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Spiritual health in women with multiple sclerosis and its association with self-esteem

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Abstract:

INTRODUCTION: Spiritual health is one of the four dimensions of health in humans, and the others are physical, psychological, and social dimensions. This dimension is essential to increase the adaptation to the disease. Therefore, this study was aimed to determine spiritual health in women with multiple sclerosis (MS) and its association with self-esteem.

METHODS: This is a descriptive cross-sectional study, and 210 women with MS referring to Ayatollah Kashani Hospital affiliated to Isfahan University of Medical Sciences were selected using convenience sampling method. The data were collected by questionnaires of demographic characteristic questionnaire (6 items), Rosenberg Self-esteem Scale (10 items), and Ellison and Paloutzian Spiritual Well-being Questionnaire (20 items). Data were analyzed using descriptive statistics, Pearson's correlation coefficient, and multiple regression analysis at a significance level of 0.05.

RESULTS: The mean and standard deviation of spiritual health (including religious health and existential health) and self-esteem in MS patients were 48.8 ± 6.80 , 44.7 ± 6.70 , and 3.21 ± 2.5 , respectively. The results showed that 95.2% of the research units had moderate-to-high spiritual (religious and existential) health and 57.7% had high self-esteem. Pearson's correlation coefficient also showed a significant positive correlation between religious health and existential with self-esteem ($r = 0.22$, $P = 0.03$ and $r = 0.24$, $P = 0.01$, respectively).

CONCLUSIONS: In this study, most of the women with MS had high levels of spiritual health and self-esteem. This can be used as a coping strategy and has a protective effect against stress-induced illness and even against complications of the treatment. In addition, in some cases, it is effective in alleviating frustration in these patients.

Keywords:

Health, multiple sclerosis, self-esteem, spirituality

Introduction

Multiple sclerosis (MS) is an autoimmune disease predominantly affecting women of childbearing age. Its higher prevalence among women is characteristic of most autoimmune diseases, which may reflect the potential impact of sex hormones on the nervous, endocrine, and immune systems. Due to more hormonal changes in women, MS disease is more likely to occur in this group.^[1] On the other hand, the disease threatens the individual's independence

and ability to participate effectively in the community, and on the other hand, its prognosis and unpredictable periods have a significant impact on the quality of life and health. These patients are unable to find a way to solve problems and achieve an approach to improve their quality of life and health.^[2,3] There are several concepts about how to deal with the problems and tensions caused by this disease.

One of these concepts is spiritual well-being, which, as one of the health dimensions, brings about the integration of other dimensions. This concept includes both

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existential and religious dimensions. Spiritual health refers to the satisfaction of communication with a superior power and existential health to attempt to understand meaning and purpose in life.^[4] In MS patients, there is evidence of the importance of spiritual factors in the life of these patients. In fact, spiritual beliefs are the approach to help people find meaning and purpose in life. They are also used to cope with stressful events, including the occurrence of severe and chronic conditions, such as MS.^[4,5] It is worth noting that stress coping strategies are social and psychological preventive measures that can reduce stress-induced sensitivities or help individuals to face less stressful symptoms when confronted with stressful events.^[6,7]

Spiritual health as one of the dimensions of health leads to the integration of its other dimensions, and it consists of existential and religious dimensions. Spiritual health refers to the satisfaction of communication with a superior power and existential health to attempt to understand meaning and purpose in life. People suffering from debilitating chronic diseases are challenging answering questions about meaning and purpose in life. Many patients recognize spiritual well-being as a source of meaning and purpose in life, and they believe that it can promote the quality of life.^[8] The study of Zamanzadeh *et al.* also showed that a high level of spiritual health can help cancer patients to face the limitations and problems of the disease with the development of their self-knowledge and also the superior power of God.^[9,10]

On the other hand, MS complications strongly affect the individual's imagination of herself. When a person feels that he or she cannot be a positive or have a positive effect, it creates feelings of humiliation and embarrassment, and this has devastating effects, especially on one's self-esteem.^[11-14] In MS patients, low self-esteem has been one of the most serious risk factors for depression, and those who have high levels of self-esteem can resist stressors.^[14,15]

Since patients with chronic disease such as MS suffer from a lot of psychosocial changes and its impact increases relative to different stresses of life during this period, this period is psychologically of great importance. Therefore, in coping with the stress, especially stress related to the disease and treatment, many personality and environmental factors can be effective. Therefore, understanding the personality traits of each individual and their surroundings is needed to improve their overall health.^[8] Considering the moderating role of the above-mentioned personality trait on the stress of MS patients, investigating the relationship between religious-existential health and self-esteem will have a profound effect on the prevention and improvement of mental and physical health in this group of patients. In

addition, limited studies have been conducted on the status of religious and existential health and self-esteem in patients with MS as well as the type and severity of the relationship between these three variables. Therefore, the researchers decided to conduct a study with the purpose of considering the spiritual health and its relationship with self-esteem in patients with MS.

