

Examining the efficacy of behavioral-cognitive approach based counseling on reducing opiate drug abuse (BDRC) among the patients undergoing maintenance treatment with methadone

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ABSTRACT

The aim of the present research was to examine the efficacy of behavioral-cognitive approach –based counseling on reducing opiate drug abuse (BDRC) among the patients undergoing maintenance treatment with methadone. The research population included all men aged 20-50 who had dependence on substance and had consulted addiction abandonment centers in Karaj. The research sample was as selected as available where 30 male addicts, who had consulted the center for addiction abandonment of Omide Naw, were selected each day per week for about 6 months. Subjects were divided into two experimental and control groups randomly and each group included 15 subjects. To collect data the following questionnaires were used: a) Opiate drug abuse, b) The index of substance gravity (OIT), c) General health questionnaire (GHQ), and the urine test. The statistical test of comparing two averages (T-Test) and one way variance analysis were used to statistically analyze data. Results indicated that adding counseling to reducing opiate narcotics consumption based on the behavioral-cognitive approach is effective in reducing temptation among the patients undergoing maintenance treatment by methadone.

Keywords: behavioral-cognitive, drug abuse, methadone, BDRC.

INTRODUCTION

Today addiction and drug abuse has reached beyond therapeutic and health boundaries and has become a social problem. During past centuries, increased narcotic consumption has been seen as an increasing concern for the societies. It is a problem that has destroyed the lives of many and has caused too much costs to be incurred for fighting, treatment and losses emanating thereof. Addiction side effects that include all aspects of disorders including physical, mental, familial, cultural, economic and social disorders have, endangered the economic and mental health of the society. During past centuries, increased narcotic consumption has been seen as an increasing concern for the societies. It is a problem that has destroyed the lives of many and has caused too much costs to be incurred for fighting, treatment and losses emanating thereof. A look at the statistics related to addiction shows a widespread expansion of this social problem from different perspectives. Since the beginning of the 1990s, the annual opiate drugs consumption has increased 5 fold since 1980 to 1996. The uncontrolled growth of drug abuse , including heroin and opium , addiction being spread to villages, producing centers and productive forces of the society and more importantly the threat of adolescents and third generation of the revolutionary young men and

women being at danger who are exposed to grave problems due to a lack of proper training, require some fundamental solutions. Drug abuse, along with narcotics trading which is today known as illegal narcotics smuggling at an international level are two main dimensions of the narcotics phenomenon. The phenomenon of drug abuse and narcotics smuggling are affected by computers and communication technology, Mafia gangs and hidden hands are today so complicated that the UN considered it as organized crimes and attempted to hold conventions and issue protocols (1961, 1971, 1988) to combat it. As a saddening social problem, addiction is a chronic and relapsing patience whose beginning and ending are affected by an interaction of different genetic, mental, social and environmental factors. This patience like the other mental diseases originated from multiple factors. It is likely a special group is present in each person and if only one of the factors is considered in treating addiction and the other factors are ignored, even that factor leaves a positive impact on treating addiction, because other factors will reduce the effect of the factor in question, various aspects should be considered in treating addiction [1]. Of problems we now encounter with in this regard is what types of treatments are available for addiction. In accordance with the multifactor nature of addiction and various perspectives towards etiology and the formation processes of this patience, there are different treatments provided for it. Some experts have divided these treatments into two major groups of drug and non drug treatments [2]. In drug related treatments, drug prescription is used for drug abandonment. The every drug prescribed is in itself addictive and has unwanted side effects. Because, non drug treatments are permanently effective and have no danger, they are well used. There are two famous maintenance treatments that include methadone and buprenorphine. Maintenance treatment with methadone is carried out when the physician commences the treatment by giving methadone as symptoms of deprivation begin to appear in initial stages. Methadone is long lasting man made drug used or treating drug related deprivation of people addicted to morphine and heroin.

