

Abstract

Objective: The present research was aimed at studying the effectiveness of group cognitive-behavioral therapy in the mitigation of depression in the addicts of Ghorveh City. **Method:** The study population consisted of the addicts referring to Nikoo Salamat Methadone Maintenance Treatment (henceforth referred to as MMT) clinic in Ghorveh city in 2013. Among them, 60 individuals were selected through simple random sampling, out of whom 24 subjects who had obtained the highest scores in Depression Scale were selected and randomly assigned to control and experimental groups. The experimental group was treated with 12 ninety-minute sessions of cognitive-behavioral therapy while the control group received no treatment. For data collection purposes, Beck's depression scale was distributed among both groups. **Results:** The results showed that the experimental group obtained lower scores compared to the control group. **Conclusion:** Group cognitive-behavioral therapy is effective in mitigating addicts' depression.

Keywords

Group Cognitive-Behavioral Therapy, Depression, Addiction

The Effectiveness of Group Cognitive-Behavioral Therapy in the Mitigation of Addicts' Depression

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Introduction

Today, addiction is one of the biggest problems of human societies that endangers societal, familial, and individual health and causes loss of individual, vocational, familial, and social functions. One of the most important social issues of today's world is the issue of drug addiction and its growing influence among the younger generation. Drug use in Iran has a long history of drug and the plants from which traditional narcotics (such as opium and cannabis) are obtained have been indigenous to Iran. However, patterns of drug abuse among young people all over the world, especially Iran and its capital-Tehran- are rapidly changing from traditional to industrial substance along with the development of societies according to the reports of international organizations such as the World Health Organization. This issue is so alarming that the representative of the United Nations Office on Drugs and Crime has warned about the growth of industrial drugs in Iran (Momtaz, 2002). Drug addiction is from among social problems of the present age, especially in countries like Iran with young social conditions and geographical conditions of its own. Addicts are considered deviant since they have gone beyond the social norms and values. They are patients as a result of social, cultural, and economic conditions of their society and this deviating route orients them towards other deviations. Addiction is a crisis that is followed by the variety of perversions, diseases, and social problems if it is not taken into account (Mozaffar, Zakariaei & Sabeti, 2009). The word opium has been originally taken from the Greek word *Taryaka* which was referred to a mixture of 60 to 70 different substances dissolved in honey. This mixture includes an antidote to poisons of some animals and has been used instead of antidote. The word Taryaka has been Trion in Greek, which was the name of an animal with a dangerous poison. Taryaka was first referred to as milky resin secreted from the capsule-like fruit of poppy plants by Paralus-the great Swiss physician and alchemist- and Sernlam- the famous English physician (Eslamdoost, 2010). The number of drug users approximates to 190 million throughout the world and 2 million individuals in Iran whose average age range is 18 years (Momtazi, 2002). Addiction is a biological, psychological, and social disease. Several factors contribute to the etiology of addiction that cause the start of drug use and resultant addiction in interaction with each other. Contextual factors such as individual, environmental, and social ones lead to the purposeful planning of the procedure of prevention, detection, treatment and follow-up (Eslamdoost, 2010). Therefore, familiarity with the underlying factors susceptible to addiction and also protective factors against it assumes importance in two perspectives: a) following the etiology of the individuals at risk of addiction and taking necessary preventive measures, and b) selecting the type of treatment and counseling and supportive services for addicts.

Personal, interpersonal, and environmental factors constitute dangerous factors of drug use (Eslamdoost, 2010). Substance use among adolescents has

