



## **EFFECTS OF SELF-CARE TRAINING ON MS PATIENTS' HOPE RATE BY GROUP DISCUSSION**

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### **ABSTRACT**

**Introduction:** Self-care plans and its related strategies are very important in patients who deal with chronic diseases. By learning the self-care skills, the patients can enhance their daily performances and wellness and treatment process of the disease. **Purpose:** This study is conducted with the aim of evaluating the effects of self-care Training through a group discussion method on hope rate of patients of Jahrom MS center in the year 2016. **Materials and methods:** this study is cross-sectional, descriptive analytic type which studies 30 patients of Jahrom MS society. Data are gathered through questionnaire of self-care index and Miller Hope Scale. SPSS23 software is used and inferential statistical tests (independent t-test) with significance level of  $P < 0.05$  are used for data analysis. **Results:** The findings show that 57.7% of the individuals' hope rate is equal to 200 or higher than that which indicates that they are hopeful. Also after self-care and group discussion activities the hope rate average is increased to a significant statistical difference ( $P < 0.05$ ). **Conclusion:** Self-care through group discussion can raise hope rate in MS patients. Hope is fundamental to personality formation, and is essential for life. Since the majority of the studied MS societies were poor in terms of self-care, it is recommended to pay more attention to self-care programs for MS patients and eradicate the causes and factors which lead to poor self-care.

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### **Introduction**

MS or multiple sclerosis is an autoimmune disease which attacks the body's immune system; in other words, the body attacks its own tissues. The cause of MS is still unknown [1]. More than 5 million people around the world and more than 7000 people are suffering from MS [2]. Race is an important factor in MS. The American people whose origin is from Japan and Africa are less at the risk of developing MS. The Irish and the Scandinavians inhabitants of US are more at the risk of developing MS. The rate of MS in Iran is between 15 and 20 cases per 100 people [3]. According to the MS society of Iran there are 5000 new cases of MS in Iran each year [4]. But the people with ms in the world are around 3 per 100000 where in Iran the prevalence increases to 50 per 100000 individuals. Therefore, the MS prevalence in Iran is 17 times higher than the world's average. The development and symptoms of MS in each patient is different and it is not predictable [5]. In the early stages the disease is highly unpredictable and the patients experience sudden unexpected attacks which have very bad psychological effects on the patients and their families so that the patients will have clinical challenges and more than 70% of the patients are in urgent need of their family help and support [6]. Lifestyle modifications and self-care plans are potential treatments to multiple sclerosis disease; they also reduce the long term risk of developing the disease. There has been a shift in managing the treatment of chronic diseases to patient centered self-care and disease progression prevention plans. In the individuals who are active in managing the disease, the results may be better [7]. In this field, group treatment and group discussion are the oldest forms of self-care treatments [8]. In this approach the individuals learn easily and quickly, since the members of a society usually have similar characteristics. MS most commonly affects young people who usually have difficulty in asking their questions from doctors or medical staff, but through peer Training programs they discuss and share personal experiences and information with the people who have the same problems without fear of judgment or misunderstanding and obtain useful information concerning the disease and the ways it can be controlled and how to relieve MS stress [9, 10]. By enhancing the patients' learning abilities, they become more capable in decision making and taking

actions and the compatibility mechanisms increases. The patients' low awareness of chronic diseases and self-care may result in their hospitalization, while Training can prevent this from happening over and over [11].

One of the main factors that impacts health and happiness is hope. Hope is an internal quality that can give energy and power to the individual. Therefore, hopeful individuals show greater sense of responsibility in self-care and recognizing others efforts in helping them [12]. The studies show that hope is one of the most important psychological factors in self-care. Self-care deals with internal and external sources in the individuals. Hope as an internal psychological source, which is related to the individual's goals and expectations can affect the individual's behaviors [13]. One the oldest forms of hope-treatment is group treatment.

In this Training approach the individuals learn easily and quickly, since they have similar characteristics. MS commonly attacks young people who most of the time are find it difficult to ask questions from doctors concerning their disease, but peer Training programs provides the opportunity for them to discuss and share personal experiences and information with the people who have the same problems without fear of judgment or misunderstanding and obtain useful information concerning the disease and the ways it can be controlled and how to reduce stress [14]. Research findings indicate that the patients who suffer from chronic disorders can improve their health by participating in Training programs. This also increases hope rate, good feelings, and life quality and reduces disability [15]. Therefore, treating MS patients only based on a medical pattern is not enough and these issues must be taken in to consideration so that in chronic diseases such as MS the focus of treatment would shift from medical treatment to the lifestyle of the patients in order to improve their health. In order to improve MS patient's health, as a treatment strategy for reducing the cost of treatments they should take part in actively in the treatment process just like the hospital staff. One of the most important tasks of the nurses is their responsibility in Training and rehabilitation of the patients so that a dependent patient becomes independent and self-sufficient. In group discussion plans, the important role of the nurses is giving responsibility to the patients. Today's, Training is recognized as one of the basic rights of humans [16]. Individual training of each patient will increase patients' satisfaction, independence, hope and engagement in health care programs. It will also reduce the patients' hospitalization and disease side-effects. There will increase patients' health and life span [17]. Training is the task of medical team, but the doctors alone cannot do that. Therefore, it is necessary to assign the patients with some parts of the treatment process, since they can communicate with people with the same problem more easily. The nurses' active and broad role in the treatment process makes them an effective agent in self-care group discussion activities for MS patients [18]. Since the nurses' task is to encourage the patients to recover their health, it is necessary that the nurses study self-care and its related factors [5]. By analyzing the treatment process of MS patients, nurses can evaluate their self-care activities and try to fix deficiencies and use the collected information in designing better self-care plans [19]. These information can also be used as the basis for future health care plans for MS patients [20].

