Journal of Novel Applied Sciences
Available online at www.jnasci.org
©2015 JNAS Journal-2015-4-8/890-894
ISSN 2322-5149 ©2015 JNAS

Meta-cognitive therapy and Brief Behavioral Activation Treatment to alleviate the symptoms of generalized anxiety disorder

Marjan Karegarzadeh[1] and Zahra Daneshvar[2*]

1- PhD Student Of Psychology, Shahid Chamran Beranch University, Ahvaz, Iran
2- PhD Student Of Psychology, Esfahan Beranch University, Esfahan, Iran

***Corresponding author*:** Zahra Daneshvar

ABSTRACT: Background: Although it seem that metacognitive processing system have a remarkable impact on general anxiety disorder (GAD), but studies about the effectiveness of metacognitive interventions in reducing the GAD symptoms are not frequent. The purpose of this study was comparing the effectiveness of metacognitive (MCT) and Brief Behavioral Activation Treatment (BAT) on reducing GAD symptoms and metacognitive beliefs. Methods: In this clinical trial study, 45 patients with GAD who met the diagnostic criteria by psychiatrist or psychologist, were selected randomly from the patients referred to psychiatric and psychological clinics and centers of Ahvaz City, Iran, in 2012. They were randomly assigned into three groups of cognitive-behavioral intervention, metacognitive intervention and control. Data were gathered before and after the interventions via general anxiety disorder scale (GADS) and metacognitive beliefs questionnaire (MCQ). Data analysis was done using Multivariate ANOVA and LSD post hoc statistical tests. Findings: There was a significant difference between three group scores at post-test ($P < 0.01$). The mean scores of metacognitive therapy group in GAD symptoms and metacognitive beliefs were lower than other two groups and as well as Brief Behavioral Activation Treatment group rather than control group. Conclusion: The metacognitive and Brief Behavioral Activation Treatment interventions are effective in reducing GAD symptoms and metacognitive beliefs but first one is more effective.

***Keywords*:** Metacognitive intervention, Brief Behavioral Activation Treatment intervention, General anxiety disorder (GAD).

INTRODUCTION

Various types of anxiety disorders General anxiety disorder or GAD is excessive anxiety and worry that uncontrollable mental defined. In this disorder, a minimum of three physical symptoms (sweating, palpitations, feeling of tightness in the throat, expecting imminent occurrence of unpleasant incidents, etc.) for 6 months show (American Psychiatric Asso caiation).

Research has shown that this disorder in the second decade of life often starts slowly and continues for years. The disorder begins between 3 and 6 percent cited (Sadoc, 2007).

GAD is a disorder common ancestry (Furmark, 2002; Kessler & etal, 2005) typically, the disorder can lead to a period of long-term disability (Bruce & etal and people with this disorder do significant damage, social and occupational relationships suffer (Wittchen, 2000; Reich, 2004). GAD with other anxiety disorders, depression and alcohol dependence and a range of associated personality disorders. Thus, the disorder in recent years, as a significant disturbance in the field of public health is considered (American Psychiatric Assocaiation).

It seems that GAD caused by defective cognitive processing systems and recurring negative thoughts that a vicious cycle of negative thoughts and beliefs can cause repeated in person. The new therapy is needed to control the state of mind to change thinking and metacognitive theory is based. Metacognitive knowledge and understanding related to the thinking and the factors that affect the opinion refers. Meta-cognitive theory and the beliefs and negative

thoughts because of cognitive control and speech recognition emphasize how effective meta-cognitive knowledge is continuity and change. MCT levels of intervention offers content that challenges traditional thinking and negative beliefs that cognitive therapy focuses, not stressed (Wells, 2008) and tries metacognition that leads to maladaptive way increase recurring negative thoughts or negative beliefs are common, change (Wells, 2004). The main purpose of enabling the patient MCT is such a different way to communicate with your thoughts and flexible cognitive control and awareness to promote, review processes for worry, and rumination and threats, prevent. Cognitive approach, the patient gives up its own strategies of locking mechanisms that cause for concern in processing, threat monitoring and self-control becomes maladaptive, leave and flexible processing of emotional education plan in the future to guide thinking and behavior in the face of threats and damage caused (Wells, 2004).