increased worldwide, so that it has engendered one of the most common psychiatric disorders in adolescence and young age. In the USA, 76% of adolescents have experienced drinking alcohol, 72% smoking cigarette, and 47% smoking cannabis. According to the World Health Organization, approximately 200 million people worldwide are addicted to various drugs and Iran has the highest prevalence of addiction by 2.8%. This has precipitated the urgent need for doing various researches on the factors influencing addiction (Delavar, Rezaei & Alizadeh, 2009). Depression is one of the most prevalent mental illnesses, and probably one of the most influential personal factors in addiction. It is required to obtain some information in terms of cognitive-behavioral group therapy in order to treat and prevent the recurrence of this disease. Beck has defined clinical depression as a kind of disorder that involves changes in the five emotional, motivational, behavioral, physical, and cognitive scopes. Depression is a state of sadness, impatience, and boredom and encompasses a broad spectrum of mood disorders with various sub-branches. The main features of depression states are the big decrease of willingness to enjoyable everyday activities such as socializing, entertainment, sports, food, and sexual desire. Inability to reach enjoyment contains a valid and reliable state and its severity depends on the number of symptoms and its degree of influence (Sadock & Sadock, 2011). Encountering obstacles in some people creates a depression wherein feelings of emptiness and abandonment are triggered and painful memories are revived. Depression based on abandonment is seen in the adolescents whose life history represents a lack of maternal care (Mansour & Dadsetan, 2008). Edelman, Bell & Kidman (1999) examined the effectiveness of cognitive-behavioral therapy program in the decrease of depression and self-esteem in metastatic breast cancer patients. The results showed that group cognitive-behavioral therapy was effective in reducing depression and mood disorders, as well these results were still apparent in follow-up stages after 3 and 6 months. Research has shown the efficacy of cognitive therapy in the treatment of depression (Hamid, Bashlideh, Eadi Bayegi & Dehghanizadeh, 2011; Siegle, Steinhauer, Friedman, Thompson & Thase, 2011). In a study entitled the effectiveness of group cognitive-behavioral therapy in the treatment of anxiety disorders, depression, and hope raising for women suffering breast cancer in Ahwaz; Pedram, Mohammadi, Naziri & Ayinparast (2010) showed that group cognitive-behavioral therapy sessions had a positive effect on reducing depression and anxiety and increasing their hope. In an investigation of the effectiveness of group cognitive-behavioral therapy on depression; Ranjbar, Ashk Torab & Dadgari (2010) found that group cognitive-behavioral therapy was effective in reducing depression in patients with mild depression. Kamarzarin, Zare & Barouki Milan (2012) concluded that cognitive-behavioral therapy was effective in the increase of efficacy and the improvement of symptoms of addiction. Khaledian, Gharibi, Gholizadeh & Shakeri (2013) investigated the effectiveness of group cognitive-behavioral therapy in the mitigation of depression and increase of life expectancy in empty

nest syndrome and showed that group cognitive-behavioral therapy was effective in reducing depression. Clients refer to group cognitive counseling training so that they can identify their dysfunctional cognitions and replace them with efficient alternatives and accept the unpleasant events that may occur in their lives. Acquaintance with appropriate treatment methods such as group cognitive-behavioral therapy is highly required to develop proper plans, improve mental health services, and adopt pertinent policies in the society. Having information about this treatment method can be beneficial for dealing with psychological processes of patients. These measures can be taken to improve depression in these patients and increase their life expectancy. In addition, the results of this study can have also application and implication for health system managers to take advantage of experienced workforce and pay more attention to non-pharmacological treatments. The present study was aimed at investigating the effectiveness of group cognitive-behavioral therapy in mitigating depression in addicts. Therefore, this research question was formulated: Is group cognitive-behavioral therapy effective in reducing depression in addicts?

Method

An experimental research design along with pretest-posttest control group was employed for this study. The study population consists of the addicts referring to Nikoo Salamat MMT clinic in Ghorveh city in 2013. For sampling purposes, 60 individuals from those referring to the MMT center were selected through simple random sampling at first. In the next step, 24 subjects who had obtained the highest scores in Depression Scale were selected and randomly assigned to control and experimental groups. The experimental group was treated with 12 ninety-minute sessions of cognitive-behavioral therapy in groups based on Frey's instructions as described in Table 1 while the control group received no treatment.

