



Comparison of multifaceted Islamic and cognitive-behavioral therapies on craving, cognitive emotion regulation, and psychological well-being in opioid-dependent patients

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Original Article

Abstract

BACKGROUND: Addiction has caused numerous socio-psychological problems around the world as well as in the process of substance abuse treatment. To improve psychological problems and cravings, it should be focused on detoxification, drug withdrawal, and psychotherapy. The study aimed to investigate the effectiveness of multifaceted Islamic therapy and cognitive-behavioral therapy (CBT) on the craving, cognitive emotion regulation strategies, and psychological well-being in male opioid-dependent patients.

METHODS: This was a quasi-experimental interventional study in Tehran, Iran, in 2018. 60 male opioid-dependent patients were selected. They were randomly assigned to three groups of the MIT (n = 20), CBT (n = 20), and controls (n = 20). The experimental groups received 10 sessions of MIT and CBT. Tools were the Craving Beliefs Questionnaire (CBQ), Cognitive Emotion Regulation Questionnaire (CERQ), and the Psychological Well-being Questionnaire. Data were analyzed using multivariate analysis of covariance (MANCOVA).

RESULTS: A significant difference was observed between the mean scores of the experimental groups and the control group in the variables of craving, cognitive emotion regulation, and psychological well-being (P < 0.05), but there was no significant difference between the two experimental groups.

CONCLUSION: The MIT and CBT impacted the craving, cognitive emotion regulation, and psychological well-being in opioid-dependent patients. However, there were no significant differences between the two approaches.

KEYWORDS: Multifaceted Islamic Therapy; Cognitive-Behavioral Therapy; Craving; Emotion Regulation; Psychological Well-Being; Opiate

Date of submission: 05 Oct. 2021, **Date of acceptance:** 28 May 2022

Citation: Ghahari S, Vahed N, Shafiee M, Zarghami M. Comparison of multifaceted Islamic and cognitive-behavioral therapies on craving, cognitive emotion regulation, and psychological well-being in opioid-dependent patients. Chron Dis J 2022; 10(3): 157-63.

Introduction

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According to the Diagnostic and Statistical Manual of Mental Disorders (DSM), the main feature of substance use disorder is a set of cognitive, behavioral, and physiological symptoms that indicate a person continues to use drugs despite significant substance-related problems in personal, family and social life. It

leads to an inability to perform one's major commitments.¹

One of these substances is opioid-type substances. Among these, the multidimensional etiology of substance abuse disorder and the problem of comorbidity with psychiatric disorders are problematic barriers to the treatment of patients with substance abuse.¹ In 2019, 275 million people worldwide used drugs, an increase of 22% compared to 2010, and the number of people with substance use disorders worldwide was 36 million, an increase of 33% compared to 2010. According to the global report, opioids have the largest share in the burden of substance-related diseases.² In our country, the most consumed substance is related to opioids.³

Craving is considered as the basis of the beginning of substance dependence, and one of the important factors in relapse.⁴ In many definitions today, temptation is recognized as a central phenomenon and a major factor in the continuation of abuse and the return to substance use after treatment.⁵ Emotional regulation strategies are the process by which people regulate and control their emotions, and these strategies have also been suggested in factors related to addiction. In fact, substance abusers may sometimes have poor emotional regulation and use the substance as a tool for emotional regulation. Therefore, poor emotion regulation seems to be one of the preconditions for substance use.⁶ Some studies have emphasized the role of psychological well-being in preventing addiction and relapse. Welfare is a positive physical, social, and mental state in which a person satisfies his needs and feels purposeful and useful.⁷ The multifaceted Islamic approach is a set of methods and spiritual and religious skills to increase the capabilities of individuals that focus on things such as attitudes toward God, belief in empowerment, turning desires to the afterlife, and remembrance and worship. In this regard, belief in spirituality can positively