Behavioral activation therapy, therapy that are structured to increase in behavior that increases the contact person with the integration of environmental enrichment. This process led to improvements in mood, thinking and quality of life, and though the underlying principles This treatment focuses on behavioral activation, cognitive and motivational processes, but it is also not ignored (Hopko, 2003). According to this view of depressive and anxiety, coping strategies to avoid high unemployment environment for patients or produce a slight strengthening of the behavioral activation therapy triggers of depression and anxiety sees in one's life not The shortcomings of the individual. Among the most important characteristics of this treatment, cost in terms of time, cost, features and ease of implementation, to guide treatment based on individual characteristics of the patient's treatment protocol. The effectiveness of this treatment in several studies, including the treatment of generalized anxiety members of the (Hopko, Lejuez, 2004), Depression in cancer patients , 2005) Hopko, Bell, Armento (Co major depression and generalized anxiety disorder (Armento, Hopko, 2009), has been proven.

Short-term behavioral activation therapy (Lejues, 2001) and MCT (Wells, Fisher, 2008), including therapies that can be used to treat anxiety. In addition to these two methods that have recently and since 2000 in the field of mental health and anxiety have been raised to explain and analyze the effectiveness they need to meditate more and Research. Given the importance of effective research in generalizing the results to the community and real medical situations, although about anxiety and its treatment are various research carried out in the world, but in examining the effectiveness of the two treatments research in the Iranian population very little is. Accordingly, comparative study you look at, on the one hand to examine the effectiveness of this therapeutic approach in reducing symptoms and improving quality of life in patients with major depression is, and the other hand in the wake of the issue which one of them is more effective in treating depression.

MATERIALS AND METHODS

Methods

This study was a clinical trial with a control group. The study population included all patients with GAD outpatient centers and clinics in the city of Ahvaz in 2015 were psychological. Initially 45 patients were under psychiatric diagnosis GAD diagnosis. The sample was drawn randomly. To ensure the diagnosis, a diagnostic interview by the investigator and based on DSM-IV-TR criteria was conducted. Inclusion criteria included: primary diagnosis of GAD in axis I, non-infected patient to any of the personality disorders, bipolar disorder, major depression, or lack of co-infection with other Axis I disorders, anxiety and psychosis veins, and the cycle education lack of organic disorders. Medication or any other intervention during therapy sessions Exclusion criteria were patients of the study.

A scale of generalized anxiety disorder (Spitzer, 2006) measured the amount and intensity of anxiety in the past two weeks. The scale for pencil - paper and seven items of zero to 3 days, 2 item 3 item more than half the days Nearly every day scored. The reliability of the test is reported Cronbach's alpha 0.92. In the present study, Cronbach's alpha coefficient of the scale was 0.79.

The short form questionnaire to measure metacognitive beliefs made. This questionnaire has 30 items and each item will be subject to multiple-choice answers. The questionnaire five components of Cognitive confidence, Positive worry beliefs, Negative beliefs about danger and thought uncontrollability measures. Cronbach's alpha coefficient of the questionnaire and its components in a range of 0.72 to 0.93 and test-retest reliability coefficient of 0.73 was reported. (Wells, 2004) in Iran in the study, Cronbach's alpha coefficient of the questionnaire was 0.81 (Abolghasemi, 2007). Also in this study, Cronbach's alpha coefficient of the scale was 0.73. After sampling, at a meeting of all the patients in-group pre-test questionnaire responded. After a brief description on how to complete the questionnaire, distributed questionnaires were given to high running accuracy. The patients were divided randomly into two groups of 15 meta-cognitive therapies and behavioral activation therapy was short term and 15 in the control group respectively. Wells cognitive intervention group and in 9 sessions for one and a half hours for 2 months was administered to the first group and short-term behavioral activation therapy for 8 sessions for an hour and a half as a group in two months for the second group was conducted. After three sessions, patients were asked to attend a

meeting as a group to complete the post-test. After collecting the information, data, software, and data were analyzed by ANOVA.

