Effectiveness of Therapeutic Schema on Reducing the Anxiety and Depression in Patients with Major Depressive Disorder

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ABSTRACT

Therapeutic schema which was created by Yang et al. is a modern and integrated treatment method that is mainly based on the development of concepts and methods for treatment of classical cognitive-behavioral, in order to cure Character recognition disorders. The purpose of this study was to determine the effectiveness of schema therapy on symptoms of anxiety and depression.

Method: this study was an experimental design with a pre-test and posttest with a control group which in two groups of case and control were used, based on a visit to two counseling Centers in the City of Kermanshah there were 40 people who were selected by the means of available sampling, randomly and divided into two groups of control and test in order to assess the symptoms of anxiety and depression, Haspytal depression questionnaire was used. The intervention group participated in 12 sessions which were 45 minute sessions of schema therapy, while the control group received no intervention, after holding the sessions once more Haspytal anxiety and depression questionnaires were distributed among the participants.

Findings: The findings of this study showed that the intervention was effective in reducing depression and anxiety symptoms in the participants.

Conclusion: the results of this research Consistent with previous researches showed that schema therapy reduces anxiety and depressive symptoms in patients with MDD disorder.

KEYWORDS: therapeutic schema, anxiety, depression

INTRODUCTION

Depression is a disease that results in disability all over the world (Lopez et al., 2006). Although depression is largely treatable, but about 20 percent of people with major depression, is chronic depression (Torpey DC, Klein DN, 2008). The average age of patients with chronic depression is 20 years, and if they attempt to suicide it is more similar to non chronic depression disorder (Angst J, Gamma A, Rossler W, Ajdacic V, Klein DN, 2009). Diagnostic and Statistical Manual of Mental Disorders claims that the chronic depression is generally divided into two types: (1) chronic major depressive disorder and (2) – dysthymic disorder. Also there are two other sub forms of this type of disorder are known including: (1) dysthymic disorder and major depressive disorder (double depression) (2) MDD has no complete cure (Whisman, 2008). Some epidemiological studies in the city of Isfahan and Yazd, respectively, have reported prevalence of dysthymic 8.5 and 4.5 percent (Omidi et al., 2010). Different approaches, including cognitive-behavioral therapy, interpersonal therapy and pharmacotherapy have been used in order to treat the chronic depression. The results show that these methods are effective in the treatment of chronic depression, but have no difference in terms of efficacy (Maddux RE, Riso LP, Klein DN, Markowitz JC, Rothbaum BO, Arnow BA, 2009). In some studies, the poor effectiveness of drug therapy but more than psychotherapy in the pre-test level and effectiveness of psychotherapy more than drug therapy has been shown. In general, it seems that the combination of medication and psychotherapy is more effective than either approach being used alone (Cuijpers P, van SA, Schuurmans J, van OP, Hollon SD, Andersson G, 2010). One of the new approaches in the treatment of cognitive dispositions (chronic) is Yang’s treatment therapy. In fact, this approach is a cognitive behavioral therapy, because cognitive-behavioral therapies in curing cognitive character are faced with problems of Therapeutic schema that the schema is trying to fill this gap (Young et al., 2003). Therapeutic schema is effective in various disorders, such as borderline personality disorder (Arntz A, Klokman J, Sieswerda S, 2005), generalized anxiety