affect health and inner satisfaction.⁸ In cognitive-behavioral therapy (CBT), the role of dysfunctional beliefs in the occurrence of addiction and its recurrence is emphasized, and cognitive reconstruction is one of the important strategies.⁹ In this regard, the study by Ghasemnezhad and Ghahari also showed that cognitive-behavioral strategies effectively controlled cravings and self-efficacy prevented a recurrence and improved quality of life.¹⁰ Moreover, the study by Seifi Gandomani *et al.* showed that Islamic psychotherapy could improve some psychological symptoms.¹¹ According to the above, no study has been conducted to examine the two multidimensional Islamic and cognitive-behavioral approaches; therefore, the hypotheses of the present study are as follows: 1- in comparison with the cognitive-behavioral approach, the multifaceted Islamic approach improves the cognitive regulation strategies of opioid addicts, 2- in comparison with the cognitive-behavioral approach, the multifaceted Islamic approach increases the individual well-being of opioid addicts.

Methods

The present study has the ethics code of IR.MAZUMS.REC.1397.1341 from Mazandaran University of Medical Sciences, Sari, Iran. This research was a quasi-experimental study in which 60 opioid-dependent patients were selected from the patients referred to the substance abuse treatment center in Tehran, Iran, in 2018 by the available sampling method. The DSM-fourth edition (DSM-IV) clinical interviews then evaluated them. Eligibility criteria were: being diagnosed with opioid use disorder based on the diagnostic criteria of DSM and being in the age range of 18-50 years old. Besides, patients who used multiple drugs based on multi-panel urine drug tests, had severe psychiatric disorders and traumatic brain injuries along with neurological deficits, were suffering from

acute and unstable medical conditions, and were receiving another medical or psychological intervention simultaneously were excluded from the study. In order to control confounding variables, groups were standardized based on gender, length of time spent abusing a substance, and level of religious belief.

Then they were randomly divided into CBT (n = 20), multifaceted Islamic therapy (MIT) (n = 20), and control (n = 20) groups. The random assignment method was simple. All three groups completed the relevant questionnaires in the baseline and follow-up stages. The intervention sessions for the experimental groups were 10 sessions, so that one session per week (90 minutes per session) for CBT¹² and MIT¹³ groups was applied. One month after completing the treatment interventions and implementing the adjusted protocol to evaluate the effect of the interventions, the participants' follow-up test was performed again. Summaries of the sessions are given below (Table 1).

Research tools

Structured clinical interview for psychiatric and personality disorders in DSM-IV: It was a

comprehensive standardized tool for assessing major psychiatric disorders based on DSM-IV definitions and criteria.¹⁴ In this study, a clinical version was used. The whole interview was conducted in one session and lasted between 45-90 minutes. Amini et al. reviewed the validity and reliability of the Persian version of this tool and the diagnostic agreement for most specific and general diagnoses of moderate to good (Kappa above 0.6) and general agreement (total Kappa) for all current diagnoses of 0.52 as well as a total lifespan of 0.55 were reported.¹⁵

Craving Beliefs Questionnaire (CBQ): This questionnaire was designed by Wright et al. It measures the temptation to use drugs and has 20 items, each rated on a scale of 1 to 7.¹⁶ Rahmanian et al. reported Cronbach's alpha of 0.84.¹⁷

Cognitive Emotion Regulation Questionnaire (CERQ): It is a multidimensional questionnaire developed by Garnefski et al. which consists of 36 five-point Likert scale questions.¹⁸ Alpha coefficients of this questionnaire have been reported in the range of 0.71 to 0.81. In Iran, Samani and Sadeghi reported the alpha coefficient for the subscales of this test in the range of 0.62 to 0.91.¹⁹

Table 1. Summary of intervention sessions

Session	The content of the multifaceted Islamic therapy	Content of cognitive-behavioral therapy
First	Introducing participants, teaching cognitive beliefs	Introduction and identification of individual motivations
Second	Teaching a monotheistic attitude, applying these beliefs in life, and group discussion	Introducing the CBT model
Third	God's relationship with humans, the purpose of creation, the power of God	Prioritizing goals
Fourth	Interpretation of various life events from the perspective of providence and divine wisdom	Dealing with dysfunctional thoughts and learning relaxation techniques
Fifth	The cause of all kinds of hardships on human beings	Investigating the relationship between thoughts and emotions, using adaptive self-talk
Sixth	Providing other topics related to the sufferings and difficulties in group discussion life	Familiarizing with the concepts of self-assessment, and learning essential skills
Seventh	Group discussion about fate and predestination	Material refusal skills and continuing to teach previous skills
Eighth	Group discussion about surrender	Practicing learned skills and activation training
Ninth	Group discussion on reliance and satisfaction of God	Group participation, identifying the causes and factors of substances
Tenth	Providing general advice on how to take these experiences to the life	An overview of the techniques taught

