



ORIGINAL ARTICLE

The Effect of Mindfulness Cognitive Therapy on stress and happiness in Male Patient with Blood Pressure of Golestan Hospital of Ahvaz

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ABSTRACT

The aim of this research was to examine the effect of mindfulness cognitive therapy on stress and happiness of male patients with blood pressure in Golestan Hospital of Ahvaz. This research was a semi-experimental study with pre-test, post-test and control group. The study community was male patients with essential blood pressure who referred to Golestan Hospital of Ahvaz. The research sample was selected by in-reach sampling method. Thus, 32 out of 40 patients were selected based on semi-structured clinical interview and with regard to inclusion criteria. These samples were randomly divided into experimental and control groups. In this research Perceived Stress Scale and Oxford Happiness Questionnaire were used. The experimental intervention performed on experimental group consisted of 8 sessions of mindfulness cognitive therapy, while the subjects in control group were on a waiting list. At last, a post-test was performed. For data analysis, multivariate analysis of covariance (MANCOVA) was used. The results showed that there was a significant difference, between the two groups in terms of stress and happiness. Therefore, it can be said that mindfulness cognitive therapy was effective in reducing stress and increasing happiness in experimental group in comparison with control group. These patients were suffering from problems such as cognitive errors and this caused them to undergo a high level of stress. Rehabilitation and paying attention to this disorder could be very helpful for the patients. The results of current research can be used in hospitals and other medical centers dealing with blood pressure.

Keywords: Mindfulness Cognitive Therapy, Stress, Happiness, Blood Pressure

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INTRODUCTION

Increase in blood pressure is a major public health problem in many countries. This disease is commonly, asymptomatic and often indistinguishable and, if untreated, can lead to fatal complications. This disease is referred to as the silent killer, due to the lack of recognizable symptoms and complications unpleasant of heart-Vascular disease [1]. Hypertension is a major risk factor for coronary disease, particularly in the developed industrial countries. In Iran is the prevalence of hypertension in the general population of more than 12% (2). Studies suggest that psychosocial factors such as personality, coping style, self-esteem, anger submerged, personality and social factors are effective to increases in blood pressure (3). Stress is one of the factors alone or in combination with other factors has an essential role in high blood pressure. When stress and threatening situations are contracted vessels visceral organs. When these vessels are constricted pressure is high enough to do not allow crossing blood to your heart muscle. In this situation makes rapid pulse and blood pressure rises. When the stress ends, bring the heart again to its normal function and blood pressure returned to normal (4). The tension is inevitable in life and its existence is the right amount of growth and development, but destructive and negative result is high levels or how copes with it incorrectly (5). What is important in disease processes attributed to tension

more than its individual type of reaction and coping to stress (6). Since it is a pleasure and satisfaction as main elements emotional and cognitive in the happiness feeling. Clearly how they relate to each other can explain make mental health. Since happiness feeling is dependent on the satisfaction of cognitive assessment in various domains of life such as family and work situations and experiences resulting from contact with other, this could become the symbol of mental health (7). Negative emotions can lead to irregular hormone secretion, while positive emotions such as love, joy and happiness may lead to the production of biochemical which is supportive the tissues and to excrete diseases and will accelerate recovery. The relationship between the factors Stressful and physiological arousal and the relationship between physiological arousal and mental tension with emotional-cognitive desire has been partially supported (8). Research shows that stress management training can be effective in the treatment of hypertension (9). It is necessary considering the high prevalence of hypertension and its association with psychological problems to reduce costs, psychological and social pressures be noticed further in this issue and essential steps to be taken in order to change the behavioral and psychological systems heart disease particularly blood pressure. One of these steps is the implementation of cognitive therapy Mindfulness which is designed to enhance the healing process, reduce stressors heart disease and extend and refine the quality of life for patients and its effects have been reported in satisfactory (10). Therefore, the aim of this study is the effect of cognitive therapy mindfulness on stress and happiness male patients with hypertension.

