

Abstract

Objective: The present study aimed to compare the effectiveness of self-acceptance group therapy by Dryden method with the teachings of NA groups in addicts' mental health. **Method:** A quasi-experimental research design with unequal groups was used for the conduct of this study. In group therapy section, 21 participants were voluntarily selected as the sample units and received 10 group therapy sessions with self-acceptance approach. In NA group, 27 participants were voluntarily selected as the sample units and received the pertaining teachings for six months. Mental Health Questionnaire (GHQ28) was used to collect the required data. **Results:** The results showed that teachings of NA groups were more effective in addicts' mental health and in the reduction of physical and depression symptoms compared to self-acceptance group therapy by Dryden's approach. **Conclusion:** In comparison to group therapy, the teachings of NA groups are more effective in the treatment of physical and depression symptoms and the improvement of mental health in addicts due to the creation of a sense of empathy and freedom of selection.

Keywords: self-acceptance group therapy, NA, mental health, men

On the Comparison of the Effectiveness of Self-Acceptance Group Therapy by Dryden Method with Teachings of Narcotics Anonymous Groups (NA) in Addicts' Mental Health in Kerman City

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Introduction

Drug addiction is one of the most important issues in every society and is one of the broadest risk factors in health which can be investigated from the perspective of biological, psychological, and social factors (Katibayi, Hamidi, Yarian, Ghanbari, & Seyed Mousavi, 2010). Addiction is a chronic, progressive, and destructive disease that not only can cause the death of an individual, but could also affect the addicted person's family and community (Naderi, Binazadeh, & Sefatian, 2006). Drug use disorder is one of the most common psychological disorders that generally affects the person's mood. Epidemiological data shows that almost half of the people with addictive disorders also suffer mental disorders at the same time. On the other hand, 15 to 40 percent of people with mental disorders are drug users (Najafi, 2005). While discussing the existence of major depression among addicts, Kaplan argues that 15 percent of addicts have attempted suicide at least once. Using Cattell's 16 Personality Factors Questionnaire, Kilkaner showed that drug addicts are dissociable, anxious, and paranoid, and have poor perceived self-concept (Hajebi as cited in the Center for Criminology Research and Studies, 2000). The results of a study showed that drug addicts had paranoid thinking, symptoms of depression, anxiety, obsessive-compulsive disorder, low self-confidence, and phobia; and had lower scores in mental health (Seraj Khorrami & Isfahani-Asl, 2008). In general, it can be argued that mental health status plays an important role in the etiology of addiction and treatment process of addicts. Unfortunately, despite the great efforts of the scientific community, there is still no proper treatment that can cure addiction, in which is to the presence of three scopes of physical, psychological, and social involvement in addiction that makes it difficult to treat. (Hadian Mobarakeh, Nouri, & Malekpour, 2010). Therapeutic approaches to drug abuse vary depending on the type of substance, patterns of consumption, the availability of psychosocial support systems, and patients' specific characteristics. One of the successful methods of addiction treatment is the use of self-help groups of anonymous addicts. Narcotics Anonymous Association is a self-help community founded in the staged version of the Twelve-Step Plan, which provides remedies for the treatment of addiction and has come into play based on a recovering addict helping another drug addict (Association of Narcotics Anonymous, 2014). Membership in the self-help groups of narcotics anonymous is one of the methods whose success has been confirmed in the durability and endurance, improvement of the quality of life, and strengthening the addicts' resolve. Also, Friedman (2006) showed that continuous participation in Narcotics Anonymous is associated with improved quality of life and mental and social well-being. In the Association of Narcotics Anonymous, there are some teachings for the improvement of the people's mood; in fact, these principles attempt to modify the irrational beliefs underlying the incidence of addiction, ease the suffering of the addicted person, and facilitate the difficulty of stopping drug use (Ghasemkhani, 2014). It seems that the Association of Narcotics Anonymous

has reached success in recovering the physical and mental health of the members by relying upon the 12-step spiritual plans and strengthening the individuals' spirituality, as well as effective and efficient social support of the members from each other to avoid substance abuse and change people's attitude towards solving their problems in life. However, some studies have reported negative evidence for the efficiency of drug users' participation at the 2-step spiritual meetings of Narcotics Anonymous and believe that reliance on a superior force, as the central axis of the Association of Narcotics Anonymous undermines the personal responsibility of individuals (Eric, Feifer, & Strohm, 2000).