Findings

After the sessions, 2 subjects withdrew short-term behavioral activation therapy and cognitive loss in group 1, 41 patients were evaluated in the test. Table 1. Demographic characteristics were studied. In Table 2, a descriptive indicator for each group is shown symptoms of anxiety. Because the score is more indicative of the severity of the symptoms of GAD, the results showed that the average post-test experimental group than the control group decreased. Descriptive indicators for each group and the meta-cognitive variables can be seen in Table 3. Since the score is more indicative of the intensity of negative beliefs, the results showed that the average post-test experimental group than the control group decreased. The results showed that among the three groups in at least one of the dependent variables, there is a significant difference p <0.001. The results showed no significant difference between the groups in the dependent variables there. 69% of metacognition score of between-group differences or Register 2 groups. The comparison test showed that the short-term cognitive therapy and behavioral activation therapy in effect on the symptoms of GAD there is a significant difference p <0.001, is test scores in the cognitive therapy group was significantly lower than the intervention group was short-lived behavioral activation therapy. It also scores of behavioral activation therapy short-term symptoms of GAD in post significantly lower than the control group p <0.002. In addition, the results showed that meta-cognitive scores are lower than other groups in the post-test p <0.001, but between metacognition scores and other groups there was no significant difference p> 0.05.

Table 1. Demographic characteristics of participants

Group	N	Age		Gender		Education		
		Mean	SD	Man	Female	Diploma	BS	MA
Control	15	20.4	2.3	7	8	7	7	1
behavioral activation treatment	12	19.5	4.8	5	7	5	5	2
Meta Cognitive	14	22.7	4.9	8	6	6	6	2

Table 2. The mean and Sd score of GAD a breakdown stages and groups

Group	Steps	Mean	SD
Control	pre-test	78.34	14.54
	Post-test	76.90	13.43
behavioral activation treatment	Pre-test	74.18	17.80
	Post-test	56.70	22/11
Meta Cognitive	Pre-test	90.06	17.60
	Post-test	21.35	22/21

Table 3. Mean and Sd score a breakdown stages and groups MCQ

Group	Steps	Mean	SD
Control	pre-test	62.3	19.44
	Post-test	61.98	16.56
Brief behavioral activation treatment	Pre-test	74.16	12.80
	Post-test	66.75	15.11
Meta Cognitive	Pre-test	79.07	20.60
	Post-test	28.35	12.20

Table 4. Compare dependent variables in the three groups

Variables	Wilks Lambda	F	p	Power of test
The total GAD and metacognition	0.15	18.8	<0.001	0.99

Table 5. Multivariate analysis of variance for each dependent variable between the groups analyzed

Variables	Brief behavioral activation treatment		metacognition		Control		F	Eta	Effect size	p
	Mean	Sd	Mean	Sd	Mean	Sd				
GAD	56.75	22.10	21.30	28.27	76.90	13.41	44.30	0.99	0.69	<0.001
metacognition	66.80	15.40	28.40	12.54	60.93	6.80	27.38	0.99	0.58	0.010

Table 6. Compare test scores of groups of dependent variables by LSD

	Group (I)	Group (J)	Mean differences	p
General anxiety disorder	BAT	MCT	35.15	<0.001
	BAT	Control	-20.18	0.002
	MCT	Control	-55.34	<0.001
Metacognitive	BAT	MCT	-38.40	<0.001
	BAT	Control	4.90	0.360
	MCT	Control	-33.50	<0.001