Methods

This is a descriptive cross-sectional study that was conducted in a 4-month period from January 21, 2018, to July 21, 2018, in MS Clinic of Ayatollah Kashani Hospital affiliated to Isfahan University of Medical Sciences. In this study, 210 women with MS (regarding the high prevalence of MS in women with MS disease in Isfahan Province) who were eligible for inclusion criteria were selected. The sample size was calculated based on the correlation index formula. In this formula, $z_1 = 1.96$, $z_2 = 0.84$, and $r = 0.2$. After approval by the ethics committee (ethical code: IR.MUI.REC.1396.2.046), the researcher selected the eligible individuals. Then, the purpose of the study was explained to those who had all the inclusion criteria, and the written informed consent form was completed.

Inclusion criteria included having Iranian nationality, speaking Persian, being a Muslim, being a resident in the city of Isfahan, age between 15 and 50 years, passing at least 6 months of clinical diagnosis, having the desire and physical and mental ability to participate in the study, having the written consent to participate in the study, and not being exposed to severe stressor problems during the past year.

The tools used in this study included a questionnaire of demographic and disease characteristics with seven items (age, level of education, marriage, occupation, income, type of treatment, and duration of illness), Ellison and Paloutzian Spiritual Well-being Questionnaire, and Rosenberg Self-esteem Scale. These tools were completed by interviewing patients.

The validity of the questionnaire of demographic and disease characteristics was determined using content validity. This tool was developed by studying recent books and articles in the field of research topic. Then, they were given to some experts and professors for evaluation.

The second questionnaire was Ellison and Paloutzian Spiritual Well-being Questionnaire (20 items). Ten items are about religious health (I do not feel happy with God in my prayers and I believe God loves me and watches me at all times) and ten items measure existential health (I believe that there is a special purpose to survive

and relationship with God plays a role in my health). The spiritual health score is the sum of these two subgroups, which ranges from 20 to 120. The answer to these questions was classified on a 6-point Likert scale, from completely disagree to completely agree.^[16,17] The validity and reliability of this questionnaire have been confirmed by Ellison and Paloutzian, and Cronbach's alpha coefficient of spiritual, existential, and total scale health was 0.91, 0.91, and 0.93, respectively.^[16,17]

The third questionnaire was the Rosenberg Self-esteem Scale which included ten items, of which five items were presented positively and five were presented negatively. The total score is computed as the sum of each item score: a score higher than zero indicates high self-esteem and a score <0 indicates low self-esteem. In Iran, in the study of Sharifi *et al.*, its validity and reliability were confirmed by calculating the Cronbach's alpha coefficient with 0.91 and 0.93, respectively.^[17,3]

Data were analyzed using SPSS version 11.5 (SPSS Inc., Chicago, IL) software. Descriptive statistics (absolute and relative frequency, mean, and standard deviation) and inferential statistics (independent *t*-test, ANOVA, and Pearson) were used for statistical analysis. $P \leq 0.05$ was considered as statistically significant level.

Ethical considerations

The study protocol and its ethical considerations were approved by the nursing and midwifery research center affiliated to Isfahan University of Medical Sciences. Permission was obtained from the hospital authorities, and the purpose of the study was explained to all participants; they all signed the written informed consent before participation. They were also assured of the data confidentiality, and all the questionnaires were kept anonymous.

Results

The results showed that the mean and standard deviation of the patients' age were 36.10 ± 10.41 years and the duration of the disease was 72.5 ± 9.60 months. The highest percentage of patients were married (69%) without university education (68%) and unemployed (60%). In this study, the mean and standard deviation of religious health, existential health, and self-esteem in cancer patients were 51.8 ± 6.80 , 44.7 ± 6.70 , 3.21 ± 3.21 , respectively.

Furthermore, the results also showed that 4.8% of the existential and religious health was low, 27.1% was moderate, and 68.1% was high.

In addition, the results of Pearson's correlation coefficient showed that there was a significant positive correlation

between the overall scores of religious and existential health and self-esteem [Table 1].