Table1: The content of group cognitive-behavioral therapy

<i>Sessions</i>	<i>Content of session</i>
Preliminary	Preparation and goal setting, familiarity with the group Reviewing the task before treatment; training lecture, A: Warm-up, incentives, a review of the structure of sessions and main principles, exercise: practice to get to know each other, training lecture, B:
First	Thinking and feeling, kindness, the criteria for self and others, exercise: imaginative guided relaxation; homework assignment for the next session. Reviewing previous session's assignments, training lecture, A: Cognitive theory of depression; Practice: Categorization of beliefs, training lecture, B: Identification of automatic thoughts; practice: automatic thoughts associated with group therapy, training lecture C:
Second	Resistance to treatment, practice: Identification of automatic thoughts and possible preventive methods; relaxation exercise; homework assignment for the next session.

<i>Sessions</i>	<i>Content of session</i>
Third	Reviewing previous session’s assignments; training lecture, A: Thought injection, thought injection practice; relaxation; homework assignment for the next session.
Fourth	Reviewing previous session’s assignments; training lecture, A: Different beliefs; exercise: categorization of beliefs; homework assignment for the next session.
Fifth	Reviewing previous session’s assignments; training lecture, A: Preparing a list of different beliefs; exercise: beginning the main list of beliefs; training lecture, B: cognitive plans; training lecture; homework assignment for the next session.
Sixth	Reviewing previous session’s assignments; training lecture, A: It is possible to change beliefs; exercise: preparing a list of beliefs that have been changed in human history and in the lives of the participants; training lecture, B: Test of beliefs, reality analysis; exercise: objective analysis; training lecture, C: criterion analysis; homework assignment for the next session.
Seventh	Reviewing previous session’s assignments; training lecture, A: Usefulness analysis; exercise: usefulness analysis; training lecture, B: Consistency analysis; practicing consistency analysis; homework assignment for the next session.
Eighth	Reviewing previous session’s assignments; training lecture, A: Logic analysis; exercise: logic analysis; training lecture, B: Continuation of logic analysis; exercise: logic analysis; homework assignment for the next session.
Ninth	Reviewing previous session’s assignments; training lecture, A: Preparing hierarchy; exercise: preparing at least one hierarchy training lecture, B: Opposite beliefs; exercise: beginning to generate opposite beliefs; homework assignment for the next session.
Tenth	Reviewing previous session’s assignments; training lecture, A: Conceptual change; exercise: completing the forms of conceptual change; training lecture, B: Optional cortical inhibition; exercise: optional cortical inhibition in a big group; homework assignment for the next session.
Eleventh	Reviewing previous session’s assignments; training lecture, A: Self-punishment/ self-reward; exercise: self-punishment/ self-reward, B: Maintenance methods; exercise: developing a maintenance plan; homework assignment for the next session.
Twelfth	Reviewing previous session’s assignments; reviewing the program; providing a plan for evaluation and follow-up after treatment; closing program

Instrument

1. Beck’s Depression Inventory (revised version): This questionnaire contains 21 self-report questions that has been designed to assess depression. Each item is four-choice and scoring is variable from zero to three. Participants should

select an alternative that is more consistent with their present mood. The total score ranges from zero to 63. In terms of the revised version of the inventory, Beck has mentioned that the instrument shows the presence and severity of depression in patients and normal population and in adolescents and adults. Internal consistency of the instrument has been reported to range from 0.73 to 0.92 with an average of 0.86 and alpha coefficient for patients and normal groups has been obtained 0.86 and 0.80, respectively. The results of a study conducted on 125 students at Tehran University and Allameh Tabatabaie University showed the mean score and standard deviation 9.79 and 7.96, respectively. Also, Cronbach's alpha and test-retest reliability with a two-week interval were reported 0.78 and 0.73, respectively (Khaledian, Hasanpour, Kheirkhah, & Ghalandari, 2013). In the present study, Cronbach's alpha for the questionnaire was obtained 0.83.

Results

Descriptive statistics and test scores for depression are shown in the table below.

Table 2: Descriptive statistics of depression scores with consideration of groups

<i>groups</i>	<i>N</i>	<i>Control</i>		<i>Experimental</i>	
		<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Pretest	12	37.66	4.88	39.91	4.33
Posttest	12	37.75	6.29	32.08	3.67

The parametric test of Covariance was used to examine the effectiveness of group cognitive-behavioral therapy on depression. One of the pre assumptions for this analysis is the homogeneity of line gradients. Test results indicated that this pre assumption was met ($F=1.603$; $P>0.05$). Covariance analysis results are presented in the following table.

