

The effect of supportive-expressive therapy on hope and quality of life in patients with multiple sclerosis (MS)

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Summary

Aim: The aim of the study was to investigate the effect of supportive-expressive therapy on the hope and quality of life in patients with multiple sclerosis (MS).

Sample and method: This was an experimental study with pre/post-test design and a control group. 32 patients selected from members of the MS Society of Tehran were selected as the sample by target sampling, and then placed into two groups of 16 (experimental and control group) through random assignment. The supportive-expressive therapy was applied to the experimental group in 12 sessions of 75 minutes each. The instruments used were Snyder et al.'s Hope Inventory and World Health Organization's Quality of Life-Brief.

Results: The results showed that there was a significant difference between hope and quality of life in the experimental and control groups ($p < 0.01$).

Discussion: Supportive-expressive therapy is effective in increasing hope and quality of life in patients with MS.

Conclusion: The results showed that supportive-expressive therapy, with its emphasis on providing support and helping patients face and deal with their disease-related stress, can help increase hope and quality of life in patients with MS.

supportive-expressive therapy, hope, quality of life, multiple sclerosis

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INTRODUCTION

Multiple sclerosis (MS) is a chronic, progressive disease. In the first stages the myelin sheath of the nerve cells is inflamed and finally the central nervous system myelin sheath, including the brain, optic nerve and the spinal cord, is damaged [1–4]. The spread rate of MS is 75 per 100,000 in the United States and 5–74 per 100,000 in Iran. Women are affected twice as frequent-

ly as men between the ages of 20 and 40 [5–6]. Visual disturbances, pain, urinary incontinence and feebleness are among the most common early symptoms of MS [7]. They affect the person's independence and ability to actively participate in family life and society, and affect all aspects of the patient's day-to-day life [8].

In chronic diseases, hope is an essential element for helping the individual cope with the illness [9]. Hope helps patients, both physiologically and emotionally, to be able to tolerate the disease crisis [10]. The mechanisms through which hope influences health act as direct and protective effects against stress and both agency and pathway thinking, as well as their different instances, play a role during this process [11].

One other psychological variable which can play an important role in MS is the quality of life. Quality of life includes the value the individual places on their own life in spite of the effect the disease, injury or treatment has on their functioning, perceptions and social opportunities [12]. In most studies, aspects of quality of life include physical, psychological, emotional and social health, mental sense of health and ability to work [13]. Chiaravalloti & Deluca [14] showed that psychological problems are the major source of disability, social harms and reduction in the quality of life in MS patients. Costa et al. [15] revealed that social support had a significant effect on the quality of life of MS patients. Furthermore, MS patients report a lower health-related quality of life in comparison with the normal population, in both physical and mental aspects [16–18].

Fricska-Nagy et al. [19] illustrated that the level of disability, fatigue, depression and disease duration has a relationship with quality of life and that MS patients' quality of life can be predicted through their level of disability, depression, and cognitive and social fatigue.

MS is associated with various affective and mental problems, including anxiety and depression; however, social support can positively affect mental health of these patients. Evidence shows that physical activity and social support have an independent, negative relationship with depression and anxiety in MS patients. Psychological and social interventions are effective in increasing the caregivers' and MS patients' social support in different areas of life [20].

The supportive-expressive therapy can lead to useful strategies for introducing and maintaining positive changes in individuals' life styles. The supportive-expressive therapy is a short-term psychodynamic treatment which has been adapted for MS patients. It includes two essential components: i) a supportive technique that helps to establish a therapeutic alliance with the patient; and ii) expressive techniques that help the patient to recognize and settle their interactive patterns and conflicts through clarification and interpretation [21]. Spiegel et al. [22] revealed that the supportive-expressive therapy group was more effective than the control group in the recovery of patients suffering from breast cancer. Boutin [23] showed that the cognitive-behavioral therapy and supportive-expressive therapy groups were effective for helping women suffering from breast cancer. Gibbons et al. [24] indicated moderate-to-large effect sizes in favor of the Supportive-expressive dynamic psychotherapy over the treatment-as-usual (TAU) therapy in the treatment of depression. Wakefield et al. [25] demonstrated that supporting the group is significantly correlated with MS patients' anxiety, depression and life satisfaction, and that it is effective in improving their mental health.

