



Journal of Applied Family Therapy



Iranian Association of Women's Studies

## The effectiveness of schema therapy with cognitive behavioral therapy on self-efficacy and quality of life in women with MS

Maryam. Heidari<sup>1</sup>

Shahram. Mami<sup>2\*</sup>

Vahid. Ahmadi<sup>3</sup>

Kianoosh. Khamooshian<sup>4</sup>

1. PhD student, Department of Psychology, Ilam Branch, Islamic Azad University, Ilam, Iran

2. \*Corresponding author: Assistant Professor, Department of Psychology, Ilam Branch, Islamic Azad University, Ilam, Iran

3. Assistant Professor, Department of Psychology, Ilam Branch, Islamic Azad University, Ilam, Iran

4. Neurologist, Imam Reza Hospital, Kermanshah University of Medical Sciences, Kermanshah, Iran

Email: shahram.mami@yahoo.com

Received: 07.12.2022

Acceptance: 17.05.2022

*Journal of  
Applied Family Therapy*

eISSN: 2717-2430  
<http://Aftj.ir>

Vol. 4, No. 1, Pp: 554-570  
Spring 2023

### Original research article

#### How to Cite This Article:

Heidari, M., Mami, Sh., Ahmadi, V., & Khamooshian, K. (2023). The effectiveness of schema therapy with cognitive behavioral therapy on self-efficacy and quality of life in women with MS. *aftj*, 4(1): 554-570.

### Abstract

**Aim:** According to people with MS, they have low quality of life and low self-efficacy. Therefore, this study was conducted with the aim of investigating self-efficacy and quality of life in women with MS. **Methods:** The current research was of applied purpose and in terms of methodology, it was quasi-experimental with a pre-test-post-test design, a control group and a two-month follow-up. The statistical population of the study included all women suffering from multiple sclerosis (MS) in Kermanshah during 2019-2020, who had referred to the Imam Reza Educational-Therapeutic Center. Using available and targeted sampling, 45 people were selected and randomly assigned to three groups (schema therapy = experimental group 1; cognitive behavioral therapy = experiment group 2 and control group). The data collection tool included the World Health Organization Quality of Life Questionnaire (1996) and Scherer and Maddox Self-Efficacy Questionnaire (1982). After determining and randomly placing the experimental and control groups, therapeutic interventions were applied to the experimental groups in the form of two sessions per week, each session lasting 1.5 hours. A week after the completion of the treatment sessions, the experimental and control groups were subjected to a post-test. Statistical analysis of data was done with SPSS version 25 software. **Results:** Data analysis using Variance analysis of repeated measures showed: Schema therapy and cognitive-behavioral therapy had a significant effect on the quality of life ( $F = 219.49$ ,  $P = 0.001$ ) and self-efficacy ( $F = 21.929$ ,  $P = 0.001$ ) of the research sample. Moreover, the significance of Bonferroni's post hoc test indicated the stability of the effects of both treatments. **Conclusion:** According to the results, it is suggested to the health policy makers to take cognitive-behavioral treatment measures and programs to improve the quality of life and self-efficacy of women with MS.

**Keywords:** Multiple sclerosis, self-efficacy, quality of life, schema, cognitive behavioral



© 2023 by the authors. Licensee Iranian Association of Women's Studies, Tehran, Iran. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) license (<http://creativecommons.org/licenses/by-nc/4.0/>)

## Introduction

Multiple sclerosis affects a person's family and social life, and since it affects the quality of a person's life, it can cause social, psychological and physical consequences for the patient, which are sometimes life-threatening (Mirzaei & Heydari, 2021). Quality of life is defined in a broad social concept in which a person defines quality of life based on experience and genetic characteristics with a mental understanding of being good or bad (Pishgoei et al., 2018). Quality of life is a set of emotional and cognitive reactions of people in front of their physical, mental and social condition (Schwartz et al., 2017). As a disease that has physical and mental complications and affects various aspects of a person's life, MS destroys many components of the quality of life and lowers the quality of life of patients (Arasteh & Azadi, 2018).

Patients with multiple sclerosis have a sense of security and a low sense of self-efficacy due to their physical disability (Piers-Fants et al., 2018). People with high self-efficacy have the ability to deal with problems, and every success increases their self-confidence, but people with low self-efficacy doubt their abilities and see themselves as unable to deal with the environment. (Inacho et al., 2015; Hamilton et al., 2017). Due to the chronic nature of multiple sclerosis, self-efficacy is an important internal factor for long-term control of chronic diseases and is related to improving the ability of adaptation in patients, and this improved adaptation leads to the reduction of psychological abnormalities (Jamaian et al., 2018).

