

# Comparison of meta-cognitive and psycho-educational family therapies on dysfunctional attitudes of bipolar patients

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## ABSTRACT

**Purpose:** Bipolar disorders of complex and multi-dimensional nature necessitate new therapies. This research compared the effect of meta-cognitive and psycho-educational family therapy on dysfunctional attitudes of bipolar patients.

**Materials and Methods:** This was a semi-empirical research with pretest-posttest design, using control group. From among the bipolar woman who had referred to psychological hospitals and clinics in Isfahan city in Iran, 24 patients were selected by purposeful sampling and were divided into three equal groups randomly. The first group received meta-cognitive therapy, second group received psycho-educational family therapy and the third group received drug therapy. The data were gathered using semi-structured interview based on diagnostic and statistical manual of mental disorders (4<sup>th</sup> edition) criteria and dysfunctional attitudes scale. The data were analyzed by descriptive statistics and covariance with SPSS 16 software.

**Results:** There was a significant difference between the mean scores of meta-cognitive therapy group compared to drug therapy group ( $P = .001$ ). Also, there was a significant difference between the mean scores of psycho-educational family therapy and drug therapy groups ( $P = .001$ ). There was no significant difference between the mean scores of psycho-educational family therapy group compared to drug therapy group ( $P = .777$ ).

**Conclusion:** Using meta-cognitive therapy with drug therapy increases dysfunctional attitudes in bipolar patients. Therefore it is recommended that therapists be trained in this field.

**Keywords:** bipolar patient; meta-cognitive therapy; psycho-educational family therapy; dysfunctional attitudes; drug therapy.

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## INTRODUCTION

Bipolar disorders are a subgroup of mood disorders, ranging from bipolar depression to type I bipolar disorder, with 7.8% prevalence in the general population. Most people with bipolar disorders seek treatment in a phase of depression. Still, because of lack the history and diagnosis of mood changes and manic states, many of these patients are not diagnosed as bipolar and do not receive proper treatment.<sup>1</sup>

Studies show bipolar disorders cause disturbance in occupational issues and social relations. Functional reduction in bipolar patients even in the stage of protective therapy is not only related to the main disease itself, but also the accompanied diseases.<sup>2</sup> Curing bipolar disorder can be done by stabilizing drugs, psychological-social interventions and in extreme cases, using electric shock.<sup>3</sup> Most bipolar disordered patients encountered emotional consequences resulting from temporal periods, problems

from previous periods of life, interpersonal problems, fear of disease reemergence, interfere in performance. All of them need psychological-social interventions.<sup>4</sup>

Meta-cognitive therapy is a therapy for bipolar disorder. It is a new psychological therapy that does not have the limitation of cognitive-behavior therapy. Meta-cognitive therapy is based on the principle that meta-cognition is important in understanding the quality of cognition process and how it creates intelligent experiences.<sup>5</sup> Meta-cognition is defined as any kind of knowledge or cognitive process that cooperates in the evaluation, supervision or control.<sup>6</sup> Emotional disorder results from biologic emotional vulnerability in addition to inability of emotion-regulation. So most bipolar patients need regulating their emotions through meta-cognitive therapy.<sup>7</sup>

Family members are responsible of taking care of psychiatric patients, especially after being discharged from hospital.<sup>8</sup> So the level of care and the rate of the patient's ability and readiness has a direct effect on therapy result.<sup>9</sup> Increasing tendency of research on educational interventions for family members of psychiatric patients can help in their treatment<sup>10</sup> and create a support structure within the family for gaining support of relatives. So comparing the efficiency of meta-cognitive and family psycho-education therapy in controlling dysfunctional attitudes of bipolar patients seemed necessary.

Integrating behavioral-cognitive therapy and psycho-education intervention with drug therapy can help in improving treatment.<sup>11</sup> In a study with 19 families, Miller and colleagues showed that family members would suffer the presence of a bipolar patient. The studied families received either drug therapy or drug therapy with family therapy. Results showed that the patients had better improvement in combined therapy.<sup>12</sup> Also, Bahrami and colleagues investigated the effectiveness of behavioral meta-cognitive-emotional processing and drug therapy. Their results showed that meta-cognitive was effective in reducing recurrent states of mania and depression in bipolar patients.<sup>13</sup> Many studies have reported the effectiveness of Wells meta-cognitive model on temptation disorder,<sup>14</sup> generalized anxiety disorder<sup>15</sup> and post-traumatic stress disorder.<sup>16</sup> Also, studies have investigated the effectiveness of meta-cognitive therapy on body dysmorphic disorder<sup>17</sup> and depression.<sup>18</sup> Hence, the purpose of this study was to compare the effectiveness of meta-cognitive, family psycho-education therapy and drug therapy on bipolar patients' dysfunctional attitudes.

