

# Effect of Spiritual Therapy Training on Multiple Sclerosis Patients' Hope

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## ABSTRACT

**Introduction:** With regard to hope which is an essential compatible source for chronic patients, it affects their attitude, health status, and life quality. This study was conducted to determine the effect of spiritual therapy training on the hope of patients with multiple sclerosis (MS).

**Method:** This study was a randomized clinical trial on MS patients that was performed in 2017. The statistical sample included 60 people who were randomly divided into two groups of experiment and control. To measure patient's hope, Miller's hopeful's questionnaire was used before and after the completion of the training. The training group received spiritual therapy training program for 8 sessions. Data analysis was done using SPSS v.20 software.

**Findings:** The mean age of the patients participating in the experimental and control groups was respectively  $38.43 \pm 9.81$  and  $38.37 \pm 9.62$ . The results of paired t-test showed that there is a significant difference in the mean scores of hope in spiritual therapy of experimental group before and after intervention ( $p < 0.0001$ ).

**Conclusion:** it is necessary to pay attention to mental and psychological dimension and considering counseling and psycho-therapy programs for these patients.

## KEY WORDS

training, spiritual therapy, hope, multiple sclerosis

## INTRODUCTION

One of the most painful events of human life is the outbreak of chronic diseases. Although patients with chronic illness have a longer lifespan than the past through the advancement of medical treatment, they still face compatibility issues. Hence the important challenge of health care in the current century is to pay attention to the quality of life and happiness of patients<sup>1)</sup>.

Multiple sclerosis is one of the most common chronic diseases of the central nervous system that is associated with demyelination of neurons, and the demyelinated parts in result of the disease cover all the white matter and affect the sensorimotor function<sup>2)</sup>. The most common age of the disease is between the ages of 20 and 40<sup>2,3)</sup>, when the individual has the most family and social responsibilities<sup>3)</sup>. As a result, the disease harms the productive forces of the community, and this problem addresses the entire population of society<sup>5)</sup>. The disease is more prevalent among people living in northern and temperate climate<sup>6,7)</sup>.

Approximately one out of 1000 has been affected by this disease and is estimated to be about 1.1 million people in the world<sup>8)</sup>. In Iran, 15 to 30 of 100,000 people are infected with the disease. According to the MS Association of Iran in 2008, approximately 30 to 40 thousand people were the approximate number of people with this disease<sup>9)</sup>. The prognosis of this disease is unclear and patients experience various physical and mental symptoms of the disease<sup>3)</sup>; this disorder greatly affects the daily functioning, social and family life, functional independence, and individual planning for the future. In general, it degrades the feeling of goodness in a person severely. About 80 percent of patients

experience some degree of disability, and only one out of every five patients remains stable and does not progress to disability.

From the above mentioned, it can be concluded that this illness can cause symptoms and mood disorders due to the chronic nature of the disease and lack of definitive prognosis in the patient. In this case, studies show that patients with multiple sclerosis have significantly higher levels of psychiatric disorders such as depression, stress and anxiety than healthy people<sup>3)</sup>. These symptoms may be due to the direct effects of inflammation and demyelination of the nerves, or the psychological effects of chronic and unpredictable multiple sclerosis. Psychic manifestations of this disease include anxiety, stress, depression, cognitive disorders, irritability and anger, among which depression and stress are the most prevalent in these patients<sup>10)</sup>.

Hope is one of the most important sources of adaptation for chronic patients to survive and affects the individual's attitude, health status and future<sup>11)</sup>. Hope is a component of the power of concentration, attention, planning, and purposefulness in life<sup>12)</sup>. Studies have shown that hope has a positive effect on the physical therapy of patients with angina and gastrointestinal problems and causes optimism and hopefulness and improvement of individual relationships to achieve therapeutic goals<sup>13)</sup>. Hope also improves self-efficacy, self-esteem, increasing spirituality, social support and promoting patients life quality<sup>14)</sup>.

The importance of paying attention to spirituality is due to the fact that spiritual needs and attitudes are considered to be the most inevitable and transcendental human needs<sup>15)</sup>. Religion and spirituality are effective on physical and mental health<sup>16)</sup>.

