduction

In recent years, chronic kidney failure resulted from high morbidity and mortality rates is taken into consideration as an important health issue. Almost 11% of the world's adult population suffer from chronic kidney failure among them a large percentage will eventually require renal replacement treatments (1,2). Technological developments have increased the survival rate of patients with chronic renal failure and the number of people in need of alternative treatments is adding up annually. Hemodialysis is the most common treatment among renal replacement therapies that reduces symptoms and maintains a person's life (2). Due to the nature of the disease, patients with chronic kidney failure and in need of frequent hemodialysis sessions have multiple problems of physical, psychological, social and economic problem and because of the disease’s long-term procedure and its complications, different health dimensions of these people will be affected (3). Dialysis patients are exposed to intense stress as much as all patients with chronic diseases; sometimes even more. So, they use coping and compatibility strategies to go on with their lives which is a protective function, in return. Coping strategies are unconscious processes during which an individual faces daily life stresses; however, patients have different powers in this field and not all are the same (4). Spirituality is regarded as a significant source in coping with chronic diseases. Spirituality increases patient's ability to cope with the outbreak of a disease and accelerate the improvement speed (5). Some
The relationship between spiritual well-being and health has been studied extensively. In their study, Cruz, et al. showed that patients’ quality of life increased by using spiritual and religious coping strategies (6). A study by Rocha also revealed the relationship between spirituality and resilience and quality of life (7). Yodchai, et al. suggested that religion and spirituality provide strong coping strategies to overcome stress in patients with kidney failure disease (8). In Iran, some studies have examined coping strategies (9) or spiritual well-being (10) focusing on patients with chronic diseases, but none has yet studied the relationship between the two issues.

Despite the existence of several evidence on the effectiveness and usefulness of spirituality in the process of patient compliance with chronic medical problems, religious and spiritual issues are not considered as the main components of the usual care, yet. According to holistic model, biological, psychological, social, and spiritual dimensions and a comprehensive care should address all of them (11). As a result, the researchers designed and conducted this study to examine the relationship between spiritual well-being and coping strategies in patients under hemodialysis therapy.

Methods
This cross-sectional, descriptive-analysis study was conducted in 2014. The study population included all hemodialysis patients going to hemodialysis centers of Qom University of Medical Sciences. A total of 95 patients aged over 15 years were selected by convenience sampling. Other inclusion criteria were at least six months of hemodialysis, the absence of a psychiatric diagnosis and the use of psychiatric drugs, being a Muslim, and the ability to communicate in Farsi. After obtaining a license from Research Deputy of Qom University of Medical Sciences and submitting it to the authorities of medical educational units, the researcher got required permissions to conduct the study; then, after explaining the study objectives, verbal consent regarding participating in the study was obtained from the sample. The questionnaire was anonymous and the data were kept confidential except for using in the study.

In this study, a three-section questionnaire was used: part 1 concerning demographic features, part 2 about coping strategies, and part 3 regarding spiritual well-being.

To determine the rate of spiritual well-being, Ellison and Paloutzian spiritual well-being scale was used; a questionnaire containing 20 statements. Of these statements, 10 measure religious well-being and 10 measure existential well-being. The respondent specified his/her opinion about each statement on a Likert scale of six options from Strongly Agree to Strongly Disagree. Scores range was variable between 20 to 120 and higher score implied better spiritual well-being (13). Validity and reliability of the questionnaire was approved by Alahbakhshian (14).

Jalowiec Coping Scale (JCS) was used to evaluate patients' perception of their coping strategies in the face of challenges. The scale consists of 60 items being measured on a four-point Likert scale (between 0 means never to 3 means often) which evaluates coping behaviors. While using this questionnaire, on a four-point scaled, the respondent is asked to illustrate how much he/she uses that specific strategy stated in every item when facing challenges. The scale contains 8 coping styles including: Confrontive coping style implying facing up to the situation and direct confrontation with the problem, Evasive coping style implying avoiding the problem, Optimistic coping style implying having positive attitude and thoughts when facing a problem, Fatalistic coping style implying feelings of hopelessness and pessimistic attitude towards a situation, Emotive coping style implying releasing emotions and excitement in facing the reality, Palliative coping style implying controlling the turmoil by addressing some issues to control and improve inner feelings and reduce tension without direct exposure to challenging situations, Supportant coping style implying using support sources such as personal, professional, and spiritual sources, and Self-reliant coping style implying self-practice and
making decisions by oneself depending on one’s willpower and not on others (15). Evaluation of the psychometric properties of this scale indicates acceptable and satisfactory validity of it (16). Data analysis was done via SPSS v.16 software using descriptive statistical tests and statistical tests t-test, ANOVA and Pearson correlation coefficient. The significance level in all tests was considered less than 0.05.