(BAT): Behavioral activation treatment (MCT): Metacognitive therapy p<0.001

RESULTS AND DISCUSSION

Discuss

The aim of this study was to compare the efficacy of cognitive therapy and behavioral activation therapy in reducing the symptoms of generalized anxiety disorder was short-lived. The results showed that cognitive therapy reduces symptoms GAD In the post-test. These results are in line with the results of other research. (Fisher, Wells, 2008; Rees, 2008) In explaining this result, meta-cognitive intervention in addition to the content of the opinion, information processing, information how to get the information out and how the output is concerned. With regard to the high rate GAD and drug dependence treatment for people with this disorder, the psychological need for new therapies for effectiveness on the specific disorder. MCT of modern methods of non-drug therapies that are used to transform and overcome the shortcomings of the theory of knowledge is formed. This therapy teaches patients to be able to increase these beliefs is incompatible metacognition change (Wells, 2008). In other words, meta-cognitive approach strategies to the patient so that their locking mechanisms that cause for concern in processing, threat monitoring is maladaptive and self-control, emotional release and flexible processing training, program design in the future to guide the thinking and behavior in the face of threats and damage the foundation (Wells, 2004) . The results of this study-reduced symptom scores GAD In the short-term behavioral activation therapy group than in the control group. These results are at the top of which the results of other studies (Hopko, 2009; Kanter, 2008; Dimidjian, 2006; Dobson, 2008; Battonari, 2008).

Behavioral activation therapy leads to regular daily activities of the patient. This makes treatment more energy and optimism in them. In addition, results showed that behavioral activation after treatment showed greater improvement compared to metacognition. So it can be concluded that in this study, short-term treatment of behavioral activation therapy was effective in improving the quality of life of patients suffering from anxiety and anxiety is treatable and fix it enhances the quality of life of these patients. These findings are consistent with research Hopko, 2005 was also consistent. Researchers suggest future therapeutic efficacies in the treatment of other anxiety disorders are also studied. Also according to the results of the therapists suggested that this therapeutic approach compared to other approaches in the treatment of GAD in first.

REFERENCES

American Psychiatric Association. 1994. Diagnostic and Statistical Manual of Mental Disorders: DSM-IV TM. 4th ed. Washington, DC: American Psychiatric Association.

Abolghasemi A, Ahmadi M, Kiamarsi A. 2007. The Relationship of Metacognition and Perfectionism with Psychological Consequences in the Addicts. J Res Behav Sci; 5(2): 73- 9. [In Persian].

Armento MEA and Hopko DR. 2009. Behavioral activation of a breast cancer patient with co-existent major depression and generalized anxiety disorder. Clinical Case Studies, 8, 25−37.

Battonari K, Roberts J, Thomas S and Read J. 2008. Stop thinking and start doing: Switching from cognitive therapy to behavioral activation in a cognitive and behavioral activation in a case of chronic treatment-resist depression. Cognitive and behavioral practice, 15, 376-386.

Borkovec TD, Newman MG, Pincus AL, Lytle R. 2002. A component analysis of cognitivebehavioral therapy for generalized anxiety disorder and the role of interpersonal problems. J Consult Clin Psychol 2002; 70(2): 288-98.

Bruce SE, Yonkers KA, Otto MW, Eisen JL, Weisberg RB, Pagano M. 2005. Influence of psychiatric comorbidity on recovery and recurrence in generalized anxiety disorder, social phobia, and panic disorder: a 12-year prospective study. Am J Psychiatry 2005; 162(6): 1179-87.

Clark DM, Fribon CJ. 2001. Knowledge and applied method of cognitive-behavioral therapy. Trans. Kavyani H. 1st ed. Tehran, Iran: Fars Publication.

Dugas MJ, Robichaud M. 2007. Cognitive-Behavioral Treatment for Generalized Anxiety Disorder: From Science to Practice. London, UK: Routledge.

Dimidjian S, Hollon SD, Dobson KS, Schmaling KB, Kohlenberg RJ, Addis ME. 2006. Randomized trial of behavioral activation, cognitive therapy, and antidepressant medication in the acute treatment of adults with major depression. Journal of Consulting and Clinical Psychology, 74, 658−670.