Several studies have shown that spiritual counseling and spiritual therapy can enhance patients mental health. For example, the study of

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**Table 1: Frequency distribution of patients' demographic characteristics in the experimental and control groups.**

Group	Variable	Experimental(30)		Control(30)		P-Value
		N	%	N	%	
Sex	Female	21	70%	20	66.7%	0.24
	Male	9	30%	10	33.3%	
	Total	30	100%	30	100%	
Marital Status	Single	23	76.7%	19	63.3%	0.74
	Married	7	23.3%	11	36.7%	
	Total	30	100%	30	100%	
Employment	Yes	11	36.7%	16	53.3%	0.62
	No	19	63.3%	14	46.7%	
	Total	30	100%	30	100%	
Education Level	Elementary	2	6.7%	8	26.7%	0.76
	Under Diploma	6	20%	4	13.3%	
	Diploma	14	46.7%	12	40%	
	Bachelor	8	26.7%	6	20%	
	Total	30	100%	30	100%	
Income	Weak	11	36.7%	6	20%	0.52
	Medium	14	46.7%	21	70%	
	Good	5	16.7%	3	10%	
	total	30	100%	30	100%	

Agha Ali *et al.*<sup>17)</sup> in the study of the effect of cognitive-behavioral group counseling with emphasis on spiritual thoughts in MS patients, a study by Yaghoubi *et al.*<sup>18)</sup> on the effectiveness of cognitive-behavioral therapy and spiritual-religious psychotherapy based on Islamic training and Rahmati *et al.* in the study of the effect of spiritual-religious group therapy in schizophrenic patients showed that spirituality causes mental health improvement<sup>19)</sup>.

Since chronic diseases, including MS, affect all aspects of the individual, family, and society's economic, financial, social and emotional conditions; only drug treatment and controlling the course of the illness are not sufficient and the nurses, given their critical role in patients' rehabilitation, are able to help them in boosting the ability to do their daily activities<sup>20)</sup>.

However, researches on patients spiritual counseling, and especially on the substantial hope indicator, is very limited. On the other hand, the spiritual counseling in these studies is consistent with the culture of those societies, which is very different from the Islamic-Iranian culture of our society.

It seems that counseling with the spirituality approach reduces the physical and psychological problems of patients and increases their hope. The existence of hope in chronic diseases is an important issue, and in fact it is a struggle to overcome the limitations of life and the effort to live<sup>21)</sup>. Therefore, this study was conducted to determine the effect of spiritual training on the multiple sclerosis patients' hope, with regard to the complications and consequences of multiple sclerosis, such as hopelessness and subsequent failure to adhere to the treatment, the patient's tendency to die, the penetration of suicidal thoughts, imposing significant expenses on families and the health system of the country, and the existence of rich Islamic culture in Iranian society.

**METHODS & MATERIAL**

**Study Type, Study Population and Sampling:**

This experimental-clinical trial study was conducted among all the patients referring to Jahrom MS Clinic, who are referred to this center for receiving health care.

The sample size was studied by using easy sampling method and considering the type 1 error ( $\alpha$ ): 0.05, power (1- $\beta$ ): 80%, accuracy (d) or Effect Size: 0.831, each group was 24 and with a probability of dropping 15% of 30 persons per group were considered.

**Method:**

The researcher participated on different days of the week after obtaining confirmation from the Ethics Committee and permission of the Education Dept. of Jahrom Nursing School and coordinating with the MS Jahrom Clinic. In the first stage, the samples were selected according to the criteria for entering and leaving of the community and they were included after explaining the goals of the study and obtaining the informed consent form. Then, 56 samples were randomly divided into experimental and control groups. For the experimental group, eight sessions of spiritual therapy training were held twice a week for 60 minutes. (Appendix No.1) before and after the training sessions, the Omidwa Miller standard questionnaire was given and completed by them. In case, the people were not able to complete the questionnaire, the researcher read the questions to them and recorded their views in the questionnaire in full.

The control group only received the routine care of the MS clinic. At the end, the control group members who did not receive any training completed the Miller questionnaire and then the effect of spiritual therapy training on the hope of multiple sclerosis patients was compared in both groups.

**Study inclusion criteria:**

1. Do not have other acute or chronic disorders of the disease (heart, respiratory, liver, skeletal, vascular, renal disease), speech or hearing impairment.
2. Be literate.
3. Fill out the informed consent form of participation in the study.

