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THE EFFECTIVENESS OF COGNITIVE-BEHAVIORAL THERAPY FOCUSED ON EXCITEMENT IN REDUCING DEPRESSION INTENSITY IN PATIENTS WITH RHEUMATOID ARTHRITIS

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ABSTRACT

Rheumatoid arthritis is a debilitating autoimmune disease, and as this is a chronic disease it has bad effects on physical and psychological variables. Due to the effects of psychological interventions on chronic physical diseases, the aim of this research is to determine the effectiveness of cognitive-behavioral therapy with the focus on the excitement of depression, severity of disease activity in patients with rheumatoid arthritis. tign with a control group. 24 patients with rheumatoid arthritis in Sanandaj rheumatology clinic were selected by available sampling method. The samples were divided into two experimental and control groups (12 patients in each group). The members of both groups responded to the depression (BDI-II) and the severity of disease activity was measured by 28 DAS scale by the Rheumatologist. The cognitive behavioral therapy plan was performed during 8 sessions reflecting 8 meeting focused in the experimental group, and the control group received no intervention. The data were analyzed by the T test and analysis of covariance. The research method was quasi-experimental and we used pre-test and post-test des. the findings suggest the significance of cognitive-behavioral therapy effects and the intensity of experimental group activity was reduced

compared to the control group; The cognitive-behavioral therapy with focus on excitement was effective in reducing depression and severity of the disease ($p \leq 0/05$).

Keywords: Cognitive-behavioral therapy focused on excitement, Depression, DAS28, Rheumatoid arthritis

INTRODUCTION

Body and mind as two aspects of human existence always affect each other. One of them may determine the status of another. Physical diseases, chemically and physiologically can resulted in mental disorders. In many cases ,the disease can make physical, chemical and hormonal changes in the body, And in people with physical illness, it can cause mental disorder. (Kaplan, 2010).One of the physical diseases is Arthritis Disease. Rheumatoid arthritis is a systemic chronic inflammatory disease; it affects mainly the joints that commonly destroy articular cartilage and lower bone (Kumar, 2012). The obvious character of Rheumatoid arthritis includes: sustainable inflammatory sinusitis usually affects environmental Joints with a symmetrically distribution. Synovial inflammation is the hallmark of the disease in creating Cartilage damage and bone erosion and subsequently joint deformity. Despite its destructive power can be quite variable. Some patients may have only a mild illness involving a small number of joints and short period of experience that Joint damage is minimal. However, in some patients forever progressive polyarthritis, it will be with significant dysfunction. Since the patient within their physical illness cannot have physical constant efficiency, so many activities of him will be limited. This status, cause anxiety, anger and depression. Stress makes a person's illness and psychological crisis (Razavian Faezeh et al.,2009). Studies In this regard have shown that arthritis patients compared with healthy people has more severity of disorders such as depression, anxiety, emotional and social problems (Edvarz et al.,2006), That this problems lowered quality of life. To reduce the psychological problems such as depression of patients with rheumatoid arthritis there are many non-pharmacological interventions one of these methods is emotion-focused cognitive behavioral approach that is based on cognitive therapy. In theory of interactive cognitive systems, there is a relationship between cognitive and emotional processes. In this regard Tizdel (1997) refers to two types ofbelief.1 – emotional Belief (hot cognition) 2-rational

beliefs (cold cognition) emotional beliefs less manipulate by traditional cognitive therapy. Emphasis one motional beliefs is considered as a characteristic of Teasdale's cognitive therapy, accordingly, negative automatic thoughts and core beliefs of depressed patients is not enough for the treatment. In this approach, depression is in mood not in thought disorder (Aboulghasemi, 2008). In this regard, Tizdel (1999) to prevent recurrence of depression and achieving new insights by depressed people recommended teaching methods of cognitive therapy based on mindfulness for patients. Young (1989) also added emotional element into cognitive behavioral therapy in the treatment of depression. For changing depressed scheme, recommended 4 kinds of intervention that are include Stimulating the emotional, interpersonal, cognitive, and behavioral. Yong believes that the possibility of evacuation of excitement must be provided for depressed person. Yang by adding the amount of emotion in cognitive-behavioral therapy expanded the scope of cognitive therapy for depression (Paul and Lindsey, 2000). Research has shown that entering emotional element as a treatment for depression is more effective and efficient methods of cognitive improvement in the face of other metacognitive beliefs (Teasdale's et al., 2002, quoted by Hamid Poor, 2003). Also mal adaptive emotion regulation can also contribute to growth disorders. Due to the above, the depression caused by the disease as endogenous depression can affect the quality and the severity of the disease which creates numerous problems for the individual. Thus, this study seeks to answer this question that if the cognitive behavioral by adding the emotion (excitement focused cognitive-behavioral therapy) can reduce depression in patients with rheumatoid arthritis?