Since the majority of therapeutic interventions in patients with MS were in the form of cognitive-behavioral interventions [26], and the findings show that coordination and appropriateness of treatment with the characteristics of the patients are an important factor in the success of treatment [27]. Therefore, evaluating the effectiveness of psychodynamic therapies, including supportive-expressive therapy, can lay the groundwork for the integration of these therapies in the treatment of MS patients have provided, and treatment outcome in a group of MS that is suitable for psychodynamic therapies improved. The purpose of the present research is to study the effectiveness of supportive-expressive therapy on the hope and quality of life in patients with MS.

METHOD

Participants

The present research is an experimental study with pretest-posttest design together with a con-

trol group. The statistical population includes all patients suffering from MS who are under treatment in Tehran city in 2015. At first, 32 patients who had the entrance research criteria were chosen among the list of patients with multiple sclerosis by referring to Tehran MS society and getting permission for performing research in order to participate in therapy sessions, and then we divided them into two groups of 16 patients (experimental and control) in random replacement form. The criteria of entering to this study included: lack of other chronic diseases, lack of any history of mental illness, age range of 20 to 40, lack of mental disorders, lack of acute illness (requiring hospitalization), and university education. To get better interventions, increased cooperation and to prevent the reduction of subjects, college education was selected as a criterion. Then, the patients participating in the study (both in the control and experimental groups) were given the hope and quality of life questionnaires as the pretest. Afterwards, the participants in the experimental group received the supportive-expressive therapy during twelve sessions in 75 minutes. At the twelfth session, subjects were asked to answer questionnaire's hope and quality of life again. The control group followed the medical treatments, but we promised them that they can receive our treatment after a short time. However, 12 of them received psychological services after the work. Furthermore, Ethical considerations were used through completing the consent form by MS patients and through the licensing of the MS society to conduct therapeutic interventions. Finally, data analysis was performed by the multivariate analysis of variance (MANOVA) and SPSS 16.

MEASURES

Hope Inventory (HI)

The HI which was developed by Snyder et al. contains 12 statements, which are answered by options ranging from completely correct to completely incorrect [28]. The internal consistency coefficient of the whole questionnaire ranges from 0.47 to 0.84 and the test-retest reliability coefficient is 0.8 [29]. This questionnaire has a correlation of 0.5 to 0.6 with the optimism, goal

achievement anticipation, and self-esteem questionnaires [30]. In addition, internal consistency and Cronbach's alpha for the subscale of agency thinking and strategies have been reported, respectively, 0.73 and 0.62 [31–32]. Correlation of hope inventory is 0.51 with the Beck hopelessness scale and 0.42 with the Beck depression inventory, which shows the simultaneous validity of this questionnaire [33].

World Health Organization's Quality of Life-Brief (WHOQOL-B)

WHOQOL-B was a plan which was implemented in 1991 for the first time. This questionnaire self-assesses individuals' perception of value and cultural systems as well as personal goals, standards, and concerns. WHOQOL-B has 26 items and is responded on a five-point scale and measures four broad areas, including physical health, psychological health, social relations, and environment. In addition, *WHOQOL-B* can also assess general health. Research has shown acceptable discriminant validity, content validity, internal reliability, and test-retest reliability for this questionnaire. The Cronbach's alpha coefficients gained are 0.80 for physical health, 0.76 for psychological health, 0.66 for social relations, and 0.80 for environment [34–35]. Moradi Manesh et al. [36] reported Cronbach's alpha coefficients of 0.92 for total scale, 0.90 for physical health, 0.83 for psychological health, 0.69 for social relations, and 0.82 for environment. Subscales of the questionnaire correlated with each other in the range of 0.23 to 0.56, and the total score was in the range of 0.54 to 0.85.