Other treatments that are used for addicts are group therapies. Cognitive therapies are among the treatments that are commonly and effectively used for addicts that are generally implemented in a cognitive-behavioral manner. In many studies, the effectiveness of cognitive group therapy has been confirmed (McCrary, & Ziednois, 2001; Narimani, 2004; Dabaghi, 2006). In addition, the effectiveness of cognitive-behavioral therapies in the treatment of psychiatric disorders with addiction comorbidity has also been confirmed (Saghatoleslam, Reza'ea, & Agighi, 2003). Also, many studies have shown that group cognitive therapy improves the mental health of individuals, especially addicts (Arefnasab, Rahimi, Mohammadi, & Baba Mahmoudi, 2007; Alaoddini, Kajbaf, & Molavi, 2008; Khodayarifard, 2008; Mollazadeh, & Ashouri, 2009).

One of the therapeutic branches of cognitive approach is Acceptance Group Therapy by Dryden Method, which is based on the theory of Ellis's Ration Emotive Behavior Therapy. The underlying assumption of this approach is that mental disorders arise from the false beliefs that individuals have about themselves, others, and the environment, and changing these beliefs can lead to the treatment of mental disorders and the increase their mental health (Dryden, 1999). Outman, & Yasamin (2010) conducted a research on the effect of Ration Emotive Behavior Therapy on people who suffered from panic attacks. The results showed that in comparison with the control group, these people were more likely to control their attacks and to make positive changes in real situations. Lispi, Casino, & Miller (2008) performed group Ration Emotive Behavior Therapy on adults with various combinations, such as rational-emotional, rational-behavioral, and emotional-behavioral mixtures. The results showed that different combinations of Ration Emotive Behavior Therapy could increase mental health of individuals effectively. Flaxman, & Bond (2010) placed 107 people holding jobs with high levels of stress in three situations: 1) self-acceptance group therapy; 2) stress relief training; and 3) control group. The results indicated that self-acceptance group therapy and stress reduction training led to the increase of the mental health and flexibility of most people by changing the incorrect cognitive content. Masuda et al. (2007) showed that self-acceptance group therapy improved mental health of individuals by altering inflexible beliefs to flexible ones. Their survey results also showed that inflexible beliefs are related to low mental health. In a Study, Floke, Parling, & Melineb (2012)

indicated that self-acceptance group therapy results in the improvement of depression, general health, and quality of life. According to the mentioned introduction, although the teachings of Narcotics Anonymous focuses on modifying the addicts' wrong beliefs, and strengthening spirituality via the provision of social support, self-acceptance group therapy emphasizes changing the illogical beliefs of patients according to Ellis's Ration Emotive Behavior Therapy. The purpose of this study is to identify the effects of two methods of treatment, i.e. teachings of the Association of Narcotics Anonymous and self-acceptance group therapy on the mental health components of addicted people and to compare the effectiveness of these therapeutic methods in the mental health of addicts.