There have been several different studies and researches concerning this issue which show that there is a significant relation between self-care program by grope discussion method and hope rate of patients in MS centers. According to Bagheri (2012) the average score of well-being and hope rate in Azemayesh group turned up to be significantly higher than Gavah group ( $P < 0.001$ ). Omrani and colleagues (2012) also reported that Azemayesh group scored significantly higher than Gavah group in life expectancy after the exam ( $P < 0.0001$ ).

Since the cognitive-behavioral group therapy has been effective on enhancing the hope rate in the MS patients, thus by adding this method to the treatment process of MS patients can increase their mental health and life expectancy. On the other hand, according to Movahedi and colleagues (2013) there is a significant difference between the scores of Azemayesh and Control group which indicates that hope therapy has increased subjective well-being of Azemayesh group ( $P < 0.001$ ). Hope therapy program by group method will increase hope and subjective well-being of the students. Heo and colleagues (2012) in a study with the title of "A study of related factors to self-care behaviors in MS patients and gender differences" have defined three sub-scale for self-care index: preservation, management, assurance. In their study they used the self-care preservation sub-scale for evaluation of self-care behaviors, and used self-care assurance sub-scale for evaluation of self confidence in capabilities in doing self-care activities. Kelani (2015) in a study has analyzed the effect of hope therapy with phone tracking on MS patients. The findings indicate that the average hope rate of the patients has increased ( $P < 0.001$ ). Therefore, an increase in hope rate can motivate the patients to take mare actions in self-care and also hope can play a positive role in controlling the disease. Since, there has been little study concerning the impact of self-care Training through group discussion on the hope rate of MS patients, the purpose of this study is investigate the impact of self-care Training through group discussion on MS patients hope rate.

## **Methodology**

This study is a semi-experimental study. The society of the study consists of all 120 MS patients of Jahrom city who have records and files in the MS center of Jahrom. The statistical society of this study consists of 30 MS patients who have the required criteria and are selected by random sampling method.

### **Criteria:**

1. Age: the samples are aged 20-50 years' old

2. Have reading and writing literacy
3. They are not wheel chaired
4. They are not in the acute stage of the disease
5. They do not have any other acute and chronic physical or mental disorders; such as major depression, speech impairments or hearing disorders recorded in their files.

**Information gathering instrument:**

Information gathering instrument in this study is miller hope scale questionnaire (appendix 1). Miller hope scale questionnaire was used for the first time in the US as a tool for measuring hope rate of patients with heart diseases. Miller hope scale questionnaire consists of 40 questions about 40 different aspects of hope and helplessness with a 5-point scale and with a score range of 40-200, where 200 score indicates maximum hope rate and 40 indicates the minimum score of hope rate. In a study which analyzed and evaluated the validity and reliability of questionnaires concerning Iranian patients hope rate, this questionnaire has been selected as the best questionnaire with maximum validity and reliability ( $\alpha= 0.81$ ) for measuring hope rate of Iranian patients (Abdi, 2011).

**Findings**

The descriptive findings of the case study sample indicate that 23.3% of the individuals age 25-30 years old, and 36.7% of them age 31-35 years old, and 40% of them age 36-40 years old. 36.7% of the individuals are men and 63.3% of them are women. the individuals with Training below diploma consist of 16.7% of the sample. Persons with diploma constituted 30% of the sample. Persons with BA constituted 36.7% of the sample and 16.7% of the persons had higher Training. Persons with BA Training accounted for the largest group. The majority of the persons (40%) live with their families where they are not in charge of head of the household (80%). 53.3% of them are house owners and 80% of them live in the city.

Regarding insurance coverage, the majority of the individuals -28 persons- are covered by insurance (93.3%), 14 persons of them (50%) are covered by Iran Health Insurance Organization and 6 persons of them (21.4%) are covered by Social Security Insurance Organization. 2 persons are covered by army insurance (7.1%) and 6 persons are covered by Iran Health Insurance Organization (21.4%). Also, 9 persons (30%) of the sample are covered by supplementary insurance and 21 persons (70%) are not.

Regarding hospitalization records, 3 persons (10%) have no hospitalization record, 7 persons (23.3%) had been hospitalized for 3 or 4 times, 9 persons (30%) had been hospitalized for 5 times and more. The majority of the patients had acquired the necessary information. They had acquired more than 50% of their information from nurses. Also, both of the groups had more Cinnovex drug use.