Methadone is given through mouth and each 4-6 hours until symptoms begin to addiction usually quit drugs in 5-10 day periods. At the same time, the person is medically controlled. People with strong addiction could remain in the methadone treatment program for several months. Although, methadone is addictive and some people change addiction to heroin and behavior of seeking the drug towards addiction to methadone and seeking it, methadone – related control of addiction will be easier. The reason why drug treatment is prescribed, is detoxification and preparation of centers for non drug treatments [3]. According to the chronic and relapsing nature of addiction, a great number of people who quit drug abuse will return shortly after the detoxification. Relapse means an initial consumption of drug substance when the person commits to quit. Thus, to help, the addicts, besides detoxification, psychotherapy and rehabilitation phases will sound more important. In psychotherapy, given the theoretical patterns, in which the psychology believes and its application is easy, psychotherapists use different treatments. Personal psychology, cognitive treatments, behavioral treatments, behavioral- cognitive treatments, family therapy, and group therapy are various treatments, psychologists would apply in their work [4]. Counseling for reducing the danger of substances and HIV is an integrated intervention for drug abuse that is based on the principles of behavioral and cognitive therapies prescribed. This intervention is counseling based approach supported by health and cognitive psychotherapy research findings and is influential in effectively changing the behavior. Counseling to reduce substance related dangers could be carried out by staff available in countries with limited resources like nurses who have not passed advanced or specialized courses in psychology or psychotherapy. Counseling to reduce substance related dangers is direct and prescriptive. The intervention uses short term appointments directed at improving the treatments and persuades patients to make primary changes to their life styles as including severing/reducing drugs, severing/reducing pernicious behaviors related to substances and sexual affairs. BDRC counselors are committed to immediate feedback and positive enhancement regarding the progress made by patients and apply the method of establishing an especially positive communication in a profit framework. Current research indicates messages of promoting health will positively in a profit frame will increase the likelihood of patients' obedience to treatment orders and involvement in the behavior changes. The primary BDRC stages are concentrative on the behavioral changes necessary for avoiding drugs and maintaining it while later stages of the treatment will link patients' progress in the treatment with the goals of long term improvements. A pilot study recently released in Malaysia suggested that the effects of treatments for the patients receiving BDRC and methadone dosage aimed at avoiding substances is better compared to patients receiving brief physician handling and standard methadone (dosage was not aimed at avoiding) [5].

Today, one of the most applied approaches used by therapists conducting addiction treatments individually is the behavioral-cognitive approach. The basic postulate of this approach is that learning processes play an important role in creating and continuing addiction. By the same token, one can help people reduce drugs. Put it simply, the behavioral-cognitive treatment helps patients in three aspects of identification, avoidance and coping, i.e. identifying situations where the likelihood of drug abuse is great and avoiding situations at proper times and effective confrontation with issues and troublesome behaviors related to drug abuse [4]. The focus in this paper, was to examine the efficacy of behavioral-cognitive approach –based counseling on reducing opiate drug abuse (BDRC) among the patients undergoing maintenance treatment with methadone so to determine which of these two

methods are most are most likely to be effective in reducing addiction symptoms. Hence, we can eventually determine the best way to treating addicts . the findings of some research reaffirm the maintenance program by methadone will reduce drug abuse and opium and heroin in particular. Flynn[6], reported methadone will reduce opiate drug consumption or result in its complete severance. Tasman [7]revealed that using methadone treatment (MMT)caused reduction in narcotics abuse in New York[8], reported MMT is the best and most used method for curing addiction of opium and heroin . Marlatt[9] reported maintenance program by methadone will reduce drug abuse and opium and heroin in particular . Giacomuzzi et al, [10] ,reported methadone influences substantially drug abuse and is more effective than detoxification .