## MATERIALS AND METHODS

This was a semi-empirical study with pretest-

posttests using control group. The population of this study consisted of bipolar women who had referred to psychological hospitals and clinics in Isfahan city, Iran. After an interview by a psychiatrist, 24 women who were diagnosed of having bipolar disorder and had the required criteria were selected and assigned to three groups. The required inclusion criteria were age range of 18-40 years old, having at least high school educational level and not being in an acute phase of illness. The first group received the meta-cognitive therapy mixed with drug-therapy in twelve 2.5-hour sessions. The second group received family psycho-educational therapy mixed with drug-therapy in eight 2-hour sessions. After distribution, all participants were examined in pre-test uniform conditions and then treatment was administered. After the treatment, a post-test was taken in the same conditions.

Data were collected using semi-structured interview based on diagnostic and statistical manual of mental disorders (4<sup>th</sup> edition) criteria and dysfunctional attitudes scale. This questionnaire was approved by psychiatrists and psychologists and its test-retest reliability was reported by 30 pilot participants to be 0.76. The validity of dysfunctional attitude scale has been 0.83.<sup>19</sup>

### Meta-cognitive treatment plan

First session: introducing emotions and its dimensions. Second session: introducing bipolar disease as emotional irregularity. Third session: training self-assessment bipolar symptoms and its intensity. Fourth session: regulating plant activities. Fifth session: Relation of emotional intelligence and affective intelligence. Sixth session: emotional awareness and its compatible state. Seventh session: regulating emotions' physical dimension, Eighth session: regulating emotions' cognitive dimension and emotions' self-regulation based on the interaction between behavior, cognition and emotion. Ninth session: examining the schemas and assumptions underlying bipolar disorder. Tenth session: change beliefs' strategies and their efficacy especially on meta-cognitive beliefs. Eleventh session: controlling anger in bipolar patients. Twelfth session: stresses and ways of confronting them.

### Family psycho-educational treatment plan

First session: introducing cognition and bipolar disorder. Second session: considering types of bipolar disorder therapies. Third session: role of stress in family environment and how to reduce it. Fourth session: relationship and power of a patient in the family. Fifth session: understanding self-value and its relation to bipolar patients and their family's role in its perception.

Sixth session: relationship and family recognition and its effect on bipolar disorder. Seventh session: relationship and feeling in family and its effect on bipolar disorder. Eight sessions: presence of conflicts in inter-personal relationships and how to solve them.

**RESULTS**

The mean and standard deviation of dysfunctional attitudes were 69.52 and 26.1 in meta-cognitive group, 123.96 and 12.5 in family psycho-educational group and 126.87 and 27.5 in drug therapy, respectively (Table 1). There was a difference between the three groups in the variable dysfunctional attitudes ( $P = .001$ ) (Table 2).

There was a significant difference between the mean scores of meta-cognitive therapy group compared to drug therapy ( $P = .001$ ). Also, there was a significant difference between the mean scores of psycho-educational family therapy and drug therapy groups ( $P = .001$ ). There was no significant difference between the mean scores of psycho-educational family therapy group compared to drug therapy group ( $P = .777$ ) (Table 3).

