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# Declining the Rate of Major Depression: Effectiveness of Dialectical Behavior Therapy

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#### **Abstract**

The purpose of this study is to compare the effect of Dialectical Behavior Therapy in declining the rate of major depression. The methodology utilized in this research is semi-experimental socio-statistic approach consisting of the experimental group and the control group. Statistical universe were participants referred to 3 hospitals with the diagnosis of major depression. They were selected based on stratified random sampling. Participants were randomly divided into control group and DBT group of 7 female and 5 male in each group for seven months. Results indicate significant difference between the two groups in declining the rate of major depression and reducing suicide tendency; thus, supported the effectiveness of Dialectical Behavior Therapy.

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Keyword: Major depression; suicidal ideation; medical therapy; dialectical behavior therapy

### 1. Introduction

Major depressive disorder is one of the most common psychiatric disorders worldwide. Furthermore, compared to other psychiatric disorders, it is associated with the highest suicide risk(Schaller &Wolfersdorf,2010). The lifetime prevalence for mood disorders in the latest World Mental Health

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Surveys is currently between 3.3 and 21.4 percent. The impact of depression on life quality is comparable with that of severe physical diseases (Kessler, Angermeyer & Antony, 2007). Depressive mood, feelings of worthlessness and insufficiency, guilt and hopelessness, lack of perspective, agonizing states of uneasiness as well as mental and emotional pressure make patients suffer from major depression a highrisk group for suicidal behaviour (Haenel and Poldinger, 1986., Hole, 1973., Sainsbury, 1986., Wolfersdorf et al., 1992, 2002 quoted from Schaller & Wolfersdorf, 2010). Depression is often the most frequently cited diagnosis associated with suicide (Waldrop, Honson, Resnick, Kilpatrick, Naugle & Saunders, 2007). In all psychological autopsy studies, major depressive disorders are the most frequent psychiatric disorders hence from the high risk group for suicidal behaviour, while among psychiatric inpatients, it is above all young psychotic patients (Wolfersdorf, 2000). Prescription of anti-depressants and psychotherapic drugs for the suicidal patients in both the primary and secondary cases is one point that turned the support and the sensational discussions to it. Verkez & Cowan (2000), quoted from Henden (2008) confirm this theory by mentioning to the above explanation that the antidepressant can treat the hidden depression in the suicidal patients thereby decreases the danger of the suicide. In reinforcing the theory against the medicament, they mention that some antidepressive drugs can increase the danger of the suicide. Benzodiazepine(for example valium and Librium) that they explain, can increase the danger of the suicide (Henden 2008). Yet there are some worries about the prescription of the anti-depressants for the depressive youth. The clinical professionals are separated on this basis that must the anti-depressive drugs prescribe as the primary action for the multi-problem youths with the inclination to suicide. Therefore, the effective actions are necessary for these youths (Miller, Rathus & Linehan, 2007). Decreasing the cues, the signs of the major depression and the action to suicide considering its relapsing and repeatable nature, requires the usage of the long-term treatments and the specific methods for the treatment to improve the specific shortages of the speciality like the control of the emotion, impatience to pain (impulsiveness) the control of the anger and assertiveness. Among these, the Dialectical Behavior Therapy (DBT) was developed by Linehan (1993) for chronically suicidal patients. These are patients who are unremittingly high in suicidal ideation, frequently threaten suicide or talk about taking their own lives, have difficulty articulating any reasons for living or staying alive, and may attempt suicide or engage in NSIB on multiple occasions. Although the treatment manuals describing DBT (Linehan, 1993a, 1993b) label it as a treatment for BPD; in fact, the first drafts of these manuals never even mentioned BPD. The treatment and its theoretical underpinnings were originally developed to apply to suicidal individuals. The metamorphosis of the treatment into one aimed at BPD was due almost entirely to the substantial overlap between BPD and suicidal behavior (Miller, Rathus, Linehan 2007). DBT views suicidal behaviors as learned methods of coping with acute emotional suffering when no other coping options are available. The emotional picture of suicidal individuals is one of chronic, aversive emotion dysregulation. Suicidal behaviors can be viewed as problem-solving behaviors that function to remediate negative emotional arousal and distress either directly (e.g., by ending life [and presumably pain], putting an individual to sleep, or distracting him or her from emotional stimuli) or indirectly (e.g., by eliciting help from the environment), or as "inevitable" outcomes of unregulated and uncontrollable negative emotions. The conclusions of the studies showed the effectiveness of this treatment pattern.