Method

Population, sample, and sampling method

A quasi-experimental research method along with pre-test and post-test design and unequal groups was used for the conduct of this study. The statistical population of the present study in the group therapy section included the number of 899 addicts in addiction centers in Kerman who had undergone a detoxification period and were introduced into groups of Narcotics Anonymous. In this section, 27 persons who met the criteria for entry in the study were selected as the volunteer participants from among the addiction centers, namely Navid, Twelve Imams, Hasti, Panah 2, Hakim, Abolfazl (AS), Tolou, Ofogh, Saman, Aramesh, Monadian Health, Green Return, and Mehregan. The entry criteria of the participants into the research was the experience of full detoxification, the announcement of readiness to receive psychiatric services in treatment centers, agreement to perform the assignments provided in the group, agreement for continued attendance at sessions, absence of any chronic psychological disorder, and receiving a score between 22 and 48 in Mental Health in the pre-test (indicating moderate mental disorder in individuals). The above-mentioned items were diagnosed by a psychiatrist of the Welfare Office and Clinical Records. These individuals would be excluded from the group if they were present in the group of Narcotics Anonymous and did not comply with the agreed terms. In the Narcotics Anonymous section, there were 754 addicts in Kerman addiction centers who had undergone the detoxification period, were not present in group therapy, and were joining the group of Narcotics Anonymous. In the group of Narcotics Anonymous, the participants were compared with the participants in the group therapy in terms of mental health and chronic psychological disorders. Among the peer group members with those of the group therapy, 45 persons were selected through criterion-based method from Navid, Aramesh, Panah 1, Hakim, and Mehregan centers. The selected participants were aware of the purpose of the research and deliberately participated in the research. They were divided into three 9-person groups. Each group received ten 90-minute sessions of Dryden's self-acceptance group

therapy, which was based on Elis's Ration Emotive Behavior Therapy. It is noteworthy that six participants were excluded from the model for reasons such as leaving the group (3 persons) and more than two sessions absence (3 persons). In the section of Narcotics Anonymous group, the model units were present for six months (the minimum time required to complete the twelve steps of the Narcotics Anonymous) and they took advantage of the teachings. Navid Drug Treatment Center was the venue for holding the group therapy sessions. Through coordination with the person responsible in charge of the sessions, the attendance was checked. Confounding factors, such as the lack of cooperation of the members and the inadequacy of the members' activities were managed by the responsible person. 18 trial units were excluded from the model group due to quitting the sessions and returning to addiction.

Instrument

Mental Health Questionnaire: This questionnaire is a self-reported measure that is used in clinical settings with the aim of identifying people with mental disorders (Dadsetan, 2003). It contains four subscales, including somatic symptoms, anxiety, social inefficiency, and depression. All its items are four-choice and are scored on a Likert scale. Items numbered 1 to 7 belong to the subscale of somatic symptoms, items numbered 8 to 14 pertain to the subscale of anxiety and insomnia, items numbered 15 to 21 belong to social inefficiency, and items numbered 22 to 28 belong to depression. A high score indicates low general health and a low score indicates high mental health and minimal morbid symptoms. The cut-off score is 6 in sub-scales and is 24 in the total questionnaire. Taghavi (2001) evaluated the reliability of the questionnaire through three methods, i.e. retest, split-half, and Cronbach's alpha where the reliability coefficients of 0.70, 0.93, and 0.90 were obtained, respectively. In order to assess its validity, three methods, including concurrent validity, correlation of sub-scales with the total score, and factor analysis were used. Concurrent validity was performed through the implementation of the Middlesex Hospital Questionnaire (MHQ), and the correlation coefficient of 0.55 was obtained. The correlation coefficients between the scores of the questionnaire sub-scales and the total score were satisfactory and ranged from 0.72 to 0.87. The result of factor analysis also revealed the existence of four subscales in this questionnaire and, in total, they explained more than 50% of the total variance (Taghavi, 2001). In the present study, Cronbach's alpha coefficients for the sub-scales of somatic symptoms, anxiety, social inefficiency, depression, and the whole scale were obtained equal to 0.82, 0.84, 0.72, 0.92 and 0.92, respectively.

Procedure

In the group therapy section, three 9-member groups were formed due to the lack of consistency among the individuals to attend group therapy sessions and for the sake of observing the criteria for the number of participants in group therapy. After the selection of the sample group, self-acceptance training sessions,

designed based on Dryden's works (1999), were held by the senior expert of clinical psychology in Navid Treatment Center during ten 90-minute sessions on a weekly basis. In these sessions, it was described to the members of the group about the factors influencing emotions and feelings, and the change of emotions and feelings through the change of beliefs. Each session consisted of three sections where the assignments were examined in the first section, a technique, mentality or a skill was taught in the second section, and, in the final section, a task was presented in relation to the already-taught skill. The group therapy sessions of self-acceptance therapy are as follows (Dryden, translated by Movahed, 2011).