**Table 1:** Frequency distribution of hope rate in case study society based on Miller questionnaire

Hope rate	Frequency		
	Numbers	Percentage	Average/ Standard deviation
200 and more ( hopeful)	16	57.7	96.83±22.64
Lower than 48 (no hope)	14	42.3	
Total	30	100	

Table 1 Shows the frequency distribution of MS patients based on the answers to the Miller questionnaire. The related questions are scaled based on the extensive parallel process pattern to five levels of 1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree. The scores are the sum of all scores of responses to all questions. Accordingly, the scores of 57.7% of all persons is equal to or more than 200 which indicates that they are hopeful.

**Table 2.** Paired T test for analysis of average hope rate in MS patients before and after self-care Training through group discussion method

Groups	Numbers	Average	Standard deviation	T value	Significance Level
Before Training	30	118.17	19.79	5.64	0.001
After Training	30	135.72	20.05		

According to the independent T test, there is a significant statistical difference between total scores of hope rate based on t that is 5.64 and significance level  $P<0.001$ . the comparison of average variations of total score of hope before and after the Training program also show that hope rate after Training through group discussion method has increased significantly.

**Discussion**

The life quality status of MS patients is impaired and they cannot live a normal life and cannot follow daily routine activities due to physical disability. Therefore, different studies and researches concerning this issue can improve life expectancy of MS patients and can also bring about advances in medical science in this field and enlighten the dark sides of this disease. Although, an ultimate cure for this disease has not been discovered yet in the world, but, there are many different methods that can control harsh attacks of the disease and Training programs can help the patients to find the methods to defer the disease and improve their normal life. Therefore, this study has analyzed the impact of self-care Training through group discussion method on the hope rate of MS patients of MS center of Jahrom city in 2016. The research hypothesis of this study, the impact of self-care Training through group discussion method on the hope rate of MS patients, is analyzed and the findings indicate that there is a significant difference in the average score of hope rate before and after the self-care Training through group discussion method. Other studies also prove the validity of the findings of this study. For example, Bagheri in an article with the title of "The Impacts of Immediacy Based Group Therapy on Life Expectancy and Hope Rate of Patients with Multiple Sclerosis" shows that the average score of well-being and hope rate in Azemayesh group turned up to be significantly higher than Gavah group ( $P < 0.001$ ). Omrani and colleagues in an article with the title of "The impact of Cognitive Behavioral Therapy through Group Discussion on the hope rate of Patients with Multiple Sclerosis" show that the average scores of hope rate in the Azemayesh has significantly increased in comparison to the Gavah group after the test ( $P < 0.0001$ ). Regarding the effectiveness of behavioral-cognitive treatment group on the increase in the hope rate and life expectancy of MS patients, it seems that providing MS patients with Training regarding behavioral- cognitive treatment leads to improvement of psychic health of MS patients specially their life expectancy in the treatment process. Movahedi and colleagues (2013) studied "The Effectiveness of Group Training based on Hope Treatment on Hope Rate and Psychological Wellbeing of Students"; their findings indicated that there was a significant difference between the average post test scores of Azemayesh group and Gavah group so that group hope treatment increases hope and psychological wellbeing in the Azemayesh group ( $P < 0.001$ ). Students' hope treatment leads to increased hope rate and psychological wellbeing. Regarding these findings, it can be declared that hope is defined as a factor influential in prolific life and encourages individuals to foresee life beyond the current painful status. Some positive results of improved hope can be named as meaningful life, job encouragement, happiness and responsibility toward life, self-confidence and calmness, compliance with different conditions and superiority in life. Studies in different aspects of weakness and disability highlight hope as a predictive variable of satisfaction in life. It can also be named as a positive psychological variable which can predict positive consequences including increased life satisfaction. According to Schneider and colleagues (2013) hope treatment interventions are efficient ways in improving life standards in chronic diseases. From this view point improved hope results in self-care, higher life quality, and public health improvement in these patients and health treatment with a focus on hope improvement leads to increased hope of the patients with MS. Results of the current study indicated that self-care through group discussion results in hope improvement in patients with MS. Hope is the basis for personality foundation; in addition, it is the source of human life. Indeed, it is a healing power which promises wellbeing and hope. Besides, it is observed that there is a relationship between hope and treatment effectiveness while it is considered as a necessary element for patients' improvements.

Schnider and Lupez (2014) believe that hope acts as a placebo in treatment of physical and psychological diseases and declared that hope based treatment brings positive changes in human physiology. An increase in hope in the patients leads to can improve their conditions and life quality and trust in life accompanied with feeling of welfare free of the worries regarding the side effects of the disease. The results of the study prove hope as a measureable quality that can be used in the evaluation and nursing cognition process and needs some intervention for its advancement as a result. Based on the positive effects of self-care on hope rate in patients' lives in this study it is suggested to nurses to pay attention to spiritual dimensions of patients as a special aspect of human existence which can affect the general health status of the patients. In this regard this study suggests self-care programs in a group which results in increased hope rate in patients. Since few studies are done in Iran regarding factors predicating self-care in patients with chronic diseases such as MS, the results of this study can be used by researchers interested in the same topic so that they can perform a comprehensive study.

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