# 2. Method

The method of the investigation was semi-experimental. The experiment group used the dialectical behavioral therapy along with the medicament and the control group used the medicament only. The statistical society of the total clients affected by the major depression disorder and attempting to the suicide who attended 3 hospitals. On the same basis, also among 100 persons, 30 persons were

selected randomly that attempted to suicide and the psychiatrist and the professional psychologist had diagnosed their disorder as the major depression by interview. These patients were divided randomly in to two groups: 1) one group of the experiment consisting 15 persons who were under the dialectical behavioral therapy along with the medicine therapy and 2) the control group that was under the medicine therapy. At last, on the basis of downsizing the sample, each group was decreased to 12 persons that included 7 women and 5 men. The patients attempting to suicide who suffered some disorders like bipolar disorder, substance abuse, the border personality, psychosis and the other disorders other than the major depression, were omitted. Also, the variables like age and sex were controlled. After the selection, subjects answered to Beck Depression Inventory and Beck Suicide Inventory as a pre-test. The control group was under medicine therapy under the psychiatrist and the experimental group was under the dialectical behavioral therapy by the psychologist in addition to the drug. This therapy had been planned on the basis of the work of Linehan and Dimeff (2007) for ones even month period. In this method, the patients visited the therapist once a week individually and talked to him about their problems, views and emotions. The patients learned the skills of the dialectical behavioral therapy in another session in a week as a group. The patients kept two appointments per week: Individual therapy (one hour) and participation in the multi family skills training group (two hours). The following skills were taught in this group: Mindfulness Skills, Interpersonal Effectiveness Skills, Distress Tolerance Skills, and Emotion Regulation Skills. In addition, we arranged regular phone contacts between patients as needed in order to support generalization of recently acquired skills in everyday life.

#### 3. Instruments

The Structured Clinical Interview for DSM-IV-TR: The structured and quasi – structured diagnosis interview consist of the organized set of the special questions which aimat evaluating that group of the behavioral samples, the thoughts and the feelings of the clients that are related to the diagnosis of their disorder (Flengen & Flengen 2003 quoted from Avadisyans, Gahan, Arab Ghohestani and Baratizade 2010). In this study, the principles of the clinical interview of Flengen & (2003), translated by Avadisyans et al (2010) was used for the clinical interview.

Beck Depression Inventory (BDI-II): the reviewed form: this inventory is one 21-question self-reporting questionnaire designed to evaluate syndrome of depression (Beck, Estir, Brown 1996, quoted from the Ghasemzadeh, Mojtabaie, Sharifi, Karam Ghadiri and Ebrahim Khani 2005). The general grade is ranged from zero to 63. The designers consider 10 or higher as the mild depression, 20-28 as medium depression and 29-63 the severe depression. The questionnaire has been translated into Persian language and its validity and reliability were studied. The internal stability of test the Iranian students was estimated 87 percent and its reliability was 73 (Ghasemzadeh et al 2005).

Beck Suicide Inventory: Beck scale for suicidal ideation is a 19-question self-report inventory that has been prepared to reveal and measure the severity of the attitudes, behaviors and designing for suicide last week. In Iran, Anisi et al., (2004) evaluated the validity and reliability of Beck scale for Suicidal ideation in one investigation about 100 male subjects with the age domain 19-28 years old who were selected by the sampling method. The obtained results showed that Beck scale is correlated to the scale of depression of test of Goldbery0.76. The validity of the scale was also obtained by the usage of the method of alpha of Kronbakh equivalent to 0.95 and by the method of two halves 0.75. Therefore, the internal validity, the validity of the test- retest and the simultaneous reliability are accepted. The question of the suicidal ideation is adjusted to the definitions of the suicide. The evidences show that this scale for suicidal ideation is the reliable choice to measure the suicidal ideation in the form of the self-report.