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disorder (Hamidpour, Dowlatshahi, Poorshahbaz and Dadkhan, 2011) and eating disorders (Simpson SG, Morrow E, van VM, Reid C, 2010) is shown. The study of behavioral psychologists has identified three factors causing anxiety: 1- Conflict 2- Fiasco and 3- The internal and external stress. When a person encounters these factors well his adaptive behavior is normal, but if it does not respond appropriately or has a wrong, extremist and unsuccessful, the behavior is non adaptive and sick and the reason is that in most psychological disorders, there is anxiety. The role of childhood in chronic depression is important so that some forms of chronic depression are known with the origin of "growth" (Akiskal, 1983). The approach emphasizes on early maladaptive schemas (Young et al., 2006) which consists of fixed beliefs and patterns that emerged from childhood Adolescence and goes on to Adulthood. These beliefs resist again change and the person looks through of the ideas of the real world. It seems that the new approach with an emphasis on early maladaptive schemas can help in the treatment of chronic depression in childhood and adolescence. The studies show that depression is associated with early maladaptive schemas, is one of the most important predictors of depression during treatment (Halvorsen M, Wang CE, Eisemann M, Waterloo K, 2010) and after 9 years of follow-up (Renner et al., 2012). It is estimated that 30% of the students had experienced depression and 15% of them also experience depression at a clinical level (Khawaja NG, Bryden KJ, 2006). Depression in students also causes many problems, including quality of life, increased risk of suicide and motivational and working problems (Lyubomirsky S, Kasri F, Zehm K, 2003). Major depressive disorder or MDD (Major) covers a wide range of different disorders that depressed mood is the only similarity and their common point (Naghizadeh, 2011). MDD will become clear with two weeks of depressed mood or lack of enjoyment along with several other symptoms that are severe enough to interfere social or occupational functioning. MDD is characterized by depression, and depression is a recurrent disorder. Most people who become infected for the first time, even if fully recovered also experience periods of relapse (Arents, 2008). Sadok (2007, translated by Poora Fkari, 2009), had a research suggesting that individuals with MDD in addition to depression, also experience anxiety. Anxiety disorder is another common form of mental disorder groups and their 12-month prevalence rate is 17.7 percent (Sadvk, 2007, translated by Poorafkari, 2009). In Amini's study (2010) we found those individuals with MDD experience anxiety and a range of depression emotions and may have maladaptive schemas which leads to a worsening of symptoms of this disorder. Our scheme leads to biases in the interpretation of events, and the biases of individual psychopathology will appear as misunderstanding, attitudes, distorted, inaccurate speculation, objective and non-realistic expectations (Joseph, 2010). Unlike many forms of cognitive therapy approach to the treatment scheme that is focused on self-destructive patterns, feelings and behavior are rooted in childhood and will be repeated during the lifetime. In the form of therapeutic schema words, this pattern is called “early maladaptive schemas” (Barinf, Oel and Tian, 2007). These schemas (exclusive) can result in the growth and development of psychological problems. The damage and hurting schemas that start from the first days of growth go on through lifetime. So, early maladaptive schemas are the deepest levels of cognitive structure that show themselves in relation to the environment and other individuals (Kason, 2012).

Asadollahi (2010) suggests that the schemas or the assumptions underlying the regulation and control of one's thoughts and actions have changed during life. The containing of all schemas considers all aspects of a person's life, whether consciously or unconsciously. Schemas create the meaning and structure that a person is born. Meanwhile development of schemes is under the influence of culture, family, religion, and factors related to gender, age or personality. Dysfunctional schemas are considered as the fundamental belief that trigger by an attack. Findings of Harris and Curtin (2012) showed that depression is a significant way of conceptualizing the whole scheme of the 5 correlations of the schema, while more severe anxiety was significantly inhibited only with prevention/care, too. On the other hand, unpleasant life experiences can cause the formation of dysfunctional schemas. Activation of these schemes is consistent with the schema by events, leading up to a period of depression. Typically, the main objectives of the treatment, are early maladaptive schemas identification, validate inappropriate emotional needs, changing dysfunctional beliefs and maladaptive schemas for improved performance and life changing patterns of maladaptive coping styles in order to provide an environment for learning coping styles (Zolfaghari, 2009). This study aimed to answer the question of whether the schema therapy reduces anxiety disorder patients with MDD is effective or not?

**METHODS**

This experiment is the type of pre-test and post-test in which the test and control groups were used. According to the participants referred to the counseling center in Kermanshah (Varmenjeh hospital for
sampling gentlemen and Hajar Institute for ladies samples) were collected and selected. Patients underwent psychiatric interviews with subjects and patients with disorders according to DSM-IV-TR criteria for MDD were selected from a sample of 40 students who were selected through convenience sampling and randomly divided into two experimental and control groups. To conduct the study, the purpose of the test was described for them. After obtaining their consent, demographic data such as age, sex, educational level, occupation, and... was questioned. The Yang’s Schema Questionnaire of early maladaptive anxiety, depression and impulsivity were proposed that were eventually collected and analyzed.