MATERIALS AND METHOD

This research was a semi-experimental study with pre-test, post-test and control group. The study community was male patients with essential blood pressure who referred to Golestan Hospital of Ahvaz. The research sample was selected by in-reach sampling method. The inclusion criteria was included: Systolic blood pressure over 140, diastolic blood pressure above 60, age range 30 to 60 years, educational level diploma and higher, have early blood pressure and lack of other diseases such as renal diseases and nephrology. Exclusion criteria were included: Using other psychological treatment during the study and absence of more than two sessions. After taking blood pressure of 30 patients were selected clinical interview. These 30 patients were divided into randomized into control and experimental groups. The program mindfulness cognitive therapy is consists of 8 sessions of 90 minutes which was held one session a week. Mindfulness is a guided attention which has its roots in Buddhist meditation practice. The overall aim intervention mindfulness is to promote awareness of mental to improve Well-being, reduce symptoms and life of felt meaning and satisfaction. Concepts of mindfulness and acceptance are closely related to each other. Mindfulness can be described focuses attention on the experiences of the present moment way to acceptable or free from judgment (11). In other to Implementation of these programs and training sessions was used from the Living Full Catastrophe book (12). The following questionnaire was used to collect data.

Perceived Stress Scale: This scale is constructed by Cohen, Kamarck & Mermelstein in 1983. Perceived Stress Scale was significantly correlated with life events, depression and physical symptoms benefit from health care, social anxiety, and low life satisfaction [13]. Mimura & Griffiths [14] in research on Japanese students obtained Cronbach's alpha coefficient and revised scale Japanese respectively 0.88, 0.81 .

Oxford Happiness Inventory: This inventory is constructed by Argyle, Martin & Crossland in 1989. Coefficient alpha for this inventory is reported in the cross-cultural study of students in Australia, American, Canada and Britain in the range 0.89 to 0.90 [15]. Argyle and Lu [16] reported test-retest reliability of this inventory after 6 weeks 0.78 and after 5 months 0.67.

RESULTS

Table 1. Mean and standard deviation scores stress and happiness

Variable	Experimental group				control group			
	Pre-test		Post-test		Pre-test		Post-test	
	Mean	Std	Mean	Std	Mean	Std	Mean	Std
Stress	38.87	2.50	20.93	4.44	39	2.72	34.67	3.61
Happiness	30.20	3.32	42.47	4.34	29.60	3.50	28.40	4.12

The contents of Table 1 shows the mean scores stress the experimental group in pre-test and post-test are respectively 38.87, 20.93. Also, mean scores happiness the control group in pre-test and post-test are respectively 39, 34.67.

Table 2. Levene's Test of Equality of Error Variances

	F	df ₁	df ₂	sig
Stress	0.934	1	28	0.342
Happiness	2.136	1	28	0.155

Table 2, showed that null hypothesis of equal variances for the two group scores on the dependent variables confirmed. Therefore, the analysis will proceed.

Table 3. Results of multivariate analysis of covariance on the post-test mean score of stress and happiness

Test	Value	F	df ₁	df ₂	Test Power	sig
Pillai's Trace	0.763	40.26	2	25	1	P<0.001
Wilks' Lambda	0.237	40.26	2	25	1	P<0.001
Hotelling's Trace	3.22	40.26	2	25	1	P<0.001
Roy's Largest Root	3.22	40.26	2	25	1	P<0.001

Contents Table 3 shows that there are significant differences between experimental and control groups in terms of the dependent variables (P<0.001). On this basis can be stated that a significant difference at least one of the dependent variables (stress or happiness) between the two groups. In order to investigate the differences between the two groups was performed one way ANCOVA in the text MANCOVA on the dependent variables.