**Study exclusion criteria:**

1. Having a history of participation in training programs in relation to spirituality and stress management in the past 6 months
2. Having a history of MS disease less than 6 months
3. Not completing the follow-up period

**Data collection tools:**

**Miller's life expectancy questionnaire:**

Miller's life expectancy questionnaire is a diagnostic test. This test was first used to measure hope in cardiac patients in the United States in order to show the amount of their hope, and includes forty-eight aspects

**Table 2: The comparison of mean and standard deviation of hope scores of MS patients in the experimental and control group**

Time	Before	After	P-Value
	Intervention	Intervention	
Group	Mean(SD)	Mean(SD)	
Experimental	96.70(10.67)	125.10(12.09)	< 0.001
Control	96.83(14.01)	95.03(13.51)	< 0.1

of hope and frustration patterns, in which the written articles are chosen based on apparent manifestations and hidden behaviors from hopeful and disappointed individuals<sup>229</sup>. In every aspect that represents a sign of behavior, including some written this way (strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, strongly agree = 5). Each person obtains a score by choosing a sentence that applies to him/her. The numerical values of each aspect vary from 1 to 5, the obtained aggregate score represents hope or disappointment. In Miller test, the obtained scores range is from 48 (the lowest hopefulness) to 240 (the most hopefulness). Miller questionnaire has been tested and reviewed constantly. Hosseini used Cronbach alpha and bisection methods to determine the reliability of the questionnaire, which their coefficients were 90/ and 89/ respectively. He also used the criterion-referenced test to determine the validity of this questionnaire. In the way that the total score of the questionnaire correlated with the score of criterion-referenced test and it was found out that there is a significant positive relationship between these them ( $r = .61$  and  $p < .0001$ ).<sup>230</sup> Darvishi through the research which was done on breast cancer women (2009), evaluated the reliability coefficient of this questionnaire using Cronbach alpha and bisection methods, respectively /89 and /90 and the validity  $r = .79$ .<sup>240</sup> Shahnam Abolghasemi in a research entitled effectiveness of guided imagination and meaningfulness on the depression, anxiety, and hope of Women with Cancer in Ahvaz Shafa Hospital in 2011, in order to determine the reliability of life expectancy questionnaire, used Cronbach Alpha and bisection and the results were 90 / and 87 respectively. To determine the validity of the life expectancy questionnaire, the score was correlated with anxiety questionnaire that it was obtained ( $p < 0.0001$  and  $r = -.79$ ) respectively, it indicates that the life expectancy questionnaire has enough credibility<sup>250</sup>.

### Data analysis:

Data analysis was done through descriptive statistics and statistical tests of covariance and paired t-test using spss19 software.

## RESULTS

The mean age of the participated patients in the experimental and control groups were ( $38.43 \pm 9.81$ ) and ( $38.67 \pm 9.62$ ) respectively. Also, the duration of the disease was reported ( $23.77 \pm 11.60$ ) and ( $19.20 \pm 9.99$ ), in both experimental and control groups respectively. The frequency distribution of other demographic characteristics of the studied units is presented in Table 1. According to Table 2, the results of paired t-test showed that the mean scores of hope in spiritual therapy of experimental group were significantly different before and after intervention ( $p < 0.001$ ). Paired t-test also showed that the mean scores of hope in the control group were not significantly different before and after the intervention ( $p < 0.05$ ). Independent t-test represented the mean score of hope between two groups after the intervention was significant ( $p = .001$ ). (Table 3)

## DISCUSSION & CONCLUSION

The purpose of this study is to investigate the effectiveness of spiritual therapy training on the hope of patients with multiple sclerosis. The research findings show that spiritual health training increases the hope level in the experimental group compared with the control group. People with high hope level are more creative in finding alternative ways to achieve their goals and they are more motivated to follow their things, and it's noticeable that they are able to learn from previous successes and failures to achieve future goals. They choose the goals that need more effort, and they are confident about their skills and goals and

**Table 3: Comparison of mean scores of hope among patients between the spiritual therapy training group and the control group after the intervention**

Group	Time	After Intervention	P-Value
	Mean(SD)		
Experimental	125.10(12.09)		< 0.01
Control	95.03(13.51)		

focus on them<sup>260</sup>. In this regard, the results of the Owen study showed that disappointment and also its subsequent depression are a common consequence of chronic illnesses in patients with chronic diseases and by increasing the level of hope in these patients, it is possible to prevent a large part of the incidence of depression as one of the public health indicators<sup>270</sup>. On the other hand, the results of Raab study showed that the hope is a kind of emotion to make a dream or good manner feasible in the future, it considered as an important factor in individual therapy and group therapy and predicts positive outcomes of the future general health of patients<sup>280</sup>.