The data collection tools

**Anxiety and Depression Scale Haspytal by Zygmon and Asnayt (1983)**

Method of scoring and interpretation Haspytal anxiety and Depression Scale is designed by Zygmon and Asnayt (1983). The Selective Inventory 3 four materials have been designed in order to measure changes in mood, especially in cases of anxiety and depression. The scale of seven questions related to symptoms of anxiety (Question 12, 9, 8, 5, 4, 1, 13) and seven questions about the symptoms of depression (questions 11, 10, 7, 6, 3, 2 and 14) are there. The questionnaire will be graded based on a scale of four score (3, 2, 1, and 0). The authors suggest score 11 as a cut-off point and above points are very clinical. High scores on depression indicate that except for coping with anxiety methods, other treatment methods should be considered too. To complete the questionnaire takes approximately shorter than 10 minutes and can be filled with measuring interviews. Often, during the interview assessment, the therapist may take a look at the completed questionnaire and process his/her inquiry made in accordance with, or prove a special response. The questionnaire was used by other authors for research purposes, thus they have normalized.

**Intervention methods and performing the experimental procedure:**

The subjects of the study comprised 40 patients with MDD disorder which 20 persons participated in the meetings of schema therapy. The number of therapeutic schema was 12, 45 minute sessions that were held once in a week. The next part was the instruction educational program of the schema that has been used during 12 psychotherapeutic sessions that will be explained in the next part.

The first meeting- communication and education to the patient depending on the nature of the disorder, defining the patient and the therapist's expectations and establish an agreed medical treatment.

The second session- the opinion survey and identification of distorted thoughts (mandatory identification, avoidances and fundamental beliefs)

Third session- exposure and correct dysfunctional thoughts (face the avoidences and changing the cognitive distortions)

The fourth session- schema-focused model (schematic model of health and education of the patient in the form of schema).

Session 5-7- identifying patterns of dysfunctional (primary dysfunctional schemas identification, identification of processes, behaviors and schematic styles)

Sessions 8-10- modified schema (using the techniques of emotional discussion about past experiences, imaginary dialogue with parents, talk about current events, mental imagery and emotional discharge)

Sessions 11-12- modified schema (using cognitive behavioral techniques, omitting the continuing behaviors of the schema, maintaining the elimination schema, avoiding elimination and increase healthy coping behaviors) will be performed.

The population of the city, Kermanshah MDD patients, and the number of patients is not clear. Participants referred to the counseling center based in Kermanshah (Varmenjeh hospital for sampling gentlemen and Hajar Institute for ladies sampling) were collected and selected.

Patients underwent psychiatric interviews with subjects and patients with disorders according to DSM-IV-TR criteria for MDD were selected from a sample of 40 students who were selected through convenience sampling and randomly divided into two experimental and control groups.

To conduct the study, the purpose of the test was described for them. After obtaining their consent, demographic data such as age, sex, educational level, occupation, and.... was questioned. The Yang’s Schema Questionnaire of early maladaptive anxiety, depression and impulsivity were proposed that were eventually collected and analyzed.

**Findings of the study**

In Table 1, the average and standard deviation of the pre-test and post-test anxiety scale is shown:
Table 1. Mean and standard deviation of the variable in the pre-test and post-test anxiety

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Count</th>
<th>Average</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>Control</td>
<td>20</td>
<td>9.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Test</td>
<td>20</td>
<td>11.05</td>
<td>1.95</td>
</tr>
<tr>
<td>Post-test</td>
<td>Control</td>
<td>20</td>
<td>9.05</td>
<td>1.84</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Test</td>
<td>20</td>
<td>7.35</td>
<td>1.66</td>
</tr>
</tbody>
</table>

In the above table, the average anxiety score in the test group which is obtained 7.35 is less than the control group.

In Table 2, the average and standard deviation of pre-test and post-test scores on the depression scale is shown:

Table 2. Average and standard deviation of the variable in the pre-test and post-test depression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Count</th>
<th>Average</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>Control</td>
<td>20</td>
<td>13.45</td>
<td>3.1</td>
</tr>
<tr>
<td>Depression</td>
<td>Test</td>
<td>20</td>
<td>12.05</td>
<td>2.35</td>
</tr>
<tr>
<td>Post-test</td>
<td>Control</td>
<td>20</td>
<td>13.8</td>
<td>2.99</td>
</tr>
<tr>
<td>Depression</td>
<td>Test</td>
<td>20</td>
<td>8.25</td>
<td>1.66</td>
</tr>
</tbody>
</table>

In the above table, the average depression score in the test group is obtained 8.25 which are more than the group control.