Intervention

The supportive-expressive therapy was first developed by Laborsky in 1984, and it was based upon a general SE treatment manual [37]. The intervention was designed to create bonds of mutual support among people who diagnosed with multiple sclerosis. The experimental group received twelve sessions of supportive-expressive (SE) treatment, and each session lasted 75 minutes. The sessions were conducted by two clinical psychologist from the university of Mo-

hagheh Ardabili for 16 patients suffering from MS who are under treatment in Tehran city in 2015. The intervention encouraged expression of thoughts and feelings related to the lived experience during MS period and about difficulties. The therapists also encouraged them to search for the meaning of their experiences, enhance symptom control and to identify strategies that could deal with the existential concerns expressed by participants. The experimental group also talked about the meaning of their participation in society, their difficulties, their expectations and how they benefited from relationship. We use the narratives shared during therapy to interpret the patient's core conflictual relationship themes (CCRT): The CCRT consists of the main maladaptive wishes, responses of self, and responses of others experienced by the patient. Because of the time limits of the treatment, specific treatment goals are established at the beginning of treatment in order to work within the

time limit and also to strengthen the therapeutic alliance, the sense that the patient and therapist are working together toward a common goal. The therapists encouraged them to understand their maladaptive relationship patterns and begin to implement more adaptive interpersonal responses. Therapy sessions and the completion of the questionnaires took place in rooms provided by the Tehran MS society. The data were collected by the researcher.

RESULTS

The mean and standard deviation age of MS patients was 31.75 years (8.42) and for controls 32.50 years (9.58). As regards gender status, participants in the experimental group included 58.3% were male and 41.7% were female, and in the control group, 45.7% were male and 54.3% were female.

Table 1. Status of hope and quality of life pre-and post-intervention

Control group				Experimental group				Variable
Post-test		Pre-test		Post-test		Pre-test		
SD	Mean	SD	Mean	SD	Mean	SD	Mean	
2.09	12.41	2.08	12.29	1.42	14.01	1.06	12.59	Hope
12.48	42.29	14.66	40.65	7.05	54.06	6.76	35.47	Quality of life

Before using the MANOVA parametric test, the homogeneity assumption of variances in the negative and positive urgency and the dimensions of sleep quality variables were confirmed,

which made using parametric tests feasible. Also, the results of the Ljung–Box test showed that the equality assumption is true for variance-covariance matrixes.

Table 2. Results of MANOVA in experimental and control groups

Dependent variable	SS	df	F	p	Effect size	Observed power
Hope	61.15	1	6.72	0.01	0.178	0.97
Quality of life	874.25	1	22.29	0.001	0.418	0.99

As indicated in Table 2, the results of MANOVA showed that a significant difference between mean pre-intervention and post-intervention scores in both groups in hope and quality of life ($p < 0.01$). The effect of supportive-expressive therapy on hope was 0.178 and on enhancing quality of life was 0.418.

DISCUSSION

This research was carried out to study the effectiveness of the supportive-expressive therapy in the hope and quality of life of patients suffering from (MS). The results obtained from this study showed that treatment through the supportive-expressive therapy was effective in enhancing hope in MS patients. This finding was in line with the results of Foote et al.'s research

[38] which indicates that there is a significant relationship between hope, self-esteem, and social support in MS patients. Furthermore, the results of the current research are consistent with Muramatsu et al. [39] and Zielinski et al. [40] which illustrated that there is a positive relationship between social support and hope. In line with the results of the current research, Gibbons et al. [24] showed that the dynamic supportive-expressive therapy is effective in the community mental health system and depression. Lavasani et al. [41] concluded that supportive-expressive psychotherapy is effective in improving the maintenance treatment outcome for addiction, and therefore, it is recommended that it should be integrated into the maintenance treatments of drug dependency.