In Feldman and Snyder's view also, hope and life meaning are related to each other, so that they consider hope as a factor of life meaning<sup>290</sup>.

In addition, other findings from other researches show that spiritual health training can increase the amount of hope in people with MS. Because spiritual health training creates multiple functions for patients' compatibility, such as maintaining self-esteem, creating exciting emotional comfort, hope and meaning and purpose in life. In fact, spiritual beliefs increase the patient's resistance to the disease and are effective in reducing physical symptoms and increasing hope. Because hope plays an important role in effective health and coping during chronic illness<sup>300</sup>, through the results of the researches, it can be concluded that there is a positive relationship between spiritual health and hope and in fact, the promotion of spiritual health and increasing hope can be effective in improving the mental health of people with chronic illness.

In explaining these findings, it can be said that spiritual health is one of the basic concepts about how to deal with the problems and tensions caused by the disease and as one of the dimensions of health, it leads to the integration of its other dimensions. When spiritual health is low, it is possible that a person experiences mental disorders such as loneliness, anxiety, and loss of meaning in life. Patients whose spiritual health is strengthened can effectively adapt to their illness<sup>310</sup>. Today researchers believe that creating life expectancy leads patients with multiple sclerosis to greater success in life, better health, healthier supportive social communication, and ultimately higher mental and physical health; accordingly, giving awareness to the family and the patient's relatives has a significant effect on improving their life quality and hope.

Based on the results of this study, the effect of spiritual therapy training can be identified as a factor in coping with physical and psychological problems caused by severe diseases. In our society, Iran, in which people have rich and old beliefs, paying attention to meaningfulness, is considered an easier and more desirable way for human and multi-dimensional care. Also, the care based on culture, meaningfulness, and having a comprehensive view of the different dimensions of patients can help health and frustration in order to provide better services for patients with chronic diseases such as multiple sclerosis. Since sampling in this study was continuous and the statistical population was selected only among members of the MS clinic, it is recommended to conduct similar studies in other counties with random sampling. Doing qualitative research is recommended due to better understanding of how spirituality effects on health, its impact on improving life quality and its aspects. Furthermore, in clinical and theoretical training, it is recommended that Medical science students, especially medical students and nursing students become more familiar with spiritual health as one of the most important dimensions of health and life satisfaction to have a more comprehensive look at the client and be able to provide a more complete and appropriate service along with maintaining humanitarian and moral values.

A limitation of this study, which can be mentioned, is lack of MS severity evaluation in patients due to time limitation. Based on the limitation, it was not possible to evaluate the effect of the disease severity on hope and compare with other studies.

### Appendix 1-1: Contents of spiritual therapy sessions

Treatment sessions	Sessions Title
First session	Members' acquaintance with each other and discussion about the concept of spirituality and religion and its effect on individual's life.
Second session	The effect of faith and trust on the reduction of psychological problems such as anxiety and depression.
Third session	Spiritual Imaging / Progressive Muscular relaxation: In this session, they were visualized and relaxed with the use of Johnson's relaxation technique, along with listening to the soothing music (the sound of nature and rain).
Fourth session	The role of patience in enduring difficulties and suffering / The role of patience besides trusting in God.
Fifth session	Book therapy, reading Quran, listening to Quran's voice: the patient cited the holy Quran. He also listened to the tape with the voice of Master Abdul Basset for 20 minutes, including the recitation of selected suras of the Holy Quran (Waqia, Nabi, Alrahman).
Sixth session	The strategy of prayer therapy in reducing psychological problems and increasing hope: the importance of prayer and its role in mental health and hope for the future were discussed.
Seventh session	Writing Daily Note / Spiritual Self-Defense: It was urged to write down daily activities and memories within a 24-hour period, and to present some solutions for the relaxation of the soul and the physical health in life.
Eighth session	Forgiveness / definition of repentance and its conditions.

## CONCLUSION

Regarding the effect of spiritual therapy training program on patient's hope, it is necessary to pay attention to spiritual and psychological dimension and consider counseling and psychotherapy programs for these patients. It is also recommended to consider programs and approaches in order to promote spiritual health, based on the concepts of meaningfulness and being purposeful in these patients for improving the compatibility and as a result improving all life quality aspects. It is also recommended to consider programs and approaches in order to promote spiritual health, based on the concepts of meaningfulness and being purposeful in these patients for improving the compatibility and as a result improving all life quality aspects.

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