METHODOLOGY

This study belongs to the semi-experimental surveys according to its application. And according to its aim, it belongs to applicable surveys which are in a semi-experimental form with-pre test and post test taken on the control and experimental groups.

Table 1.3: Plan of the survey

Groups	Pretest	Experiment	posttest
R_E	T_1	X	T_2
R_C	T_1	---	T_2

Statistical Society:

The study population included all patients with rheumatoid arthritis in the first half of 2015 rheumatology clinics in the city of Sanandaj visit and rheumatoid arthritis rheumatologist based on the criteria proposed by the Association of Rheumatology 2010

America and Europe (ACR-EULAR 2010) for they have.

Sampling method: using available sampling of 24 patients who agreed to participate were eligible for the study were selected and divided into two experimental and control groups. Selection criteria of the sample group 1) having rheumatoid arthritis, 2) voluntary cooperation, 3) literacy, 4) having depression disease, 5) lack of mental disorders and physical illness and depression due to lack of drugs , 6) avoiding the use of antidepressants and tranquilizers.

Performance method: all patients with rheumatoid arthritis who were referred to the clinic And their rheumatoid arthritis is based on the criteria proposed by the American RheumatismAssociation2010and Europe(ACR-EULAR 2010),was given by Professor of Rheumatology, participated in the study. Understandable Description was given to all participants and the participation satisfaction in the project was taken from all subjects, and data collected that includes 1-demographic data and background 2, Information on Rheumatoid Arthritis, Including for the onset of symptoms, the degree of morning stiffness, number of joints, radiological changes due to rheumatoid arthritis, rheumatoid nodules, VAS. Then all participants were examined by Professor of Rheumatology and the results were recorded. After determining the sample and determining the experimental and control groups, in the pre-test, Depression Inventory BDI-II tests by both groups was filled. Then the experimental group was put based on cognitive-behavioral therapy on excitement (control group cognitive-behavioral therapy was not focused on the excitement). Emotion-focused cognitive-behavioral therapy was carried out in 8 sessions, once a week for75 minutes on the experimental group. After the post test sessionsBDI-II,was held.

Instruments

1: Beck depression questionnaire second edition of BDI II:

Beck new version depression questionnaire includes (BDI-II) 21-item of self-report to measure depression in adults and adolescents of 13 years and above. This version is applied for evaluation of symptoms consistent with major depression diagnostic criteria that was given by the American Psychiatric Association. (Beck, Vaster, Brown, 2000) The BDI-II evaluates the severity of symptoms of depression, so it's just not used to diagnose depression, and it covers all elements of depression based on cognitive theory, that participants selects anyone of the four options that reflect the

severity of depressive symptoms on its own. Each material takes a score between 0 and 3. These materials are in areas such as sadness, pessimism, sense of failure, guilt, sleep disturbances, loss of appetite, self-loathing, etc. this meansthat2 material has been allocated to emotions, 11materials to the recognition, 2materials to the overt behavior, 5 materials to physical symptoms and1 material to the semiotics of the person. And thus the total score ranged from0 to63inthe questionnaire. These scores can be used to show the overall level of depression applied:

0-13: no or minimal depression

14-19: mild depression

20-28 moderate depression

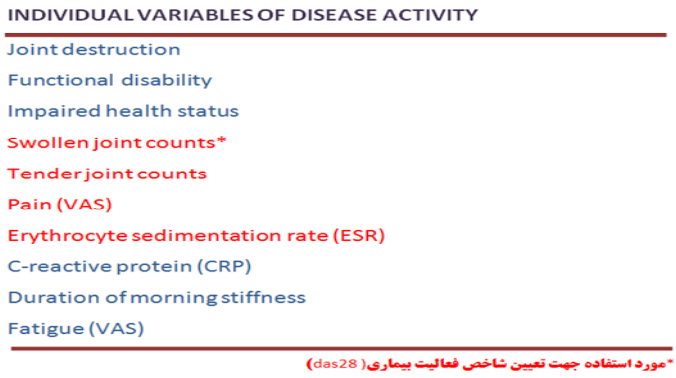
29-63: severe depression

Reliability and Validity

Psychometric studies conducted on the second edition of this questionnaire showed that enjoys good reliability and validity. In general, the questionnaire is a proper substitute for the first edition. The results of Beck, Steer, Brown indicated that the questionnaire has high internal consistency (Beck, Steer, Brown, 2000). Also other studies, the alpha coefficient 91%, 89%correlationbetween the two halves, retest coefficients within a week, 94% reported (Da Bessonkit, Mohammad Khani Butterfly, 2006). internal consistency of the test for Iranian students87% and test-retest reliability was 73% (Da Bessonkit, Mohammad Khani Butterfly, 2006). Fataina sample of94peoplein Iran, reported 91%Cranach's alpha and test-retest reliability of this scale reported, 96% during a week (Fata, 2003). For reliability and validity of the inventory in Iran, we can point to Tashakori's research and Mehryar In1994 that the reliability of 78% achieved in Iran. Partovi's research in 1975, Vahabzadeh in 1973 and Chegini in 2002, the validity of Beck questionnaire was reported high and it was from 70% to 90%, respectively. (Azkhosh, 2008).