To explain these results, it can be mentioned that hope is one of the mental needs of human beings and according to Snyder et al. [28] hope is an active feature which includes having goals, having the ability to plan, being determined to achieve your goals, attending to the obstacles for achieving your goals, and having the ability to overcome them. Therefore, the supportive-expressive therapy which uses supportive techniques to establish working alliance with patients and to encourage them to express and understand their major interactional conflicts created the impression that there will be positive results and this leads to effort, foresight, and hoped on the side of the patient. Also, hope as an important source for MS patients has protective effects against the undesirable effects of severe stress [11] and helps patients physiologically and emotionally to be able to tolerate the disease crisis [10]. In addition, the supportive-expressive (interpretative) aspects of the therapy lead to an increase in these individuals' hope and motivation and to changes in their emotional and behavioral responses. Therefore, targeting the interactional patterns and repetitious maladaptive interpersonal conflicts, the supportive-expressive therapy leads to an increase in these individuals' hope. Consequently, they learn from adverse events and exploit them for following their future goals rather than concentrating on them. Likewise, reviewing studies related to hoping, Banson [42] states that high levels of hope are positively related to physical and psychological health, high self-esteem, pos-

itive thought, and exceptional social relations. In a study, Snyder [43] concluded that there are significant correlations between high hopefulness and positive emotions and low hopefulness and negative emotions. This means that low hopefulness is predictive of the symptoms of depression, which are independent of the diagnostic symptoms and other coping skills. Patients who enjoy a hopeful spirit learn the ways to cope with the disease faster than others do and this way, in their treatment courses, they can act as supportive and informative sources for other patients.

Another result of the present research was that the supportive-expressive therapy is effective for enhancing the quality of life MS patients. This finding is consistent with the results of Costa et al. [15] which suggest that supportive therapy has the significant effect on the quality of life of MS patients and also with the results of LaRocca et al. [44] which reveal that supporting along with the cognitive-behavioral therapy enhances the quality of life of individuals. In line with the current research, Wakefield et al. [25] illustrated that the therapeutic intervention significantly related to MS patients' anxiety, depression, and life satisfaction, and it is effective for the mental health of MS patients. Beutel et al. [45] showed that short-term psychodynamic psychotherapy is an effective treatment of a broad range of depressive conditions in breast cancer patients improving depression and functional quality of life.

We can say that since psychological stress leads to the activation of MS [46] the supportive expressive therapy helps the patients to manage their symptom through resolving interactional conflicts and increasing alliance. When the major conflicts are identified, interpreted, and resolved, the patients develop the capacity to identify, predict, and change or control their emotions and behaviors and therefore, change their maladaptive interactional patterns. The supportive-expressive therapy can result in effective strategies for bringing about and maintaining positive changes in individuals' life styles. Studies have revealed that MS patients have a lower quality of life in comparison with healthy people [47]. In general, supportive therapy enhances the individual's ability to cope with the disease, improves the quality of life and financial

status, maintains the sense of social homogeneity, and facilitates self-assessment, bonding with the society, and overcoming the sense of loneliness [48]. Authors assume that probably due to their undesirable physical conditions; MS patients negatively assess themselves as dislikable, which influences their interactional patterns. The supportive-expressive therapy influences these patients affectively and emotionally and leads to an improvement in their lives' quality through resolving these conflicts and interactional patterns and enhancing support.