Table 4. The results of the analysis ANCOVA in the text MANCOVA on mean score stress and happiness the post-test

	SS	df	Ms	F	Sig
Stress	1421.461	1	1421.461	82.706	P<0.001
Happiness	99.179	1	99.179	7.491	0.011

Table 4 shows that there are significant differences between the experimental and control groups in terms of stress variable at post-test after fixation pre-test (F=82.706, P<0.001). Also, there are significant differences between the experimental and control groups in terms of happiness variable at post-test after fixation pre-test (F=82.706, P=0.011).

DISCUSSION AND CONCLUSION

The purpose of this research was to examine the effect of mindfulness cognitive therapy on stress and happiness of male patients with blood pressure in Golestan Hospital of Ahvaz. The results of this study based on the table 4 indicate that the approach of mindfulness cognitive therapy is effective on stress male patients with blood pressure. These results are consistent with previous studies [1, 17, 18, 19]. In explaining these results should be stated that different techniques mindfulness such as yoga, meditation, presence of mind breathing, give feedback, relaxation training, doing homework household, changed attitudes and thinking towards disease patients and increase awareness about the disease high blood pressure, adjusted traditional habits and cultural-race life, educational control attention and increase patience and tolerance, creating a cheerful and joyful morale and acquisition coping skills correct and adaptive gradually lead to a restoration, improvement quality of life and ultimately reduce stress patients. Also, the results of this research showed that the approach of mindfulness cognitive therapy is effective on happiness male patients with blood pressure. These results are consistent with previous studies [20, 21, 22, 23, 24]. In explaining these results should be stated that mindfulness causes the people reasonable and positive to counter with the stresses life and causing positive re-evaluation of life the events and incidents [21]. Thus, patients with high blood pressure in case of equipped with the techniques of mindfulness as well as body scan techniques, mindfulness of breathing and mindfulness of thoughts can accept the thoughts, feelings and events in their lives without judge and create positive change in their lifestyle which lead to positive attitude toward themselves and their lives and is associated with life satisfaction in there. On the one hand, emotions play an important role in the life and mindfulness techniques such as presence of mind breathing, give feedback, relaxation training and attitude change in emotion regulation is associated with self-esteem and positive social interaction and leads effective meditation with stressful situations [25]. Thus, mindfulness cognitive therapy is causing awareness patient's hypertension of their negative and positive emotions. Also, this treatment leads to acceptance and timely expressed emotions and increasing life satisfaction, positive mood, happiness and mental health. Including the limitation of the present study was the lake of control gender variable and the lake

of influence various medications in patients with essential hypertension. The results of this research are to reaffirm necessity to link the various branches of science, including medicine and psychology. Also, Simultaneous collaboration of psychologists and cardiologist in order to increase the effectiveness of interventions on patients with hypertension.