Table 1: Sessions of Dryden-based Self-Acceptance therapy for each session

<i>Sessions</i>	<i>Content</i>
First	The therapist and other members were introduced, and the objectives and the general approach of the treatment sessions were discussed.
Second	The principles of self-acceptance therapy were described for the members and the some goals were set for them so that they should reach the end of the group therapy. Also, the ABC model (A represents the activation position, B expresses the individual's belief, and C expresses the consequences) was described so that the members could know what factors contribute to the creation of an emotion.
Third	Members were taught how to question the rigid demands associated with self-humiliating thinking and replace them with their alternatives derived from their own acceptance beliefs.
Fourth	The techniques of rational skill (based on reason and wise judgment) were taught.
Fifth	The zigzag technique (weakening the convincing self-confidence beliefs and empowering the convincing power of self-acceptance beliefs) was taught to members.
Sixth	The audio version of the zigzag technique was taught to members through the use of their own effective expressions and rational-emotional imagery to help people who wanted to reduce the convincing state of unhealthy beliefs.
Seventh	Subjective review of cognitive-behavioral assignments; methods of overcoming barriers using cognitive therapy were also explained.
Eighth	Cognitive-behavioral techniques were determined and a rational argument was expressed to combat shyness. The team members were described how shyness makes people lose many opportunities in their lives.
Ninth	It was shown to members how their beliefs affect their thinking. The members were also taught how to challenge their distorted inferences.
Tenth	The members' progress was evaluated and the group members' feedback about the group were discussed. At the end of the treatment, the team members were helped to expand their knowledge and increase its sustainability. Then, the post-test was administered.

In Narcotics Anonymous group, the individuals participated in the daily sessions of this association after administering the pre-test and introducing the individual to the self-help groups of Narcotics Anonymous. Then, based on training and guidance of other addicts, they completed twelve steps of the Narcotics Anonymous. The post-test was then run after six months. During this six-month period, the researcher was present in the sessions as a participant. The

twelve steps Narcotics Anonymous include the following (World Association of Narcotics Anonymous, 2014).

We admitted that we were unable to cope with our addiction and our lives were disturbed; we reached this belief that a superior force beyond us could restore health to us; we have decided to make our willful destiny to God, as we understood him; we have prepared an ethical, frivolous, and scrupulous balance sheet of ourselves; we have admitted the details of our mistakes to God, to ourselves, and to another human being; we are fully prepared to ask God to resolve all these deficiencies of our character; we humbled God to resolve our moral shortcomings. Wherever it was possible, we compensated for these damages, except in cases where they or other people were hurt. We prepared a list of all those who have been hurt by us and have decided that they will be compensated for all of them; we continued to prepare our personal balance sheet; and whenever we were wrong, we quickly acknowledged it; we sought to improve our conscious relationship with God, as we understood it by praying and thinking; and we prayed to know his will and obtain a power to do it; with a spiritual awakening that we found as a result of these steps, we tried to convey this message to the addicts and practice these principles in all our affairs.

Results

The demographic statistics of this study showed that the mean value of participants' age in the group of self-acceptance therapy was 33.67 years with the standard deviation of 7.67 years, while this value in the group of Narcotics Anonymous was 32.5 years with the standard deviation of 7.91 years. The mean value of duration of drug use in the group of self-acceptance therapy was equal to 12.10 years with the standard deviation of 8.82 years, while this value in the group of Narcotics Anonymous was 11.11 years with the standard deviation of 6.10 years. The descriptive statistics of mental health components are presented for each test type and group in Table 2.