Findings related to examining the MMT in life and health level of the addicts suggested this method is effective on the health level . In researches by Isaac et al,[11] it was proclaimed that methadone , besides improving the health level will increase life expectancy among the addicts to heroin and opium . Brondz and Yalom[12], stated that there is a direct relationship between the number of methadone clinics , health level, training, social production , an increased likelihood of remaining at work among the addicts to heroin and opium . Thus, The aim of the present research was to examine the efficacy of behavioral-cognitive approach –based counseling on reducing opiate drug abuse (BDRC)among the patients undergoing maintenance treatment with methadone.

MATERIALS AND METHODS

The research is semi experimental. The pattern of the present research in accordance with some patterns of semi experimental or experimental method is as follows:

The research population included all men aged 20-50 who had dependence on substance and had consulted addiction abandonment centers in Karaj. The research sample was as selected as available where 30 male addicts, who had consulted the center for addiction abandonment of Omide Naw, were selected each day per week for about 6 months. Subjects were divided into two experimental and control groups randomly and each group included 15 subjects . To collect data the following questionnaires were used:

a) Opiate drug abuse, b)The index of substance gravity (OIT), c)General health questionnaire (GHQ), and the urine test. The statistical test of comparing two averages (T-Test) and one way variance analysis were used to statistically analyze data. The research tool was made by the researcher and it was multi section. Demographic information was received from ten subjects according to the forms used in centers for rehabilitation and treating addicts. Various tests were used with relation to the research hypotheses. These tools included several parts. To determine the efficacy and compare the counseling in reducing the opiate drug consumption based on the behavioral-cognitive approach among the patients undergoing the maintenance treatment by methadone , the questionnaire related to the opiate drug abuse and OIT questionnaire as well as urine test were applied . To observe the efficacy of counseling, the Goldberg's general health test was used for examining the problems of the patients. This questionnaire measures the level of drug abuse in the past 6 months and includes 36 questions that was designed by Bruce Hackman . This tool has been applied by the researcher due to the fact that research centers nowadays, apply it for investigating the narcotic consumption level . the index of opiate treatment (OTI) includes demographic parts, substance abuse, sexual and injection behaviors, social performance , and health and delinquency . Here , the research only uses the substance abuse part .In this part, consuming all types of narcotics like heroin, opium , poppy, sedatives cigarettes and etc... are going to be investigated . The present research applies the 28 question form of general health questionnaire (GHQ) in order to examine the mental health of the patients monthly. This 28 question form was designed by Goldberg and Hapler, through executing the factor analysis method. The content of the questionnaire deals with examining the mental status of the person in ten past month an deemphasized on such symptoms as the thoughts of here and present. In this research, for analyzing data in proportionate to the data required, different statistical methods were applied. Demographic information were described using the statistical indices of frequency percentage and average rates .The statistical test of comparing two averages (T-Test) and one way variance analysis were used to test the research hypotheses.

RESULTS

The hypothesis in this research is that adding counseling to reducing opiate narcotics consumption based on the behavioral-cognitive approach is effective in reducing temptation among the patients undergoing maintenance treatment by methadone . To test the hypothesis , the OIT questionnaire was used. This questionnaire implemented in the beginning of the therapy period in each of the control and experimental groups after 6 months (the end of the period). The mean score of these two groups are seen in table , 5-4.

Table 1. Scores of the experimental and control groups in the OIT questionnaire

Group	Number	Average	Standard Deviation	Average standard error
Control	15	25.87	3.36	0.87
Experiment	15	15.2	2.91	0.75
Control	15	7.33	4.91	1.27
Experiment	15	0.8	0.68	0.18

A comparison of the averages are presented in table 2 for examining the differences of the two groups . The average difference of the two groups is significant with the assumption of tests equality($P<0/00$). In another word, the treatment in use is effective in reducing the reducing temptation of the opiate addicts .