Dobson KS, Hollon SD, Dimidjian S, Schmaling KB, Kohlenberg RJ, Gallop R. 2008. Randomized trial of behavioral activation, cognitive therapy, and antidepressant medicationin the prevention of relapse and recurrence in majordepression.Journal of Consulting and Clinical Psychology, 76, 468−477.

Furmark T. 2002. Social phobia: overview of community surveys. Acta Psychiatr Scand 2002; 105(2): 84-93. 12. Fisher PL, Wells A. Metacognitive therapy for obsessive-compulsive disorder: a case series. J Behav Ther Exp Psychiatry 2008; 39(2): 117-32.

Hopko DR, Lejuez CW, Ruggiero KJ and Eifert GH. 2003. behavioral activation treatments for depression: Procedures, principles, and progress. Clinical Psychology Review, 23, 699−717.

Hopko DR, Lejuez CW and Hopko SD. 2004. Behavioral activation as an intervention for co-existent depressive and anxiety symptoms. Clinical Case Studies, 3, 37−48.

Hopko DR, Bell JL, Armento MEA, Hunt MK and Lejuez CW. 2005. Behavior therapy for depressed cancer patients in primary care. Psychotherapy: Theory, Research, Practice, Training, 42, 236−243.

Hopko DR, Lejuez CW and Hopko SD. 2004. Behavioral activation as an intervention for co-existent depressive and anxiety symptoms. Clinical Case Studies, 3, 37−48.

Hopko DR, Lejuez CW, Ruggiero KJ and Eifert GH. 2003. behavioral activation treatments for depression: Procedures, principles, and progress. Clinical Psychology Review, 23, 699−717.

Hopko DR, Sanchez L, Hopko SD, Dvir S and Lejuez CW. 2003. Behavioral activation and the prevention of suicidal behaviors in patients with borderline personality disorder. Journal of personality Disorder, 17(5)460-478.

Kanter JW, Hurtado GD, Rusch LC, Bush AM and Rivera AS. 2008. Behavioral activation for Latinos with depresion.Clinical Case studies, 6,491-506.

Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. 2005. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry 2005; 62(6): 593-602.

Lejuez CW, Hopko DR and Hopko SD. 2001. A brief behavioral activation treatment for depression: Treatment manual. Behavior Modification, 25, 255−286.

Rees CS, van Koesveld KE. 2008. An open trial of group metacognitive therapy for obsessivecompulsive disorder. J Behav Ther Exp Psychiatry 2008; 39(4): 451-8.

Reich J, Hofmann SG. 2004. State personality disorder in social phobia. Ann Clin Psychiatry 2004; 16(3): 139-44.

Sadoc B, Sadoc V. 2007 The behavioral science psychiatry summary. Trans. Poorafkari N. Tehran, Iran: Shahrab Publication.

Spitzer RL, Kroenke K, Williams JB, Lowe B. 2006. A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med 2006; 166(10): 1092-7.

Wells A, Cartwright-Hatton S. 2004. A short form of the metacognitions questionnaire: properties of the MCQ-30. Behav Res Ther 2004; 42(4): 385-96.

Wells A, Sembi S. 2004. Metacognitive therapy for PTSD: A core treatment manual. Cognitive and Behavioral Practice 2004; 11(4): 365-77.

Well A. 2000. Emotional disorder and metacognition. Trans. Bahrami F, Rezvan Sh. Isfahan, Iran: Mani Publication.

Wells A, Fisher P, Samuel M, Trishnapatel C and Brew in. 2008. Meta- cognitive therapy in Recurrent and persistent Depression.

Wells A. 2008. Metacognitive Therapy for Anxiety and Depression. New York, NY: Guilford Press.

Wells A. 2000 Emotional Disorders and Metacognition: Innovative Cognitive Therapy. New Jersey, NJ: Wiley.

Wittchen HU, Fuetsch M, Sonntag H, Muller N, Liebowitz M. 2000. Disability and quality of life in pure and comsorbid social phobia. Findings from a controlled study. Eur Psychiatry 2000; 15(1): 46-58.