The findings suggest that supportive expressive therapy played a protective role and had a significant effect on reducing loneliness, promoting their hope and enhancing the quality of life of patients with MS. In other words, the results of the present study suggest that patients who were attending the intervention sessions were enabled to decrease loneliness, overcome social isolation, strengthen hope and were also empowered to have higher quality of life compared to individuals in the control group. To explain this conclusion, these kinds of programs made them to away from negative thoughts. Attending and expressing the feelings provided the opportunity to receive information regarding individual's attitudes and feelings about their illness, helped them to improve planning and designing new programs to deal with their challenges, provided a means of evaluating current lifestyle, produced insights for developing strategies for better quality of life. Patients with MS naturally interacted and were influenced by others, improved communication skills, which led to new friendships; moreover, they realized that their problem is not unique, so an improved sense of well-being was the outcome.

CONCLUSIONS

In fact, it seems the supportive-expressive therapy affects MS patients' hope and quality of life through enhancing therapeutic alliance and resolving interactional conflicts. Therefore, given the effectiveness of this type of therapy and its benefits for these patients' hopefulness, physical and psychological health, and healthy social relationships and environment, we recommend the wide application of this therapy. One of the

limitations of the present research was that no group session or alternative therapy was devised for the control group. Another limitation included the lack of a follow-up period because of time limits, and it is suggested that further studies devise follow-up periods to evaluate the persistence of the results of the therapy and also investigate MS patients' social and financial statuses and family backgrounds.

REFERENCES

1. Ponsonby AL, Lucas RM, Dear K, van der Mei I, Taylor B, Chapman C, et al. The physical anthropometry, lifestyle habits and blood pressure of people presenting with a first clinical demyelinating event compared to controls: the Ausimmune study. *J Mult Scler*. 2013; 19(13): 1717–1725.
2. Greer JM. Autoimmune t-cell reactivity to myelin proteolipids and glycolipids in multiple sclerosis. *Mult Scler Int*. 2013; 28(4).
3. Patten SB, Williams JV, Lavorato DH, Koch M, Metz LM. Depression as a predictor of occupational transition in a multiple sclerosis cohort. *Funct Neurol*. 2013; 28(4): 275–280.
4. Holland NJ, Halper J. *Multiple Sclerosis: A Self-Care Guide to Wellness*. New York: Demos Medical Publishing; 2005: pp. 1–10.
5. Etemadifar M, Sajjadi S, Nasr Z, Firoozeei TS, Abtahi SH, Akbari M, et al. Epidemiology of multiple sclerosis in Iran: a systematic review. *Eur Neurol*. 2013; 70(5-6): 356–363.
6. Oksenberg JR, Hauser SL. Genetics of multiple sclerosis. *Neurology Clin*. 2005; 23: 61–75.
7. Omrani S, Mirzaeian B, Aghabagheri H, Hassanzadeh R, Abedini M. Effectuality of cognitive-behavioral therapy on the life expectancy of patients with multiple sclerosis. *J Mazandaran Univ Med Sci*. 2012; 22(93): 58–65.
8. Hamidzadeh S, Masoodi R, Ahmadi F, Mohammadi E. Evaluation of the effect of self – care program based on the Orem Framework on the physical quality of life in multiple sclerosis patients. *J Shahid Sadoughi Univ Med Sci*. 2009; 17(2): 153–162.
9. Ghazavi Z, Khaledi-Sardashti F, Kajbaf MB, Esmailzadeh M. Effect of hope therapy on the hope of diabetic patients. *Iran J Nurs*. 2015; 20(1): 75–80.
10. Benzein EG, Berg AC. The level of and relation between hope, hopelessness and fatigue in patients and family members in palliative care. *Palliat Med*. 2005; 19(3): 234–240.
11. Madan S, Pakenham KI. The stress-buffering effects of hope on adjustment to multiple sclerosis. *Int J Behav Med*. 2014; 21(6): 877–890.
12. Al-Akour NO, Khader YS, Shatnawi NJ. Quality of life and associated factors among Jordanian adolescents with type 1 diabetes mellitus. *J Diabetes Complications*. 2010; 24(1): 43–47.