In order to treat psychological problems, in addition to drug treatments, many psychological treatments have been invented over the years. Studies have shown that cognitive behavioural therapy is one of the effective interventions for psychological structures in chronic patients (van den Acker et al., 2017). In cognitive-behavioural therapy, therapeutic progress occurs following changes in cognitive schemas. Especially when the false beliefs of the patient are directly corrected or disabled by using other schemas (Kale and Ayach, 2018). This approach allows a person with a disease to be freed from the constraints of dos and don'ts and idealistic thoughts, to accept his illness and face it rationally through the challenge with negative spontaneous thoughts, identifying and correcting the individual's cognitive errors. In addition, with the change in cognitions and correction of irrational beliefs of a person, his attitude towards himself, the world and the future changes. Therefore, the patient can adopt a new perspective and flexibility instead of focusing on disabilities and despair about the future (Leahy et al., 2012).

Since many sufferers of chronic diseases with psychological symptoms, especially in follow-up studies, suffer a decline in the healing process, schema therapy is another approach used in this research. One of the advantages of the schema model is its brevity, complexity, and depth, and this treatment is exclusive. In other words, schemas show specific coping styles and mentalities (Beck et al., 2015). Based on the model theory proposed by Yang, schemas are developed in childhood and are used as templates for processing later experiences. By reflecting incompatible schemas, often unconditional beliefs about a person are created (Pogue, 2015).

Although progress has been made regarding the expansion of psychosocial interventions for patients with multiple sclerosis, their effectiveness has yet to be investigated in practical terms. Appropriate methods not only increase skills and resilience but also increase the immune system's efficiency and reduce the disease's health-economic consequences. Therefore, studying as much as possible and comparing various treatment methods can greatly help recovery. The current research was conducted to answer the following questions:

1. Is schema therapy effective on self-efficacy and quality of life in women with MS?
2. Is cognitive behavioural therapy effective on self-efficacy and quality of life in women with MS?

### **Method**

The current research was of applied purpose and in terms of methodology, it was quasi-experimental with a pre-test-post-test design, a control group and a two-month follow-up. The statistical population of the study included all women suffering from multiple sclerosis (MS) in Kermanshah during 2019-2020, who had referred to the Imam Reza Educational-Therapeutic Center. Using available and targeted sampling, 45 people were selected and randomly assigned to three groups (schema therapy = experimental group 1; cognitive behavioral therapy = experiment group 2 and control group). The data collection tool included the World Health Organization Quality of Life Questionnaire (1996) and Scherer and Maddox Self-Efficacy Questionnaire (1982). After determining and randomly placing the experimental and control groups, therapeutic interventions were applied to the experimental groups in the form of two sessions per week, each session lasting 1.5 hours. A week after the completion of the treatment sessions, the experimental and control groups were subjected to a post-test. Statistical analysis of data was done with SPSS version 25 software.

### **Results**

The results showed that the changes in the average quality of life score during the pre-test, post-test and follow-up periods were statistically significant ( $P = 0.001$ ). eta square showed that the duration of the intervention had a significant effect on the quality of life of women with MS. The results of the Greenhouse-Geers test showed that the changes in the average quality of life of women with MS in the three control groups, schema therapy intervention, cognitive-behavioral therapy during the pre-test, post-test and follow-up period were statistically significant. In other words, in the schema therapy intervention group, the changes in the average quality of life in the pre-exam phase compared to the post-exam and follow-up were statistically significant ( $P = 0.001$ ). The results showed that the level of quality of life was statistically significantly different in at least two of the three investigated groups ( $P = 0.001$ ). It indicates the high effectiveness of inter-subject factor levels in changing the quality of life score of women with MS. The results showed that the intervention over time had a significant effect on the self-esteem of women with MS. The effect of the intervention over time was statistically significant ( $P = 0.001$ ). Among the three investigated groups, the interventions over time were statistically significant ( $P = 0.001$ ).

### **Conclusion**

Like any other research, the current research had limitations; among these limitations, we can point out the use of self-report data collection tool and its limited statistical population. In addition, the existence of variables that are out of the researcher's control can cause problems in the results. Therefore, it is necessary to be cautious in generalizing the results of those aspects. Finally, it is suggested

that the researchers use the approaches used in this research in future studies so that its effectiveness can be checked on different statistical communities and other variables as well. According to the results obtained in the present study, it is also suggested that psychotherapists use cognitive-behavioral and schema therapy approaches and hold special workshops to teach the principles and techniques of these two approaches.