Table 3: Covariance analysis results for examining the effectiveness of group cognitive-behavioral therapy on depression

<i>Source</i>	<i>Sum of squares</i>	<i>df</i>	<i>Mean square</i>	<i>F</i>	<i>P</i>	<i>Eta square</i>
Pretest	374.01	1	374.01	37.197	0.0005	0.64
Group	331.93	1	331.93	33.012	0.0005	0.61
Error	211.15	21	10.05	-	-	-

As seen in Table 3, there is a significant difference between the mean score of control and experimental groups after controlling pretest scores ($F=33.012$, $P<0.001$). According to descriptive statistics, it can be claimed that cognitive-behavioral therapy has reduced depression in the participants of the experimental group.

Discussion and Conclusion

The aim of this study was to examine the effectiveness of group cognitive-behavioral therapy in the mitigation of depression in addicted people. The results revealed that group cognitive-behavioral therapy is effective in mitigating addicts' depression. This result is consistent with that of Edelman et al. (1999), Pedram et al. (2010), Hamid et al. (2011), Siegle et al. (2011), Ranjbar et al. (2010), Kamarzarin et al. (2012), and Khaledian et al. (2013). An important point is that this group method enjoys many advantages which lead to the facilitation and acceleration of treatment process. Many patients suffering depression hold a sense of uniqueness in terms of the problems and their thoughts. This unique feeling precipitates the intensity of social isolation and it strengthens the feeling of uniqueness in the patients (Ranjbar et al., 2010). In terms of the results of this study, it should be mentioned that negative thoughts about self, current experience, and future constitute the depressed person's thinking system. For example, they believe that they are incompetent and, for this reason, they believe that they will never achieve satisfaction. Interpretations of the events that are to happen to depressed patients constitute their negative thoughts about experience. They interpret negative barriers as strongly entrenched and impregnable, even at the times when there are more reasonable views about their experience. They are inclined towards the most negative possible interpretation about what happened to them. Finally, their negative attitudes about the future are helpless attitudes. When they think about the future, they believe that the negative events happening to them will continue in the future because of their personal failings (Beck, Rush, Shaw, & Emery, 1979).

In fact, cognitive-behavioral therapy in depression lays emphasis on information process which is a consequence of distorted interpretations of self, the environment, and future. These interpretations are interrelated with the maladaptive beliefs that are stimulated by the sufferers themselves. More recent views support the model that emphasizes the relationship between the nature of depressing events and interpretations of depressed patients from these events. Cognitive-behavioral techniques strengthen planning for the satisfaction of goals and reduce depression by challenging negative thoughts (Hollon, 1981). The results of the current study can be beneficial to family counselors, therapists, psychiatrists, university officials to take appropriate actions in dealing with addiction, in addition to the fruitfulness of the results for the prevention of addiction. In conclusion, group cognitive-behavioral therapy is effective in reducing depression in addicts. This assumes more importance when it comes to understanding that depression even is considered as an obstacle to withdrawal from addiction and leads to recurrence after cessation of drug use. As well, it will be possible to alleviate the intensity of problems in the individuals being at risk of addiction and prevent the increasing growth of addiction with the enjoyment of relevant knowledge and based on counselling methods. This means

that people should be trained in consultative workshops so that they do not get entrapped into negative publicity and addiction. The main objective is to prevent addiction which inhibits the growth and satisfaction of desirable goals in societies. Due to the increase in drug consumption, it is suggested that comprehensive research be conducted about the quantity of drug use at the national level. Authorities are highly recommended to familiarize students and community members with addiction and its effects by holding educational workshops in universities. Officials, experts, and practitioners in universities and the society should develop a comprehensive plan for the reduction of drug use. Other suggestions lie within the domain of preventive and treatment programs such as combating drug supply, the important role of mass media in increasing the individuals' awareness of the negative effects of drug, the important role of parents in their interactions with children, and training people to be self-assertive and to resist peer pressure. One of the limitations of this study was pertinent to test administration among the participants. In this regard, it was sometimes difficult to get their consent about participation and the participants practiced some kind of secrecy while completing the questionnaire in some cases due to the social and legal problems existing in the society against addiction.