# 4. Findings

The investigation was done on 24 persons in two groups of the experiment and control and each of the groups includes 7 women and 25 men. The age mean of the experimental group was27 years old and the control group was 15 years old. The minimal education of the subjects was diploma. Experimenters did not consider the marital status of the subjects and this variable was not controlled. The mean and the standard deviation of the scores of the depression and the suicide of the subjects have been introduced in the periods of pre-test and post-test in the tables of 1 and 2.

Table 1. The mean and the standard deviation of the score of depression

pre-test		post – test		
mean	standard deviation	mean	standard deviation	
36.83	7.284	16.42	6.186	Dialectical behavioral therapy + medicine therapy
32.58	6.331	26.25	7.30	Medicine therapy

According to the Table 1, it is obvious that the mean and the standard deviation of the depression scores of the experimental group in the stage of pre-test were 36.83, 7.248 respectively and in the stage of the pos-test stage, they were 16.42 and 6.186 respectively, and for the control group, they were 26.25 and 7.30 in the stage of pre-test and 32.58 and 6.331 in the post- test stages respectively.

Of the pos-test stage, they were 16.42 and 6.186 respectively, and for the control group, they were 26.25 and 7.30 in the stage of pre-test and 32.58 and 6.331 in the post-test stages respectively.

Table 2. The mean and the standard deviation of the score of suicide

pre-test		post – test		
mean	standard deviation	mean	standard deviation	
20.58	7.26	7.50	4.739	Dialectical behavioral therapy + medicine therapy
19.00	3.931	16.5	6.113	Medicine therapy

According to the table 2, the mean and the standard deviation of the scores of suicide of the experimental group in the stage of the pre-test are 20.58, 7.26 respectively and in the – stage of the post-test are 7.50 and 4.739. The figures for the control group are 19.00 and 3.931 in the stage of pre-test and 16.5 and 6.113 in the stage of post-test respectively.

For the analysis of data and the test of the experimental theory, the one-variable one-way covariance analysis was used. Before performing the covariance analysis, the related presumptions based on following show the suitable conditions to perform the covariance – analysis in the experiment.

According to established presumptions of the test after controlling the scores of the pretest, the mean of the pretest, the mean of the post-tests was estimated for the group of the dialectical behavioral therapy

+ medicine therapy as 9.91 and for the medicine therapy group as 18.45, and was compared by the covariance analysis and the results were reported in Table 3.

Table 3. The summary of the covariance analysis to study the effect of the method of treatment on decrease the depression

The value of the effect	The meaningful value	F	Mean squares	Degree of freedom	sum of cross squares	Chengesresoures
0.274	0.412	0.702	40.452	1	40.452	Pre-test
0.339	0.001	13.957	804.679	1	804.679	The method of medicament [the dialectical behavior therapy+medicine therapy- medicine therapy]
				21	1210.715	error

According to Table 3, the decrease scores of depression in persons under dialectical behavioral therapy + medicine therapy were less than that of the depressed persons that were under only the medicine therapy.

#### 5. Conclusion

In this investigation, after performing the dialectical behavioral therapy, the significant decrease was observed in the scores of depression of the patients (pretest: 38.83 and post-test: 16) compared to the medicament (pre-test: 32.58, and post- test: 30.58). The dialectical behavioral therapy along with teaching skills like the tolerance of the distress help by increasing the flexibility and presenting new solutions and modulation of the traces of the distressing conditions in coping with the distressing incidences. Also by usage of the skills for controlling emotions, clients can recognize their feelings more carefully and then study each emotion without disability to it. Aim is to modulate the feelings without reactional and destructing behavior (McKay, Wood & Brantley 2007). These factors cause to decrease the depression score of the patients after performing the dialectical behavioral therapy compared to the medicine therapy and decrease their inclination to suicide yields. On this conclusion, we can refer to Miller et al (2000), Van Den Bosch, Koeter, Stijnen, Verhoul & Brink (2002) and Kroger, Schweiger, Valerija, Ruediger, Reinecker, Rudolf (2006). They all confirm the effectiveness of the dialectical behavioral therapy and group skill - learning in decrease the impulsiveness, selfinjuring, control of emotion and improvement of some of the mood and emotional matters like depression, anxiety, anger, instability and irritability in the studied persons.DBT is a supporting and empathetic therapy. In DBT, support from the therapist and the relationship with the patient results in the unity between the patient and the therapist and plays a great role in forming this belief that the patient receives the support. Verger, Brabis, Kovess, Lovell, Villanin and Rouillon (2007)also showed that the recognition of the attempt to suicide and suicidal ideation has positive relationship with length of time of the counseling and emphasizes on the education of the patients and explains how hey can control the emotional damages not to decrease them only. Or by the interpersonal effectiveness skill, one new tool is available to clients to express their views, determine the limitation and discuss about the solution of the problem that by it, they can have respectful behavior with others along with supporting their relationship (McKay et al 2007). By accepting the damages and supporting the client and also teaching control distressing emotions, the danger of the vulnerability will be decreased, since lack of social support and especially affective support in the depressed – suicidal persons is important