The findings indicate that there is no significant correlation between spiritual health and self-esteem with age ($P = 0.21$ and $P = 0.14$), marital status ($P = 0.32$ and $P = 0.26$), family income ($P = 0.21$ and $P = 0.21$), occupation ($P = 0.31$ and $P = 0.1$), types of treatment ($P = 0.25$ and $P = 0.11$), and duration of illness ($P = 0.41$ and $P = 0.32$), respectively.

Discussion

In this study, 95.2% of MS patients had a moderate-to-high level of spiritual and existential health, which can be used as a coping strategy and act as a protective shield against stress-induced illness and even the complications of treatment in these patients. Moreover, it can be effective in alleviating frustration in patients. In this regard, Zinnbauer *et al.*'s study showed that spiritual beliefs and their development and the use of spiritual coping strategies (such as communication with oneself, others, and God) induced hope and reduced anxiety in patients.^[18,3]

As a result, it seems logical that professional nurses are required to achieve this competence in providing spiritual care. Research has also shown that feeling of comfort and power from religious beliefs can contribute to health and well-being. Although religious practices may not lead to the treatment of a patient, they can help the person to feel good. In addition, they are more resistant to physical, psychological, and psychological stresses and changes resulting from the disease.^[19]

It is worth noting that determining the health and existential health status, especially in people with chronic disease, including female MS patients, can be very useful in providing clinical and nursing care to these patients. It is expected that individuals with lower religious and existential health behave in an ineffective way to deal with stressful situations and therefore are at high risk for mental and physical illnesses. On the contrary, individuals with higher religious and existential health can achieve a high level of well-being as a consequence of stressful situations. This is one of the tasks of the treatment team to identify these strengths and to enhance the other levels of personality and address the problems associated with the disease. Individuals with a high level

Table 1: The correlation between spiritual health (existential health and religious health) scores and self-esteem score

Variables	Self-esteem
Religious health (<i>r</i> , <i>P</i>)	0.23, 0.001
Existential health (<i>r</i> , <i>P</i>)	0.22, 0.008

of religious and existential health with chronic illness may interact with health-care providers differently from those with a low level of religious and existential health.^[20]

Other research objectives were to determine the relationship between religious and existential health and self-esteem in women with MS. Pearson's correlation coefficient showed a significant positive correlation between these two variables and self-esteem. As the level of religious and existential health increased, the level of self-esteem increased. This result can be interpreted as follows: by increasing the level of religious and existential health in patients, self-esteem can be improved in these patients. In this regard, Najafi Sani *et al.* showed that the longer pregnant women are familiar with Holy Quran, the higher will be happiness levels, and the mean duration of the communication with Quran among people with higher happiness was higher than those of other groups.^[21] Furthermore, the results of the study of Asgari *et al.* showed that spiritual health education increased the problem-oriented coping strategies and reduced the emotional-oriented coping strategies.^[22] Allahbakhshian *et al.* (2010) in their study showed that there was a significant positive correlation between spiritual health and quality of life in patients with MS.^[3] Moreover, the result of their study showed that as the level of spiritual health increased, patients' quality of life will increase in both physical and mental dimensions. Therefore, recommended that further studies be conducted with the purpose of assessing the relationship between other psychological variables with spiritual health and self-esteem in MS patients. In this study, demographic and disease factors associated with spiritual health and self-esteem were examined. Finally, and contrary to our assumption, spiritual health and self-esteem had no relationship with any of the demographic and disease characteristics in MS patients. Lack of relationship between clinical variables including duration of illness, type of treatment, with spiritual health and self-esteem can be related to inclusion criteria. Because patients for entry into the study should have had at least 6 months passed from their illness. Therefore, it is likely that after this period, the patients had reached a minimum level of stability in spiritual health and self-esteem and changes occurring after this period would be much less, or they had achieved compliance with the changes caused subsequent to disease and treatment.^[8,23,24]

It should be noted that the results of this study should be considered along with its limitations. First, due to the cross-sectional design of the study, we cannot infer causal relationships. In addition, in this study, it was not possible to determine the status of religious and existential health, as well as self-esteem before the onset

of MS, and also a comparison with existing situation was not possible due to executive problems.

Conclusions

This study showed that spiritual health was significantly associated with self-esteem in women with MS. Hence, considering special conditions of MS patients and their urgent need for maintaining and improving spiritual well-being, enhancement of spiritual health, and self-esteem should be further emphasized in the treatment and caring programs of these patients such that they and their families overcome to these critical conditions.

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Conflicts of interest

There are no conflicts of interest.

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