2- Severity of disease activity

Questionnaire28: DAS These questionnaires consisted of swelling and tenderness in the joints of the shoulders, elbows, wrists, fingers and knee. Method of scoring is from 0 to 28with a score of 0 that indicates no disease activityand28 is for high disease activity score indicator. DAS scales to measure disease activity and includes the calculation of four parameters (number of swollen joints, number of tender joints, ESR, VAS and obtained by mathematical calculation. Expressed in terms of number. Numberless than 6.2 indicates remission and response to treatment.



Measure criteria quality is by the patient pain and a horizontal line with a length of 10 cm,s paced 1 cm from 0 to10 will be explained for patients (The patient himself on the line shows the numeric pain. Zero means no pain and10 mean the worst pain felt by the patient). And all information and relevant questions asked by the investigator based on the SF-36 questionnaire recorded. In system DAS 28, we used the existence of swelling ortenderness28.

Treatment methods: the trial intervention was as follows.

Integrated cross-diagnostic protocol for the treatment of emotional disorders (Barlow, 2014) practical guide of cognitive group therapy, Farnam, 2012).

sessions	The sessions content
First	Communication and initial assessment, establishing good relations, establishing a therapeutic alliance, explaining the rules, objectives and number of treatments and treatment contracts, encouraging participation and speaking in meetings and task
2th	Investigation task define and describe the concept of depression, causes of rheumatoid arthritis, the work represented the first emotion emotions: happiness, is thinking about the excitement, the assignment
3th	Assess the physical and psychological consequences of depression explaining task to introduce anger, symptoms, discuss ways to control the symptoms of anger, rainfall thinking about anger, learning push button, provide homework
4th	Investigate tasks, explaining the experience depression during illness, emotional observed experience (emotion and reaction to emotions), recognition of the quality of emotion, causes and consequences and cope and deal, preservative agents (such as common trigger Emitters and environmental associations to develop solutions and methods of their own, providing task
5th	Investigate tasks, the introduction of guilt, rainfall thought to introduce the personal thoughts and their impact on an individual's response at the time of depression, explaining his thoughts based on ABCD, the assignment and grading of emotions and thoughts
6th	Investigation tasks expressed negative automatic thoughts, metaphor baggage familiar with the vertical arrow method, the relation between thoughts and emotion, focusing on the emotion and the idea of automatic identification and response to emotional reactions, providing tasks
7th	Investigation tasks, learning to recognize negative automatic thoughts, focusing on the internal trigger Emitters (including physical feelings) and external emotional, cognitive evaluation, identification of non-thinking automatic and common animals, cognitive re appraisal, increased flexibility in thinking, providing tasks
8th	Investigation tasks, browse the emotions, behaviors associated with emotion, review the concept of negative self-talk, trying to change the self-talk coping self-talk, and learning a new behavior, overview of concepts, discuss the progress of recovery and treatment of patients, summing up The sessions, survey

Analysis of data:

Statistical methods used in this study, in addition to descriptive statistics(frequency, mean and standard deviation), inferential statistics, t, analysis of covariance was used. The data obtained using the software SPSS-18 were analyzed.

FINDINGS

Table 1 shows that the average depression severity and disease activity in post-test than the pre-test and in the experimental group decreased, but increased in the control group.

To test the hypothesis of ANCOVA was used. that it is necessary to test assumptions are examined using this test. one of the assumptions of homogeneity of the slope of the regression analysis of covariance, that the results of the regression slope of variable severity of depression and disease activity in Table 2.

Results Table 2 shows the interaction of group * Pre-variable test and depression was significant interaction between these variables from the regression slope assumption of homogeneity is not. * Pre-test group interaction was not significant in any variable intensity activity, therefore, the data support the hypothesis of homogeneity of regression slopes and this hypothesis is confirmed

Another assumptions of homogeneity of variance, analysis of covariance. To verify this assumption, use Levene's test results are summarized in Table 3.

Results Table 3 shows that depression variable was significant at less than 0.05 and the assumption of homogeneity of variances is not. But highly variable disease activity showed the homogeneity of variances, this assumption is confirmed.

To test the hypothesis (emotion-focused cognitive-behavioral concepts on depression in patients with rheumatoid arthritis is effective.) When the default has not been met by analysis of covariance was used T-test results are shown in Table 4.

T test results showed that the mean difference in level ($P \leq 0.05$, $T=6.927$) was significant, the result of which is an emotion-focused cognitive-behavioral concepts depression patients rheumatoid arthritis is effective in the experimental group than the control group.