Reference

- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*, New York: Guilford press.
- Delavar, A., Rezai, A.M., Alizadeh, E. (2009). The relationship between family factors related to attitudes towards narcotic drugs among high school students in Tehran, *Scientific Journal of Daneshvar Raftar*, 37, 21-35.
- Edelman, S., Bell, D. R., Kidman, A. D. (1999). A group cognitive behavior therapy program with metastatic breast cancer patients, *Psychooncology*, 8(4), 295-305.
- Eslamdoost, S. (2010). *Addiction (etiology and treatment)*, Tehran: Payame Noor Publication.
- Hamid, N., Bashlideh, K., Eadi Bayegi, M. & Dehghanizadeh, Z. (2011). The effectiveness of religion-based cognitive-behavioral psychotherapy in the mitigation of depression in divorced women, *Quarterly Journal of Counseling and Family Therapy*, 1 (1), 54-64.
- Frey, M. (2005). *The practical guideline on group cognitive therapy*, translated by Mohammadi, M. & Farnam, R., and Tehran: Roshd Publication (published in English in 2005).
- Hollon, S. D. (1981). *Comparisons and combinations with alternative approaches*, In L. P. Rehm (Ed.), *Behavior therapy for depression: Present status and future directions* (pp. 33-71). New York: Academic Press.
- Kamarzarin, H., Zare, H., & Barouki Milan, H. (2012). The effectiveness of cognitive-behavioral therapy in the increase of efficacy and the improvement of symptoms of addiction in drug-dependent patients, *Journal of Addiction Studies*, 6 (22), 75-85.
- Khaleidian, M., Gharibi, H., Gholizadeh, Z. & Shakeri, R. (2013). The effectiveness of group cognitive-behavioral therapy in the mitigation of depression and increase of life

- expectancy in empty nest syndrome, *Quarterly Journal of Counseling and Family Therapy*, 3 (2), 261-279.
- Khaledian, M., Hasanpour, S., Kheirkhah, Z., & Ghalandari, S. (2013). The Relationship between Attachment Lifestyle with Depression and Life Expectancy, *Indian Journal of Education & Information Management*, 2 (2), 573- 580.
- Mansour, M., & Dadsetan, P. (2008). *Genetic Psychology*, Tehran: Roshd Publication.
- Momtaz, F. (2002). *Social deviations, theories, and views (1st Ede.)*, Tehran: Sahami Company Publication.
- Momtazi, S. (2002). *Family and Addiction*, Zanjan: Mahdis Publication.
- Mozaffar, H., Zakariaei, M., & Sabeti, M. (2009). Cultural anomie and drug addiction among young people aged 13 -28 in Tehran, *Research Journal of Social Sciences*, 3 (4), 33-54.
- Pedram, M., Mohammadi, M., Naziri, Q., & Ayinparast, N. (2010). the effectiveness of group cognitive-behavioral therapy in the treatment of anxiety disorders, depression, and hope raising for women suffering breast cancer in Ahwaz, *Scientific Journal of Research on Society and Women*, 1 (4), 61-75.
- Ranjbar, F., Ashk Torab, T., & Dadgari, A. (2010). An investigation of the effectiveness of group cognitive-behavioral therapy on depression, *Scientific Journal of Shahid Sadoughi University of Medical Sciences*, 18 (4), 299-306.
- Sadock, B. J., & Sadock, V. A. (2011). *Synopsis of Psychiatry: Behavioral Sciences/ Clinical Psychiatry*, translated by Razaee, F., Tehran: Arjomand Publication, (published in English in 2011).
- Siegle, G., Steinhauer, S., Friedman, E., Thompson, W., & Thase, M. (2011). Remission Prognosis for cognitive therapy for Recurrent Depression Using the Pupil: Utility and Neural Correlate, *Biological Psychiatry*, 69(8), 726-733.