factor in extension of the illness. The affective and social supports decrease not being useful feeling and worthlessness - that is the cognitive element in the depression. It this decreases the value of the mental pain that patient experiences. It is also one cause of the effectiveness of the dialectical behavioral treatment that in this investigation is on decreasing the major depression level of the patients. Most depressive and suicidal persons say that they do not have the power to face the future and hardness that cause to increase the hopelessness and depression. DBT teaches many skills so clients can learn the resistance not only run away (Linehan 2008). In the dialectical behavioral therapy by usage of the mindfulness skills and emotion regulation skills, the clients learn to concentrate on their consciousness and concentration on the present not on the bodily subjects and can use the bodilyrelaxation methods to control and improve their pains. So the lower pain, the less value of depression and this condition decreases the suicidal ideation. Linton (2010) used dialectical behavioral therapy to disorder of chronic pain and after completion of the therapy period, the improvement was observed in the yield of the therapy and the value of the depression of the patient was decreased significantly, and they did not have difficulties in regulating their emotion. On the basis of using the medicine therapy to decrease the depression, in this study, although the medicine therapy decreased the scores of the depression, this effect was not as high as the medicament along with the dialectical be behavioral treatment and the difference between these two groups was meaningful. The obtained result can be interpreted by referring to the investigations and the studies: According to Henden (2008), usage of the medicine therapy to prevent the suicide is on the basis that the successful medicine therapy for the hidden mental disorder (usually depression) will decrease the danger of the attempt of suicide and suicidal ideation. Now there are evidences that medicine therapy can be very useful for chronic and relapsing mental problems and decreases the value of suicide. But this point is also important that persons who seek help, will not commit suicide and less value of the suicide among who receive the medicine therapy, is not because of the special effects of the drugs, and the formed relationships with therapists in the system of the mental health, is more important factor. In this direction, we can name the investigation by Zisook, Trivedi, Warden and Lebowitz (2009) that in one search on the basis of the expression or increase of the suicidal ideation along the therapy with the selective serotonin reuptake inhibitions (SSRIs) concluded that 57 percent of the patients were cured and 5 percent became worse. They indicated that the most dangerous factor to express the suicidal ideation is in the wrong usage of the medicine therapy, the sever depression with the melancholic specialties. Also Ilgen, Czyz, Welsh, Zeber & Bauer (2009) concluded that prescribing drugs only does not relate directly with decreasing the danger of the suicide in the poly-fold patterns and the multi-variable findings show that the relationship between prescribing drug and suicidal ideation must be considered as the synthesis of the specialties of the patient and the therapy relationships. Specially, the common decision, empathy, hearing the patient and sympathy with him/her make the important supporting factors. The limitation of this investigation was that the pre-test was done the first week after the attempt to suicide that in this period, patient is not in a good clinical mood. It is probable that the time element has affected on the pre-test and showed the scores of the depression and the suicide more than the real value. Because the factors cause to suicide may be different, for future studies, we recommend that in addition to the above limitation, this method must be performed in the other population that the likelihood of the suicide is very high in them including the patients abusing the drugs, the border personality disorder, bi-polar disorder, the stress disorder post - traumatic (PTSD) and persons having damaging experiences like sexual victims.

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