Table 2: Descriptive statistics of mental health components for each test and group

<i>Variable</i>	<i>Group</i>	<i>Pre-test</i>		<i>Post-test</i>	
		<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Somatic symptoms	Group therapy	7.05	4.61	6.43	3.82
	NA	7.74	3.16	5.53	2.83
Anxiety	Group therapy	7.95	4.95	5.57	3.14
	NA	7.63	3.73	5.74	3.10
Social inefficiency	Group therapy	7.29	3.55	6.76	4.03
	NA	7.21	2.39	6.84	1.64
Depression	Group therapy	7.10	6.56	4.05	4.08
	NA	9.37	4.09	2.74	3.31
Total score	Group therapy	29.29	18.19	22.95	13.17
	NA	31.58	8.09	20.53	8.14

Multivariate analysis of covariance was used to analyze the data and control the pre-test effect. One of the assumptions of this analysis is the equality of

variance-covariance matrices. The results of Box's test indicated that this assumption has been met ($P > 0.05$; $F = 1.5$; $M \text{ Box} = 8.802$). Another assumption for using this test is the equality of error variances. In this regard, the results of Levene's test are presented in Table 3.

Table 3: Results of the Leven's test for the evaluation of error variances

<i>Variable</i>	<i>F</i>	<i>Df 1</i>	<i>Df 2</i>	<i>Sig.</i>
Total mental health	3.94	1	46	0.068
Somatic symptoms	3.22	1	46	0.076
Anxiety	1.3	1	46	0.35
Social inefficiency	1.92	1	46	0.18
Depression	1.82	1	46	0.19

As it has been shown in Table 3, the results indicate that the assumption has been met ($P > 0.05$). Therefore, multivariate analysis of covariance was run and the results indicated the existence of a significant difference between the two groups (Eta-squared = 0.918; $P < 0.001$; $F = 205.77$; Wilks's Lambda = 0.802). To examine the patterns of difference, univariate analysis of covariance was used as presented in table 4.

Table 4: Univariate covariate analysis results examining the effectiveness of Dryden's group therapy and NA in mental health components

<i>Variable</i>	<i>Sum of squares</i>	<i>Df</i>	<i>Mean Squares</i>	<i>F</i>	<i>Sig.</i>
Somatic symptoms	662.48	1	662.48	8.39	0.04
Depression	551.75	1	551.75	14.17	0.0005
Social inefficiency	0.08	1	0.08	0.20	0.65
Anxiety	23.9	1	23.9	5.13	0.06

As it can be observed in the table above, there is a significant difference between the two groups in the components of somatic symptoms ($P < 0.05$) and depression symptoms ($P < 0.001$). In both components, the intervention of NA has been more effective.

Discussion and Conclusion

This study was conducted to evaluate and compare the effectiveness of self-acceptance group therapy with NA teachings in terms of mental health components among addicted people. The results showed that there is a significant difference between the effectiveness of self-acceptance group therapy and attendance in NA sessions with regard to the components of somatic symptoms and depression. To interpret this finding, it can be argued that the self-help NA group has a significant role in solving the problem of addiction, especially depression by providing social support, increasing interpersonal relationships, and providing practical models and solutions. It should also be taken into account that the duration of the treatment and the number of treatment sessions of self-help NA groups were more than those of the group receiving self-acceptance therapy. Therefore, it can be assumed that there is a significant difference between these two therapies can be due to the difference in the length of these two therapies where a longer duration leads to a sense of value, increased

self-confidence, and reduced depression in individuals. Factors, such as learning from each other, empathy, responsibility, and motivation for leading a healthy life are among the most important features of NA sessions (Bairwaite, 2004). In the self-help NA group, it is believed that participation in the forum may help participants improve their conditions. These self-help groups develop a sense of hope that includes a sense of control of the situation and the belief that every problem in life is a stimulus for transformation and growth. This research has several theoretical implications and practical applications. From among the theoretical implications of this study in the group therapy section, one can refer to the effect of creating healthy beliefs and changing unhealthy and irrational beliefs in addicted individuals, which may lead to a recovery in depression and anxiety and overall mental health in these individuals in a short time. Similarly, in the NA section, according to the results, it can be said that the existence of supportive groups without the need for specialized people can have a positive effect on the mental health of addicted people. The results highlight the need to set up psychological service providers and remove the barriers to the formation of self-help NA groups for the addicted people who have undergone detoxification in the course of drug use withdrawal. Among the limitations of this study, it can be referred to the absence of a control group for group therapy. Indeed, the sample units were not ready to be kept on the waiting list for group therapy, and in the case of non-membership in therapeutic groups, they became members of the self-help NA groups. In addition, based on the diagnosis of the individuals' psychological condition and with the consideration of the ethical criteria of the research, all volunteers were placed in three therapy groups. The formation of a control group was not possible for this study. For further research, it is recommended that researchers implement this therapy on other groups of addicts where it is possible to form a control and comparison group. Another limitation of this research in the group therapy section is that the population was limited to drug addicts in the addiction treatment centers that were mostly of a drug therapy nature. In this regard, it is suggested that this study be conducted in other populations of addicts, such as addiction treatment camps. In group therapy, the clinical observation showed that the duration of the therapy may not be enough to make changes in setting goals and following them. Therefore, it is suggested that future studies include longer treatments as well as longer and multiple follow-ups. In addition to being able to show the continuity of the effects of the treatment, these follow-ups help researchers discover those hidden effects that appear some time after the treatment. This study aimed to provide initial evidence of the effectiveness of self-acceptance therapy; thus, the conduct of more and more replications on research is needed to determine the stability of the effects of this program.