**DISCUSSION**

This study compared the effect of meta-cognitive and psycho-educational family therapy in dysfunctional attitudes of bipolar patients. Because of emotional irregularities, bipolar patients require a program which is based on reduced dysfunctional attitudes. In this study

meta-cognitive therapy led to an increase of awareness toward emotions, feelings and how to control them. The results of this study are consistent with previous studies.<sup>15,18,19</sup>

The results are consistent with the findings of Lam and Wong. They concluded that recurrence is decreased if patients had more self-control and compliance with disease symptoms.<sup>20</sup> Although drug therapy is regarded as the main therapy for patients with bipolar disorder, researches indicate that adding mental-social interventions to this therapy can increase its efficacy.<sup>21</sup>

Bahadori and colleagues assessed the effect of meta-cognitive therapy on the rate of self-assertiveness skill in patients with social phobia disorder. Their results showed that the mean of the self-assertiveness scores in post-test and follow up in the experimental group was significantly higher than that of the control group.<sup>22</sup> In another study, Normann and colleagues examined the efficacy of meta-cognitive therapy in patients with mental disorders. Their results suggested that meta-cognitive therapy is effective in decreasing anxiety and depression and is superior compared to control groups and cognitive behavior therapy, although the latter finding should be interpreted with caution.<sup>23</sup>

Meta-cognitive therapy reduces problems in job performance and communication. In this regard Scott has indicated that mental social interventions in social compatibility followed by drug therapy with observer group is more effective.<sup>21</sup> To explain these findings it can be said that the main objective this therapy is enhancing patients cognition to help them communicate in different ways with their mind and develop flexible meta-cognitive awareness and prevent the review process as worry and rumination and threat. Overcoming meta-cognitive deficits can reduce dysfunctional attitudes in bipolar patients.

There are people who have impaired meta-cognition for conscious cognitive processing of emotional information and use of inefficient strategies which puts a person at greater risk of incomplete cognitive schemas. However, the problematic cognitive domains can be modified with training meta-cognitive techniques in less stressful and less vulnerable people. In this way the disorders people

**Table 1.** Comparing mean scores of dysfunctional attitudes in the three groups.

Dependent Variable	Groups	Mean	SD*
Dysfunctional attitudes	Meta-cognitive	69.52	26.1
	Family psycho-education	123.96	12.5
	Drug therapy	126.87	27.5

\*SD, standard deviation.

**Table 2.** The results of one-way variance analyze for comparing dysfunctional attitude in the three groups.

Groups	Dependent Variable	Sum of Square	Mean of Square	P Value
	Dysfunctional attitudes	5828.87	2914.43	.001

**Table 3.** Paired comparison of variables of dysfunctional attitudes in the three groups.

Dependent Variable	Groups	Means Difference	Standard Error	P Value
Dysfunctional attitudes	Meta-cognitive combined with drug therapy	-54.4	8.6	.001
	Family psycho-educational combined with drug therapy	-73.35	10.8	.001
	Meta-cognitive combined with family psycho-educational therapy	-2.90	9.9	.777

can be guide toward cognitive and emotional processes which bring about better mental health. Gonzalez-Pinto and colleagues have stated that integrating behavioral cognitive therapy and training mental intervention with drug therapies can improve them.<sup>11</sup> Also, Morrow and colleagues found out that psychiatric patients are interested in learning about the initial disease signs. This interest is the result from their intensive need for controlling the disease.<sup>24</sup>

So using meta-cognitive therapy and strengthening skills related to the center of emotions control can help the patient in reducing dysfunctional attitudes. In meta-cognitive therapy, patients are trained to be far from themselves and pay attention to their thoughts and behaviors. On the other hand, the importance of establishing inner family structures for taking care of the patients has led to more researches on family educational interventions. In family mental-training therapy, it is tried to make family members' feelings positive toward the bipolar patient and that they accept the patient's disease and have better relationship with him/her.

The results of meta-analyses indicate that training the family has considerable treatment effects compared to working with the patient alone. Training the patient and family members together can reduce the number of re-emergences; it can reduce the frequency of hospital stay, statement of emotions, and signs of psychotic disorder. Accepting the drug therapy by the patient and his/her consent and cooperation with the therapy has a significant role in its efficacy. One limitation of the present study was that it was done on women. So generalizing the results to men should be considered with caution.

## CONCLUSION

Using meta-cognitive therapy with the drug therapy increases dysfunctional attitudes in bipolar patients. Therefore, it is recommended that therapists be trained in this field. Systematic training is necessary for families dealing with mental disorders. Also using psychoanalysis interventions like meta-cognitive therapy combined with drug therapy can result in their compatibility and improving their social performance. Also, their dysfunctional attitudes will be reduced and it prevents waste of time and cut high expenses of one-dimensional therapies. Since this study was done only on women, it is recommended that a similar study be done on bipolar men.

## CONFLICT OF INTEREST

None declared.

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