REFERENCES

1. Davis, S. L. (2010). Race-related stress, quality of life and coronary heart disease (CHD) risk in middle-class African American. *Journal of Coronary Heart Disease*, 4, 55-7.
2. Akbarzadeh, A., Hejazi, M. E., & Pezashkian, M. (2009). Prevalence cardiovascular diseases and-risk factors for cardiac in area West ofIran-Tabriz. *J Tabriz Uni Med Sci*, 59, 11-5.
3. Dressler, W. W., Dos Santos, J. E., Viteri, F. E. (1986). Blood pressure, ethnicity, and psychosocial resources.. *Psychosom Med*, 48 (7), 509-19.
4. Lazarus, R. S. (1999). The cognition emotion dedate: A bit of history. In T. Dalgleish & M. Power (Eds.), *Handbook of cognition and emotion*. New York: John Wiley and Son.
5. Keltner, N. L., Schwecke, L. H., & Bostrom, C. E. (2002). *Psychiatry nursing*, (4th ed.). New York: WB Saunders Company.
6. Sharif, F. (2008). Coping strategies with stress and its relationship to health. National Seminar disease from stress, Shiraz University of Medical Sciences Publications, P: 5.
7. Walker, H. L., & Colosimo, K. (2011). Mindfulness self-compassion and happiness in non-meditators: A theoretical and empirical and examination. *Personality and Individual Differences*, 50, 222-7.
8. Segerstrom, S. C., & Miller, G. F. (2004). Psychological stress and the human immune system: A meta-analytic study of 30 years of inquiry. *Psycho Bull*, 130 (4), 601-30.
9. Lundquist, T. L., Beilin, L. J., & Knuiman, M. W. (1997). Influence of lifestyle coping and jop stress on blood pressure in men and women hypertension. *American Heart Association*, 29(1), 1-7.
10. Siavash-Vahabi, Y. (2002). The effect of music therapy and relaxation techniques on anxiety in patients admitted to the cardiac intensive care unit (ICU). *Mentality & behavior journal*, 8 (3), 75-82.
11. Lebow, J. L. (2008). *Twenty-first century psychotherapies: contemporary approaches to theory and practice*. New York: Dell publishing.
12. Kabat-Zinn, J. (2004). *Full catastrophe living: The program of the stress reduction clinic at theuniversity of Massachuset Medical Center*.New York: Dell Publishing.
13. Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal Health Soc Behav*, 24 (4), 385-96.
14. Mimura C, Griffiths P. (2004). A Japanese version of the perceived stress scale: translation and preliminary test. *Int J Nurs Stud*, 4(4), 379-85
15. Francis, L. J., Brown, L. B., Lester, D., & Philipchalk, R. (1998). Examination of the reliability and validity of the Oxford happiness inventory among students in the UK, USA, Australia, and Canada. *Personality and Individual Differences*, 24, 167-71 .
16. Argyle, M., & Lu, L. (1990). The happiness of extraverts. *Personality and Individual Differences*, 11, 1011-7.
16. Sullivan, M. J., Laura, M. D., & Terry, J. (2009). The support education and research in chronic heart failure study: A mindfulness-based psychoeducational intervention improves depression and clinical symptoms in patients with chronic heart failure. *AM Heart*, 157, 84-90.
17. Carlson, L. E., & Garland, S. N. (2005). Impact of mindfulness- based stress reduction (MBSR) on sleep, mood, stress and fatigue symptoms in cancer outpatients, *International Journal of Behavioral Medicine*, 12 (4), 278 -85.
18. Carlson, L. E., Michael, S., Kamala, D., & Eileen, G. (2003). Mindfulness-based stress reduction in relation to quality of life, mood symptoms of stress and levels of cortisol, dehydroepiandrosterone sulfate (DHEAS) and melatonin in breast and prostate cancer outpatients. *Journal of Psychoneuroendocrinology*, 20, 28-39.
19. Walker, H. L., & Colosimo, K. (2011). Mindfulness self-compassion and happiness in non-meditators: A theoretical and empirical and examination. *Personality and Individual Differences*, 50, 222-227.
20. Flugel Colle, K., Vincent Acha, S. S., Loehrer, L. L., Bauer, B. A. & Wahner-Roedler, D. L. (2010). Measurement of quality of life and participant experience with the mindfulness-based stress reduction program. *Complement Ther Clin Pract*. 16 (1), 36-40.
21. Evans, S., Ferrando, S., Findler, M., Stowell, C., Smart, C., & Haglin, D. (2008). Mindfulness-based cognitive therapy for generalized anxiety disorder. *Journal of Anxiety Disord*, 22 (4), 716-21.
22. Kieviet, A., Visser, A., Garssen, B., & Hudig, H. (2008). Mindfulness-based stress reduction training for oncology patients: Patients' appraisal and changes in well-being. *Patient Educ and Couns*, 72 (3), 436-42.
23. Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal Pers Soc Psychol*, 84(4), 822-848.
24. Tugade, M. M., & Frederickson, B. L. (2002). *Positive emotions and emotional intelligence*. United States, New York: The Guilford Press. 319-40.

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