References

- Aghihi, K. (2013). The Effect of Cognitive-Behavioral Therapy on Reducing Depression among Substance Abusers. *Quarterly Journal of Ardabil University of Medical Sciences & Health Services*, 2 (4), 33-38.
- Alaoddini, Z., Kajbaf, M., & Molavi, H. (2008). The Effects of Group Hope-Therapy on Mental Health of Female Students in Isfahan University. *Quarterly Journal of Health in Psychology*, 1 (4), 67-76.
- Arefnasab, Z., Rahimi, C., Mohammadi, N., & Baba Mahmoudi, A. (2007). Effect of Methadone Maintenance Treatment on the Mental Health of Opium and Heroin Addicts. *Quarterly Journal of Iranian Psychologists*, 4 (13), 43-52.
- Brairwaite V. (2004). The hope process and social inclusion. *The Annals of the American academy of political and Social Science*, 592(1), 128-151.
- Dabaghi, P. (2006). *The Effectiveness of Cognitive Therapy Based on Ocular Thinking and Activation of Spiritual Schemes in Relapse Prevention of Opiate Use*, Doctoral Dissertation: Unpublished. Tehran Psychiatric Institute.
- Dadsetan, P. (2003). *Forensic Psychology*. Tehran: SAMT Publication.
- Dryden, W. (1999). *Developing Self-Acceptance (A brief, educational, small group approach)*, New York: Wiley.
- Eric, C.L., Feifer, C., Strohm, M. (2000). A Pilot study: Locus of control and spiritual Beliefs in AA and SMART Recovery members. *Addictive Behavior*, 25(4), 633-640.
- Flaxman, P.E., Bond, F.W. (2010). A randomized worksite comparison of acceptance and commitment therapy and stress inoculation training. *Behavior Research and therapy*, 48(8), 816-820, DOI: 10.1016/j.brat.2010.05.004.
- Folke, F., Parling, T., Melin, L. (2012). Acceptance and Commitment Therapy for Depression: A Preliminary Randomized Clinical Trial for Unemployed on Long-Term Sick Leave. *Cognitive and Behavioral Practice*, 19(4), 583-594.
- Friedman, G.L. (2006). *Narcotic Anonymous: Promotion of change and growth in spiritual health, quality of life and attachment dimensions of avoidance and anxiety in relation to program involvement and time clean [Dissertation]*. Alliant International University, Los Angeles, California, 4-32.
- Ghasemkhani, G. (2014). *Theories and methods of counseling and psychotherapy*. Tehran: Jungle Publication.
- Groh, D.R., Jason, L.A., Keys, C.B. (2008). Social network variable in Alcoholics Anonymous: A literature review. *Clinical Psychology Review*, 28(3), 430-450. DOI: 10.1016/j.cpr.2007.07.014.
- Hadian Mobarakeh, R., Noori, A., & Malekpour, M. (2010). Psychodrama and Addiction. *Journal of New Findings in Psychotherapy*. 16 (55-56), 47-66.
- Herman, M. (2000). Psychotherapy with substance abusers: integration of psychodynamic and cognitive behavioral approaches. *American Journal of Psychotherapy*, 54(4), 574-579.
- Kaplan, H., Sadock, B. (2007). *Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry*, Translated by Farzin Reza'ea. Tehran: Arjomand Publications. Eighth Edition, Vol. I.
- Katibayi, J., Hamidi, H., Yarian, S., Ghanbari, S., & Seyed Mousavi, P. (2010). Comparison of quality of life, stress, and mental health between addicts, non-addicts with HIV, and healthy people. *Journal of Behavioral Sciences*, 4 (2), 125-139.