To test the hypothesis (emotion-focused cognitive-behavioral concepts on the severity of disease activity in RA patients is effective.) The analysis of covariance was used. The average post-test analysis and test group compared with the control group, the average pre-test score-were used as covariates.

Results Table 5 shows that the effect of the independent variable on the dependent variable, the emotion-focused cognitive-behavioral therapy, the severity of disease activity (F =8.228 , Sig=0.009) are statistically significant and given that the average Nmran test the experimental group compared to the control group is lower, which means that emotion-focused cognitive-behavioral therapy has significantly intensified activity in the experimental group compared to the control group.

variable	group	Frequencies	Pre-test		Post-test	
			mean	Std. Deviation	mean	Std. Deviation
depression	Exprimental	12	24.83	9.46	12.75	6.17
	Contorol	12	24.92	9.1	27.5	9.4
DASS	Exprimental	12	2.72	1.21	1.82	0.97
	Contorol	12	1.97	0.87	2.11	0.85

Tests 2: Between-Subjects Effects shib regression

variables	Sum of Squares	df	Mean Square	F	Sig
Group*pre-test depression	171.575	1	171.575	13.098	0.002
Group*pretest DASS	0.628	1	0.628	1.684	0.209

Table 3: Levene's Test

variables	F	df1	df2	Sig
Depression	5.886	1	22	0/776
DASS	1.057	1	22	0.315

Table 4: The results of two independent samples T-test

Levene test for equality of variances			T-test for equality of means				
Variances are not equal	F	sig	T	Df	Sig (two-sided)	D.M	S.D D
	13.327	0.001	-6.927	11.726	0.001	-14.67	2.12

Table 5: The results of ANOVA to assess the significance of differences between experimental and control groups in the severity of disease activity

variables	Sum of Squares	df	Mean Square	F	Sig	Eta
pretest	10.267	1	10.267	26.651	0.001	0.559
group	3.170	1	3.170	8.228	0.009	0.282
Error	8.09	21	0.385			

DISCUSSION AND CONCLUSION

The present results showed that emotion-focused cognitive behavioral therapy is effective in patients with rheumatoid arthritis and it was able to significantly reduced depression and the severity of their disease activity. In other words, the average grades of disease activity and severity of depression in posttest, in the experimental group had a significant increase than the control group. And it seems that the impact of the intervention on depression and severity of active arthritis has been done for the first time. In making this assumption it can be said that although studies in conjunction with the emotion-focused therapy is limited, But the results of the studies like vitality, Mokhtari, Maulvi Ismail Abedi, Najafi,

Aghaei, AsadNia, Mazaheri Mohammadi, Daghaghzadeh, Afshar, Zavatra, Barcelona and colleagues, Skinner, Snouck and Grade and colleagues, are consistent and consonants. In explaining the impact of the intervention on depressive symptoms based on emotion regulation, it can be argued that, according to Barlow, emotional process is our main goal. According Tizdel emotional and behavioral reaction striggered by cognitive processes. Thus thoughts, beliefs, and other cognitive processes, are determines the mood and excitement. And, according to Gross and Mons people who have difficulty managing their emotional responses, experienced greater terror and Long periods and it is more likely that they are depressed. Cognitive behavioral therapy focuses on the excitement that is emphasized on Adaptive nature, to identify and correct mal adaptive efforts to adjust the excitement, Thereby facilitating proper processing and turn off the extreme emotional response to internal and outer cues (body) (Tom Posen, willmuvuska, 2010). Those patients with chronic pain that have difficulty in making their emotions in times of emotional distress show physical symptoms.

Briefly, emotion-focused cognitive behavioral therapy can cause problems (depression, anxiety) and greatly reduce disease activity in patients with rheumatoid arthritis, And it improve their health in different aspects of biological, psychological, social and moral. This study can be used in terms of emotion-focused cognitive-behavioral therapy in reducing depression and severity of disease activity in patients with rheumatoid arthritis as a preliminary study, Based on the promising results that can be made to research on a massive scale. The severity of rheumatic diseases effects on different aspects of daily life and lead to reducing the ability of doing some activities. Social function, physical function and dysfunction, psychological, and emotional are among the areas that are affected by the outcome and complications of the disease, that these same disabilities cause morbidity inpatients (Edvards et al, 2006). Research by Roshani and colleagues (2011) showed that due to the symptoms of rheumatoid arthritis, these diseases can have a significant impact in terms of economic, social and on individuals and society. Socially because of the deformities that occur in a person's body, He face with anxiety inability to communicate with others and accepted by them and finally makes resent, and therefore he does not have a good mental health. According to the daily pain of the joints in rheumatoid arthritis that is an inevitable

symptom of the disease, a person with face with depression, anxiety, hopelessness.

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