Table 3. The covariance assessment to show the impact of schema therapy for reducing anxiety in patients with MDD

<table>
<thead>
<tr>
<th>Depression</th>
<th>Source</th>
<th>Total squares</th>
<th>Freedom degree</th>
<th>Average square</th>
<th>F</th>
<th>Meaningfulness level</th>
<th>ETA Total coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test effectiveness</td>
<td>52.278</td>
<td>1</td>
<td>52.278</td>
<td>29.657</td>
<td>P &lt; 0.01</td>
<td>0.445</td>
</tr>
<tr>
<td></td>
<td>Between groups</td>
<td>55.636</td>
<td>1</td>
<td>55.636</td>
<td>31.562</td>
<td>P &lt; 0.01</td>
<td>0.757</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>65.22</td>
<td>37</td>
<td>1.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2836</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As it can be seen in the table above due to the variable test anxiety is meaningful in the 0/01 > P level thus eliminating the effect of pre-test it can be seen that between groups (37, 1) F is more than the F in the table with 1 and 37 degrees of freedom on one hand 0/01 > P obtained indicates that anxiety between the intervention and control groups in the level 0.01 has a significant difference and this represents an intervention efficacy in reducing the Intervention Syndrome. As it can be seen the square factor 1 to 0.460 is obtained which shows the Intensity of treatment’s effectiveness.

Table 4. covariance assessment to show the impact of therapeutic schema to reduce depression in patients with MDD

<table>
<thead>
<tr>
<th>Depression</th>
<th>Source</th>
<th>Total squares</th>
<th>Freedom degree</th>
<th>Average square</th>
<th>F</th>
<th>Meaningfulness level</th>
<th>ETA Total coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test effectiveness</td>
<td>592.28</td>
<td>1</td>
<td>592.28</td>
<td>63.21</td>
<td>P &lt; 0/01</td>
<td>0.631</td>
</tr>
<tr>
<td></td>
<td>Between groups</td>
<td>1081.27</td>
<td>1</td>
<td>1081.27</td>
<td>115.4</td>
<td>P &lt; 0/01</td>
<td>0.757</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>346.67</td>
<td>37</td>
<td>9.37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>268479</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As it can be seen in the table above due to the variable test anxiety is meaningful in the 0/01 > P level thus eliminating the effect of pre-test it can be seen that between groups (37, 1) F is more than the F in the table with 1 and 37 degrees of freedom on one hand 0/01 > P obtained indicates that anxiety between the intervention and control groups in the level 0.01 has a significant difference which shows the effectiveness of intervention in increasing the depression. As it can be seen the square factor 1 to 0.757 is obtained which shows the Intensity of treatment’s effectiveness.
CONCLUSION

As it was observed, therapeutic schema is really effective in reducing anxiety disorder in patients with MDD. These findings are consistent with studies clearly seen (2009), Arentz, clockman and sisorda (2005), Yang, Klasko, Vishar (2003), Hamidpour, Dowlatshahi, Poorshahbaz and Dadkhan (2011), Simpson, Morrow, Won and Reed (2010) and Sadok (2007).

It can be said in explanation that MDD disorder is a disorder that has increased dramatically, especially nowadays. It is believed that the schemes are one of the factors causing this disorder. Therapeutic schema approach focuses on early maladaptive schemas that include fixed beliefs and patterns from childhood to adulthood and continues during the lifetime. These beliefs resist against changes very much and the person looks around him/herself through these ideas. The therapeutic approach to treat such schemes may, be effective (Dideh Roshani, 2009). One of the new approaches in treatment of cognitive dispositions (chronic) is the treatment scheme of Yang. Therapeutic schema has also been integrated by Yang et al., which are mainly based on the expansion of traditional concepts and methods of cognitive-behavioral therapy. In fact, this approach is a cognitive behavioral therapy; because cognitive-behavioral therapies in treatment of cognitive character are faced with problems of therapeutic schemas that try to fill this gap (Yang, Klasko, Vyshar, 2003). The therapeutic schema is effective in various disorders, such as borderline personality disorder (Arentz, Clockman and Sysorda, 2005), generalized anxiety disorder (Hamidpour, Dowlatshahi, Poorshahbaz and Dadkhan, 2011) and eating disorders (Simpson, Morrow, bath, and Reid, 2010) which have been shown. Anxiety is the mother of all diseases, psychological and even physical disorders so it is an essential component and we can certainly say that it exists in 100% of psychological disorders. Psychologists in the study of behavioral disorders have identified three factors causing anxiety: 1- Conflict 2- Fiasco and 3- Internal and external stress. When a person has a good deal with these factors, the adaptive behavior is normal, but if it does not respond appropriately or has a wrong, radical and is unsuccessful reaction, the behavior would be non-adaptive pathological behavior, and that is why that there is anxiety in most psychological disorders. Sadok (2007, translated by Porafkary, 2009), the research suggests that individuals with MDD there is anxiety. As it can be seen, the therapeutic schema is really effective in reducing depression in patients with MDD disorder. These findings are consistent with studies about MDD of Yousefi (2010), Wishman (2008), Mohammadi (2013), (Maddox, Ryso, Klein, Markowitz, Rodbavem and Arno (2009). MDD disorder or major depression encompasses a range of different disorders that depressed mood is the only similarity and their common point (Naghizadeh, 2011).