CBT: Cognitive-behavioral therapy

Table 2. Descriptive statistics of the studied variables by groups and pre-test and post-test

Variables		Craving (mean ± SD)	Cognitive regulation strategy (mean ± SD)	Psychological well-being (mean ± SD)
Multifaceted Islamic approach	Pre-test	3.65 ± 1.18	3.70 ± 0.97	3.35 ± 0.87
	Post-test	4.70 ± 0.47	4.65 ± 0.48	4.40 ± 0.68
Cognitive-behavioral approach	Pre-test	3.60 ± 1.14	3.65 ± 0.93	3.20 ± 0.76
	Post-test	4.65 ± 0.58	4.65 ± 0.48	4.45 ± 0.68
Control	Pre-test	6.70 ± 1.30	3.35 ± 1.46	3.65 ± 0.87
	Post-test	4.15 ± 0.87	4.00 ± 0.97	3.70 ± 0.92

SD: Standard deviation

Psychological Well-Being Scale: This scale was designed by Ryff. It has 84 questions and six factors and the subjects answer the questions on a 6-point scale (from strongly disagree to strongly agree). Ryff and Keyes reported Cronbach's alpha of the factors from 0.86 to 0.93.²⁰ Bayani et al. reported the reliability coefficient of this questionnaire in Iran as 0.82.²¹

Results

According to the demographic checklist, all subjects were men with an average age of 50, and the degree of education was a diploma; 80% of the study group were married. The followings are the study's findings; descriptive statistics of the studied variables are presented in table 2.

Analysis of covariance (ANCOVA) has been used to evaluate the effectiveness of treatments. One of the preconditions of this analysis is the study of the correlation of regression slopes, which is presented in table 3.

As shown in table 3, the homogeneity of the regression slope was established. Another condition for equality of variance is an error. The results of Levene's test indicated that this condition was met in all three variables of craving ($F = 2.23$, $P > 0.05$), cognitive regulation strategy ($F = 1.33$, $P > 0.05$), and psychological well-being ($F = 0.06$, $P > 0.05$) (Table 4).

The results of the table 4 indicated that the significance level for Levene's test for research variables was more than 0.05, and the assumption of the equality of variances in the samples was confirmed. Therefore, a multivariate ANCOVA (MANCOVA) was performed, and the results indicated significant differences. Univariate ANCOVA was used to examine the patterns of difference (Table 5).

Table 3. Results of regression homogeneity slopes for variables

Variables	Average squares	F statistic	P
Craving	78.2	19.10	0.10
Cognitive regulation strategy	24.2	2.05	0.08
Psychological well-being	14.2	3.77	0.05

As shown in table 5, there was a significant difference in all three variables. Considering that the three groups were compared, the Bonferroni test was used to examine the differences, the results of which are presented in table 6.

As shown in table 6, both the multifaceted Islamic approach and the cognitive-behavioral approach have been effective. However, there was no significant difference between the two approaches.

Table 4. Levene's test for equality of variance

Variables	F statistic	df	Degree of the denominator	P
Craving	2.23	2	57	0.11
Cognitive regulation strategy	1.33	2	57	0.25
Psychological well-being	0.06	2	57	0.93

df: Degree of freedom

Table 5. Results of univariate analysis of covariance (ANCOVA)

Variables	Average squares	F statistic	P
Craving	1.90	4.43	0.01
Cognitive regulation strategy	2.29	5.20	< 0.01
Psychological well-being	4.22	7.43	< 0.01

Discussion

This study aimed to investigate the effect of two methods of MIT and CBT on cravings, cognitive emotion regulation strategies, and psychological well-being of opioid-dependent patients. The results showed a significant difference between the mean scores of the experimental groups and the control group in the studied variables. However, there was no significant difference between the two experimental groups.