Table 2. T test for comparing the average of the two control and experimental groups

Timing	Assumption	Equality test of Levene's variance		T test for the average equality						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Standard error difference	Confidence level	
Before	Equality of variances	0.075	0.79	9.30	28	0/000	10.67	1.15	8.32	13.02
	Inequality			9.30	27.44	0/000	10.67	1.15	8.32	13.02
After	Equality of variances	10.70	0.00	5.11	28	0/000	6.53	1.28	3.91	9.15
	Inequality			5.11	14.53	0/000	6.53	1.28	3.80	9.27

Table3. Estimating the F value for the test of the averages difference

Timing		Squares sum	df	Average square	F	Sig.
Before	Inter groups	853.32	1	853.33	86.53	0/000
	Intra groups	275.13	28	9.86		
	Total	1129.47	29			
After	Inter groups	321.13	1	320.13	26.08	0/000
	Intra groups	323.73	28	12.28		
	Total	663.87	29			

According to the research findings concerning the first hypothesis of the research, we can say that that adding counseling to reducing opiate narcotics consumption based on the behavioral-cognitive approach is effective in reducing temptation among the patients undergoing maintenance treatment by methadone. In other words, the addicts who received the mentioned counseling in the six month interval of the treatment period, have little temptation and inclination towards drug abuse ($P<0/00$).

DISCUSSION AND CONCLUSION

A social campaign against addiction has century long record in Iran and deterring laws with respect to cultivation, production and drug abuse have up to now been imposed while a scientific confrontation with this problem necessitates an understanding of social and mental areas and utilizing scientific research for identifying ways affecting reduction and solution of addicts and opium substances a scientific in particular. Finding a scientific guideline could be complementary to legal, social and cultural measures for treating addiction. Result of the present research in the framework of the 3-faceted pattern (model) of biological, psychological and sociological issues in dealing with social problems, and addiction [13,14,15] help factors affecting the psychological area to be recognized. Results suggest that if behavioral- cognitive treatments are given to addicts, they're success will be guaranteed. Thus, in later stages this step will be completed with other suitable measures. The findings of the present research are affirmative to the reports and researches in the area of drug treatment by[16 ,1, 8,9] It can be emphasized that inspired by the 3-faceted pattern in dealing with addiction , it is imperative to have a full psychological therapeutic and drug (biologic) measures.

In accordance with the age average of the addicts in question , i.e.39/4 , it is important to bear in mind that providing counseling behavioral-cognitive services , given the average age and maturity of the personality could be helpful .In the present research %60 of the subjects are over 36 years and hence, the point mentioned is confirmed. Another point regarding the provision of counseling behavioral-cognitive services is that mentioned measures , in accordance with addiction implications by the time of making changes to the cognitive processes that exist in ten studies by Isaac [11] Brandz and March[12], Carrol et al, [17], Astolphi et al, [18] Bell et al, [14], Hansel et al[19], one can anticipate cognitive interventions that occur in the process of treatment could be effective in improving these processes and strengthening mental patients . The effectiveness of cognitive-behavioral intervention, in line with personal factors paving for addiction mentioned in chart two is justifiable. From among the six categories of

mentioned personal factors for addiction, there are three factors found to be directly correlated with cognitive factors. These three factors are childhood and experiences, personality characteristics and possible mental disorders. It is obvious any behavioral-cognitive could help beliefs and attitudes and thus, his behavioral preparation . If the two environmental factors (easy access to narcotics and lack of enough support by relatives) are kept under control, one can expect that personal; factors leading to addiction are almost an improvement will not be in vain. It should be born in mind that although behavioral-cognitive intervention could considerably control personal realms, a complete therapeutic process must pay attention to social and environmental factors. For instance, the environment where the addict lives in must be controlled so after he returns to his normal life is not exposed once again to relation with other addicts [14] and his social affairs should be so modifiable that some possible turbulences can't expose him t the danger of addiction [20]. Finally, findings in the area of the efficacy of behavioral –cognitive intervention reaffirm the approaches supporting the emotional and cognitive factors with relation to drug abuse that Liu[21]and his colleagues posed[22]. According to the views by Kevin on the role of temptation in reducing or increasing the tendency to narcotics, in case cognitive and behavioral intervention could undermine these roles, the addict will be enabled to identify the harmful effects of substances.

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