- Khodayarifard, M., Abedini, Y., Akbari Zardkhanen, S., Ghobari Bonab, B., Sohrabi, F., & Younesi, J. (2008). The Effectiveness of Cognitive-Behavioral Interventions on the Psychological Health of Prisoners. *Quarterly Journal of Behavioral Sciences*, 2 (2), 283-290.
- Liraud, F., verdoux, H. (2002). Effective of Comorbid substance use on neuropsychological performance in subjects with psychotic or mood disorders. *Encephale*, 28(2), 160-168.
- Lipsy, M.j., Kassinove, H., & Miller, N.j. (2008). Effects of rational emotive therapy rational role reversal, and rational-emotive imagery on the emotional adjustment of community mental health center patients. *Journal of Consulting and Clinical Psychology*, 48(3), 366-374.
- Masuda, A., Hayes, S.C., Fletcher, L.B., Seignourel, P.J., Bunting, K., Herbst, S.A., ... Lillis, J. (2007). Impact of acceptance and commitment therapy versus education on stigma toward people with psychological disorders. *Behavior Research and Therapy*, 45(11), 2764-2772. DOI: 10.1016/j.brat.2007.05.008.
- McCrary, B.C., Ziedonis, D. (2001). American Psychiatric Association Practice Guideline for substance Use Disorders. *Behavior Therapy*, 32, 309-336.
- Maremmani, I., pani, P.P., Pacini, M., Perugi, G. (2007). Substance use and quality of life over 12 month among buprenorphine maintenance-treated and methadone maintenance-treated heroin addicted patients. *Journal of substance abuse treatment*, 33(1), 91-98. DOI: 10.1016/j.jsat.2006.11.009.
- Mohammadi, Y. (2013). *Diagnostic Guide for Mental Disorders*. Fifth Edition, Tehran: Ravan Publication.
- Mollazadeh, J., & Ashouri, A. (2009). The effectiveness of cognitive-behavioral group therapy in relapse prevention and improvement of the mental health of addicted people. *Scientific-Research Journal of Shahed University Sixteenth Year*, 16 (34), 1-12.
- Naderi, S., Binazadeh, B., & Sefatian, S. (2006). *Self-teaching of Addiction Treatment*. Kholous Publications, Tehran.
- Najafi, K. (2015). Comparison of the quality of life between the wives of men with substance abuse and control group. *Journal of Guilan University of Medical Sciences*, 14 (55), 35-41.
- Narimani, M. (2004). Investigating the Psychological Behavioral Effect on Addiction Treatment and Rehab of Addicts, *Journal of Counseling Research & Developments*, 3 (9-10), 42-59.
- Othman Mydin, Y., Yusooff, F. (2010). Psychological counseling process: application of rational emotive behavior therapy to treat 'Panic Attack' case. *Procedia- Social and Behavioral sciences*, 5, 416-420, DOI: 10.1016/j.sbspro.2010.07.115.
- Seraj Khorrami, N., & Isfahani-Asl, M. (2008). Effectiveness of addiction treatment in mental health status, self-esteem, and ethical judgment of addicted drug users. *Proceedings of the National Conference on Psychological and Social Pathology*, Research Deputy. Tehran: Islamic Azad University, Rudehen Branch.
- World Association of Narcotics Anonymous (2014). *Step-by-Step Guide to Narcotics Anonymous*. Translation of the Worldwide Directory of Narcotics Anonymous. Tehran: Kimia Publication.