13. Albert U, Mania G, Bogetto F, Chiarle A, Mataix-Cols D. Clinical predictors of health-related quality of life psychiatry. *Compr Psychiatry*. 2010; 51: 193–200.
14. Chiaravalloti ND, Deluca J. Cognitive impairment in multiple sclerosis. *Neurol*. 2008; 7: 1139–1151.
15. Costa DC, Sá MJ, Calheiros JM. The effect of social support on the quality of life of patients with multiple sclerosis. *Arq Neuropsiquiatr*. 2012; 70(2): 108–1013.
16. Gedik Z, Sorias O, Idiman E. Do coping styles mediate the relationship between disability status and psychosocial loss in people with relapsing remitting multiple sclerosis? *J Health Psychol*. 2015; Nov 3. pii: 1359105315611958. [Epub ahead of print]
17. Klevan G, Jacobsen CO, Aarseth JH, Myhr KM, Nyland H, Glad S, et al. Health related quality of life in patients recently diagnosed with multiple sclerosis. *Acta Neurol Scand*. 2014; 129(1): 21–26.
18. Senders A, Sando K, Wahbeh H, Hiller AP, Shinto L. Managing psychological stress in the multiple sclerosis medical visit: patient perspectives and unmet needs. *J Health Psychol*. 2016; 21(8): 1676–1687.
19. Fricska-Nagy Z, Füvesi J, Rózsa C, Komoly S, Jakab G, Csépany T, et al. The effects of fatigue, depression and the level of disability on the health-related quality of life of glatiramer acetate-treated relapsing-remitting patients with multiple sclerosis in Hungary. *Mult Scler Relat Disord*. 2016; 7: 26–32.
20. Bambara J, Wadley V, Owsley C, Martin RC, Porter C, Dreer LE. Family functioning and low vision: a systematic review. *J Vis Impair Blind*. 2009; 103(3): 137–149.
21. Luborsky L, Mark D, Hole AV. Supportive-expressive dynamic psychotherapy for depression: a time-limited version. In Barber JP, Crits-Christoph P, eds. *Dynamic Therapies for Psychiatric Disorders (Axis I)*. New York: Basic Books; 1995: pp. 13–14.
22. Spiegel D, Butler LD, Giese-Davis J, Koopman C, Miller E, DiMiceli S, et al. Effects of supportive-expressive group therapy on survival of patients with metastatic breast cancer: a randomized prospective trial. *Cancer*. 2007; 110(5): 1130–1138.
23. Boutin DL. Effectiveness of cognitive behavioral and supportive-expressive group therapy for women diagnosed with breast cancer: a review of the literature. *J Specialists Group Work*. 2007; 32(3): 267–284.
24. Gibbons MB, Thompson SM, Scott K, Schauble LA, Moonney T. Supportive-expressive dynamic psychotherapy in the community mental health system: a pilot effectiveness trial for the treatment of depression. *Psychother Chic*. 2012; 49(3): 303–316.
25. Wakefield JRH, Bickley S, Sani F. The effects of identification with a support group on the mental health of people with multiple sclerosis. *J Psychosom Res*. 2013; 74 (5): 420–426.
26. Famil Sharifian Y, Khalili, M, Hasanzadeh Pashang S, Kamarzarin H, Taghizadeh ME. The study of effectiveness of cognitive-behavioral therapy in Group on mental health among primary MS patients. *Urmia Med J*. 2013; 24(9): 652–664.
27. McLellan AT, McKay J, Forman R, Cacciola J, Kemp J. Reconsidering the evaluation of addiction treatment: from retrospective follow-up to concurrent recovery monitoring. *Addiction*. 2005; 100: 447–458.
28. Snyder CR, Harris C, Irving LM. The will and the ways: development and validation of an individual differences measure of hope. *Soc Personal Psychol*. 1991; 60: 570.
29. Snyder CR, Lopez SJ. *Positive Psychology: The Scientific and Practical Explorations of Human Strengths*. Thousand Oaks: Sage Publications; 2007.
30. Snyder CR. *Handbook of Hope: Theory, Measures, and Applications*. Academic Press; USA: 2000.
31. Barzegar Bafroie K, Kamali M, Kamali K. Perceived social support and life expectancy of elderly residents and non-residents in nursing homes in Yazd [Persian]. *Contemp Psychol*. 2013; 4(7): 501–505.
32. Zahed Babelan A, Ghasempour A, Hassanzade S. The comparison of hope and humor between athletic and nonathletic students [Persian]. *Res J Human*. 2011; 10(26): 117–128.
33. Kermani Z, Khodapanahi MK, Heidari M. Psychometric properties of Snyder's hope scale [Persian]. *J Applied Psychology*. 2011; 5(3): 7–23.
34. WHOQOL Group. Development of the World Health Organization WHOQOL-BREF quality of life assessment. *Psychol Med*. 1998; 28: 551–558.
35. Skevington SM, Lotfy M, O'Connell KA. WHOQOL Group. The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL group. *Qual Life Res*. 2004; 13: 299–310.
36. Moradi Msanesh F, Ahadi H, Jomehri F, Rahgozar M. Relationship between psychological distress and quality of life in women with breast cancer [Persian]. *J Zabol Univ Med Sci Health Serv*. 2012; 4(2): 51–59.
37. Luborsky L. *Principles of Psychoanalytic Psychotherapy: A Manual for Supportive-Expressive Treatment*. New York: Basic Books; 1984.
38. Foote AW, Piazza D, Holcombe J, Paul P, Daffin P. Hope, self-esteem and social support in persons with multiple sclerosis. *J Neurosci Nurs*. 1990; 22(3): 155–159.
39. Muramatsu N, Yin H, Hedeker D. Functional declines, social support and mental health in the elderly: does living in a state supportive of home and community-based services make a difference? *J Soci Sci Med*. 2010; 70 (7): 1050–1058.
40. Zielinski MJ, Veilleux JC. Examining the relation between borderline personality features and social support: the me-