MDD (Major Depression Disorder) is specified with two weeks of depressed mood or lack of enjoyment along with several other symptoms that is severe enough to cause impairment in social or occupational functioning. MDD is characterized by depression, and depression is a recurrent disorder. Most people who become infected for the first time, even if they have been fully recovered also experience periods of relapse (Arentz, 2008). In the study of Amini (2010) he found that individuals with MDD experience a range of emotions of depression and anxiety and may have maladaptive schemas and this causes the worsening symptoms of this disorder. According to the diagnostic and Statistical Manual of Mental Disorders, Chronic depression is generally divided into two types: (1) Chronic major depressive disorder and 2- behavioral depression disorder. Two other sub-forms of this are also known including: (1) dysthymic disorder with major depressive disorder and 2- major depressive disorder with no completely cure. (Wishman, 2008). Various approaches, including cognitive-behavioral therapy, interpersonal therapy and pharmacotherapy have been used in the treatment of chronic depression. The results show that these treatments are effective in the treatment of chronic depression, but there is no difference in terms of efficacy (Maddox, Ryso, Klein, Markowitz, Rodbavem and Arno, 2009). In some studies the more effectiveness but little of Pharmacotherapy compared to Psychotherapy in post-test level and also the effectiveness of Psychotherapy compared to Pharmacotherapy in the Follow-up treatment of chronic depression has been shown.

Schemes leads to bias in our interpretation of events and the biases of individual psychopathology will be identified as misunderstanding, distorted attitudes, inaccurate speculation, objective and non-realistic expectations (Joseph, 2010). Asadollahi (2010) suggests that the schemas, underlying assumptions or rules that control a person’s thoughts and behavior have evolved over the years the person’s life. Schemas contain all aspects of life, whether consciously or unconsciously. Schemas create the meaning and structure that a person is born. Meanwhile development of schemes is under the influence of culture, family, religion, and factors related to gender, age or personality. Dysfunctional schemas are considered as fundamental belief that gets triggered by an attack. Findings of Harris and Curtin (2012) showed that
depression is a significant way of conceptualizing the whole scheme of all 5 dimensions of the therapy; on the other hand, unpleasant life experiences can cause the formation of dysfunctional schemas. Activation of these schemes is consistent with events consonant with the schema, that lead up to a period of depression. Therapeutic schema has been developed for the treatment of chronic and refractory patients and patients who have personality disorders or those who have problems with chronic cognitive character and cannot get good help from the classical cognitive behavioral therapy. The therapeutic schema according to the patients’ problem can be the short-term, medium-term and long-term (Yang, 2007).

Schema has two phases: training and measurement phase and the shift or changing phase. In the first phase the therapists help the patients to know themselves, find the changing resources of that and connect these therapies with their problems. In this phase the therapist through combining and using the cognitive, experimental behavioral and interpersonal tries to the patient’s schemas and replace the Maladaptive coping styles with Healthier behavioral styles. By the means of this method the person can find the reasons of his/her communication problems and then try with more motivation in order to get rid of these problems. The research showed that the therapeutic schema is really effective in reducing the stress and depression but it should also be noticed that the research has examined the schema without being with other disorders, thus generalizing the results to MDD patients who their disorder is like another disorder should be performed with caution. It is suggested that research on other patients, would be performed such as patients with generalized anxiety disorder and other psychiatric disorders. It is suggested that in addition to promoting the education of counselors and psychologists in using the schema also pharmacotherapy under the supervision of a psychiatrist be used.

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