This finding is consistent with other studies that confirm the effect of psychological therapies on reducing substance use and cravings.²² Craving is a strong desire to re-experience the effects of psychotropic substances and is the strongest predictor of relapse. Moreover, therapies that emphasize spirituality and meaning in life, relying on religious teachings

such as patience, belief in God, belief in the afterlife, and worship,²³ can be used as an important strategy in emotional regulation and well-being. They are psychologically effective in substance-dependent patients and reduce cravings for opioids. The present study's findings are also consistent with studies that point to the role of spiritual and religious variables in the emotional regulation and psychological well-being of psychiatric patients and addicts. These studies suggest that all spiritual interventions can reduce cravings and improve the management of emotional regulation and mental health.²⁴ In explaining it, it can be said that spiritual teachings help strengthen people's coping mechanisms and give meaning and direction to their life.²³

In this regard, drug addicts have more psychological well-being by gaining peace from spiritual confrontation and purposeful life, and can better manage their emotions and become more resistant to cravings. Other studies have shown that cognitive-behavioral techniques and strategies are effective in emotional regulation and psychological adjustment²⁵ and reducing psychiatric symptoms such as depression, anxiety, and cravings for use in addicts and people with mental disorders.²⁶⁻²⁸

Table 6. Bonferroni test results for group comparison

Variables	Group	Group	Mean difference	SD	P
Craving	Control	MIT	-0.59*	0.20	0.010
		CBT	-0.53*	0.20	0.030
	MIT	Control	0.59*	0.20	0.010
		CBT	0.06	0.20	0.990
	CBT	Control	0.53*	0.20	0.030
		MIT	-0.06	0.20	0.990
Cognitive regulation strategy	Control	MIT	-0.64*	0.21	0.010
		CBT	-0.68*	0.21	< 0.001
	MIT	Control	0.64*	0.21	0.010
		CBT	-0.03	0.21	0.990
	CBT	Control	0.68*	0.21	< 0.001
		MIT	0.03	0.21	0.990
Psychological well-being	Control	MIT	-0.68*	0.24	0.010
		CBT	-0.76*	0.24	< 0.001
	MIT	Control	0.68*	0.24	0.010
		CBT	-0.08	0.23	0.990
	CBT	Control	0.76*	0.24	0.008
		MIT	0.08	0.23	0.990

CBT: Cognitive-behavioral therapy; MIT: Multifaceted Islamic therapy; SD: Standard deviation

* P < 0.05

In this regard, the results of the present study are consistent with the results of a study conducted by MacLeod and Luzon regarding the effectiveness of CBT on improving psychological well-being as well as reducing the consumption of drug addicts in other countries.²⁹ As mentioned, there was a significant difference between the results of the two experimental groups and the control group, but there was no significant difference between the two treatment groups. That is, both groups had the same therapeutic effect. Explaining it, it can be said that the assimilation of the findings, control of the confounding variable, and selection of relatively uniform samples caused both treatments to show their effectiveness and efficiency.

On the other hand, both therapeutic approaches emphasize people's beliefs, thoughts, and behaviors that can affect the variables in the same way, and if more variables were examined or the follow-up period was longer, the differences would show themselves more. Like most studies, this one had limitations that could make it difficult to generalize. Lack of follow-up period and lack of female samples are the limitations of this study; therefore, it is suggested that future studies consider the proposed approaches among other psychological variables and female samples with long follow-up periods.

Conclusion

MIT and CBT, separately, can effectively reduce individuals' cravings and improve emotional regulation and psychological well-being. However, the comparison of these two treatments did not show a significant difference. This result can have many explanations, one of these can be mentioned is the individual differences and heterogeneity of the samples. Depending on the effectiveness of each treatment approach alone, therapists working in the field of addiction can use these two methods alone or

in combination to help patients.

Conflict of Interests

Authors have no conflict of interests.

Acknowledgments

The authors are grateful to the Psychiatry and Behavioral Sciences Research Center of the Addiction Treatment Institute of Mazandaran University of Medical Sciences for supporting this study and the participants for their time for this study.

Financials support and sponsorship

The present study was conducted with the financial support of Mazandaran University of Medical Sciences.

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