### References

- Aghili, M., Sarani, M., Asghari, A., & Namazi, M. (2022). The effectiveness of schema therapy on anxiety sensitivity and perceived stress in women with chronic pain. Zanko Journal of Medical Sciences. 23(76):13-24.
- Alfredsson, L., & Olsson, T. (2019). Lifestyle and environmental factors in multiple sclerosis. Cold Spring Harbor perspectives in medicine, 9(4), a028944.
- Ebrahimi Meymand, H. A., Askarizadeh, G., Bagheri, M., & Arabnejad, M. (2020). The Role of Spiritual Intelligence, Sense of Coherence, and Cognitive Flexibility as Internal Resources in Predicting Perceived Stress in Patients With Multiple Sclerosis. Intern Med Today, 27 (1) :114-129
- Gameian,, D., Hosseinsabet,, F., & Motamedi, A. (2018). Effectiveness of Brief Solution-focused Group Therapy on Quality of Life and Self-efficacy of Multiple Sclerosis Women. Journal of Clinical Psychology, 10(3), 13-22.
- Graziano, F., Calandri, E., Borghi, M., & Bonino, S. (2014). The effects of a group-based cognitive behavioral therapy on people with multiple sclerosis: a randomized controlled trial. Clinical rehabilitation, 28(3), 264–274.
- Hosseininezhad, M., Saadat, S., Bakhshipour, H., & Nasiri, P. (2021). Prevalence and Incidence of Multiple Sclerosis (MS) in Guilan Province. JSSU 2021; 29 (1) :3438-3447
- Issazadegan, A., Shiekhy, S., Hafeznia, M. (2015). The effectiveness of cognitive-behavioral therapy on enhancing of self-efficacy and mental health among women with obesity. Studies in Medical Sciences. 26(9):785-92.
- Khazaei, F., Mirza Hosseini, H., & Nokani, M. (2020). The effectiveness of emotional schema therapy based on improving the quality of life of dialysis patients referred to dialysis centres of Tehran University of Medical Sciences in 1398. jhosp 2020; 19 (2) :51-59
- Moghtaderi, A., Rakhshanizadeh, F., & Shahraki-Ibrahimi, S. (2013). Incidence and prevalence of multiple sclerosis in southeastern Iran. Clinical neurology and neurosurgery, 115(3), 304–308.
- Pakandish, S., kraskyan, A., & jomehri, F. (2020). Comparing the Effectiveness of Schema Therapy and Cognitive-Behavioral Therapy on Quality of Life and Body Image of Obese Women. Journal of Excellence in counseling and psychotherapy, 9(34), 20-32.
- SAARIJÄRVI, P., WAHLMAN, M., & KARUKIVI, M. (2019). EARLY MALADAPTIVE SCHEMAS AND PSYCHIATRIC SYMPTOMS IN ADOLESCENCE. Psychiatria Fennica, 50, 164-181.
- Sadri Damirchi, E., & Aghazadehasl, M. (2017). Effectiveness of Cognitive-Behavioral Group Therapy on Coping Styles in Multiple Sclerosis Patients. Intern Med Today, 23 (2) :117-122.

- Shahabian, M., Majidi, A., Ashjaei, E., Allahyari, F., & Hosseini Nejad, S. J. (2020). Relationship Between Spiritual Health and Quality of Life in Patients with Multiple Sclerosis. JRH, 8 (1) :11-18
- Shareh, H., & Robati, Z. (2021). Effect of Cognitive-Behavioral Group Therapy on Pain Self-efficacy, Fatigue, Life Expectancy and Depression in Patients With Multiple Sclerosis: A Randomized Controlled Clinical Trial. IJPCP; 26 (4) :418-431.
- Siengsukon, C. F., Alshehri, M., Williams, C., Drerup, M., & Lynch, S. (2020). Feasibility and treatment effect of cognitive behavioral therapy for insomnia in individuals with multiple sclerosis: a pilot randomized controlled trial. Multiple sclerosis and related disorders, 40, 101958.
- van den Akker, L. E., Beckerman, H., Collette, E. H., Twisk, J. W., Bleijenberg, G., Dekker, J.,... & TREFAMS-ACE Study Group. (2017). Cognitive behavioral therapy positively affects fatigue in patients with multiple sclerosis: Results of a randomized controlled trial. Multiple Sclerosis Journal, 23(11), 1542-1553.
- Yousefi, N., mohammadi, F., Azizi, A., & shams esfand abadi, R. (2019). Comparing the Effectiveness of Classical Cognitive Behavioral Therapy and Enhancement - Based Cognitive Behavioral Therapy on Depression and Quality of Life in Depressed Women. *Journal of Clinical Psychology*, 11(3), 101-112.
- Yusefi, R., Hafezi, F., bakhtiarpoor, S., & Makvandi, B. (2023). Comparing the effectiveness of cognitive- behavioral hypnotherapy and mindfulness therapy on pain perception and self-efficacy in women with breast cancer in Gorgan. Journal of Applied Family Therapy, 3(5), 209-227.