**Result**

Mean and standard deviation score of the patients’ age range were 50.30±15.75 and 61.1% were male subjects. In terms of marital status, 81.1% were married, 12.9% were single and the rest were either divorced or widowed. Mean and SD for the total score of spiritual well-being of the subjects were 91.15±98.09 and mean and SD score for existential and religious well-being 50.76±8.06 and 41.22±8.91, respectively. 52.6% got scores higher than the average score in spiritual well-being scale. Meanwhile, the mean score of problem-oriented coping strategies in patients was 2.47 and SD was 0.39 while emotion-focused coping strategies had mean score of 2.54 and SD of 0.29. The most common coping strategies in patients were Evasive and Supportant coping styles (Table 1).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existential well-being</td>
<td>50.76</td>
<td>8.06</td>
</tr>
<tr>
<td>Religious well-being</td>
<td>41.22</td>
<td>8.91</td>
</tr>
<tr>
<td>Total Spiritual well-being</td>
<td>91.98</td>
<td>15.09</td>
</tr>
<tr>
<td>Confrontive coping style</td>
<td>2.64</td>
<td>0.74</td>
</tr>
<tr>
<td>Evasive coping style</td>
<td>2.69</td>
<td>0.37</td>
</tr>
<tr>
<td>Optimistic coping style</td>
<td>2.62</td>
<td>0.42</td>
</tr>
<tr>
<td>Fatalistic coping style</td>
<td>2.63</td>
<td>0.50</td>
</tr>
<tr>
<td>Emotive coping style</td>
<td>2.44</td>
<td>0.44</td>
</tr>
<tr>
<td>Palliative coping style</td>
<td>2.10</td>
<td>0.31</td>
</tr>
<tr>
<td>Supportant coping style</td>
<td>2.66</td>
<td>0.49</td>
</tr>
<tr>
<td>Self-reliant coping style</td>
<td>2.43</td>
<td>0.43</td>
</tr>
<tr>
<td>Emotion-focused coping style</td>
<td>2.54</td>
<td>0.39</td>
</tr>
<tr>
<td>Problem-oriented coping style</td>
<td>2.47</td>
<td>0.29</td>
</tr>
</tbody>
</table>

There was a positive, significant relationship between spiritual well-being and problem-oriented coping strategies (p=0.008, r=0.41); however, the relationship between spiritual well-being and emotion-focused coping strategies was not significant (Table 2).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Emotion-focused coping style Correlation(P-value)</th>
<th>Problem-oriented coping style Correlation(P-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious well-being</td>
<td>0.01 (0.9)</td>
<td>0.38 (0.01)</td>
</tr>
<tr>
<td>Existential well-being</td>
<td>0.21 (0.1)</td>
<td>0.31 (0.02)</td>
</tr>
<tr>
<td>Total Spiritual well-being</td>
<td>0.18 (0.2)</td>
<td>0.41 (0.008)</td>
</tr>
</tbody>
</table>

Spiritual well-being and the use of coping strategies were not significantly different in the two sexes. With higher age range, spiritual well-being indicated to be higher and the relationship was statistically significant. ANOVA showed that the means related to spiritual well-being and existential and religious well-being subscales were significantly higher in married patients than singles and widows (p<0.05).

**Discussion**

As shown by the findings of this study, spiritual well-being and problem-focused coping strategies have a direct and significant correlation. Chronic conditions such as chronic renal failure with a very long procedure have numerous irreversible negative effects on all health aspects. Having meaning and purpose in life, a sense of belonging to a sublime source, having faith in God’s help in stressful situations, and benefiting from spiritual supports are all among methods by which people can deal with stressful life events, suffering less loss and pain. Other resources are also consensus of the impact of spirituality on improvement and based on studies’ results increased levels of spiritual well-being has resulted into patients’ improvement and is associated with the ability to cope with change and adaptation (7 & 8). Koenig, et al. stated there is a relationship between spiritual values and compatibility and it leads to lower levels of depression (17). The results of some other studies also show in addition to reducing the effects of depression, spiritual well-being also reduce the burden of diseases and enhance mental health, life satisfaction and higher quality of sleep and life in patients (18-22). Furthermore, Hampton and Wienert believe spiritual well-being is associated with the ideal
health condition because spirituality helps people to adapt with chronic diseases and accept having a disease without any cure as a life fact and accept the results (23). Patel, et al. showed significant correlation between spirituality and religion in hemodialysis patients with coping strategies (24). In their descriptive study, Tanyi & Werner suggested a relationship between better copings and spiritual well-being (25). In their qualitative study, Walton, et al. described faith and spirituality as a driving force in helping hemodialysis patients to deal with mortality and accept dialysis (26).

Random sampling and limited sample size in this study reduce the generalizability of the findings. Conducting the same study with a bigger sample size (e.g. hemodialysis patients of several provinces) can be effective in promoting these restrictions. The lack of detailed information on the role of factors such as anxiety, depression and social support restricts making any comprehensive conclusion derived from the findings. It is suggested that using an accurate, scientific methodology in future studies will assist in examining the impact of these factors on coping strategies.

Conclusion
The main result of the research was the relationship between spiritual well-being and problem-oriented coping styles which seem beneficial and essential in designing treatment-caring plans for patients. Training and caring intervention plans with their focus on coping styles and spiritual needs of patients is suggested.

Conflict of interest
The authors declare no conflict of interest.

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