- diating role of rejection sensitivity. *J Pers Individ Dif*. 2014; 70: 235–238.
41. Fathali Lavasani F, Atef Vahid MK, Asgharnegad Farid A, Farzad V. The effectiveness of supportive-expressive dynamic psychotherapy in improving the treatment outcome for drug dependency. *Contemp Psychol*. 2010; 4(2): 16–24.
 42. Banson W. The role of hope and study skills in predicting test anxiety level of university students high-school and psychological health self-esteem, positive thinking and social communication [MSc thesis]. Department of Educational Sciences, Middle East Technical University, Ankara, Turkey; 2006.
 43. Snyder M. The discursive proportion of hope: a qualitative analysis of cancer patient speech. *Qual Health Res*. 2006; 12(2).
 44. LaRocca MA, Scogin FR. The effect of social support on quality of life in older adults receiving cognitive behavioral therapy. *Clin Gerontol*. 2015; 38(2): 131–148.
 45. Beutel ME, Weißflog G, Leuteritz K, Wiltink J, Haselbacher A, Ruckes C, et al. Efficacy of short-term psychodynamic psychotherapy (STPP) with depressed breast cancer patients: results of a randomized controlled multicenter trial. *Ann Oncol*. 2014; 25(2): 378–384.
 46. Buljevac D, Hop WCJ, Reedeker W, Janssens AC, van der Meché FG, van Doorn PA, et al. Self-reported stressful life events and exacerbations in multiple sclerosis: prospective study. *BMJ*. 2003; 646(4): 327.
 47. Nejat S, Montazeri A, Kazem M. Quality of life patients with multiple M.S. compare with healthy people in Tehran. *J Epidemiol*. 2006; 1(4): 19–24.
 48. Courtens AM, Stevens FCJ, Crebolder HM, Philipsen H. Longitudinal study and quality of life and social support in cancer patients. *Cancer Nurs*. 1996; (3): 162–169.