

Effects of a period CBT on mental health of homeless women in recovery phase of narcotics addict

Sedigheh Ebrahimi¹, Daryoush Ghasemian¹ and Mina Khosravi^{2*}

- 1- PhD in Clinical Psychology, Department of Psychology, Science and Research Branch, Islamic Azad University, Mazandaran, Iran
- 2- MA student in Clinical Psychology, Department of Psychology, Science and Research Branch, Islamic Azad University, Mazandaran, Iran

Corresponding author: Mina Khosravi

ABSTRACT: Several pharmacological approaches are effective in the treatment of opioid dependence. Extensive research has been conducted on psychosocial interventions as an adjunct to pharmacotherapy in opioid dependence. The aim of the present work was to study the effects of a period Cognitive Behavioral Therapy on mental health of homeless women in recovery of narcotics addict. The study statistical society included all patients who in the spring of 2013 referred to the Sabz-e-Rahae (Marham) addiction treatment camp, Tehran, Iran. After the preliminary survey, 30 persons (15= intervention group and 15=control group) that are eligible to participate in the study were selected. Participants were 20-40 years old, homeless, cessation of opium use (at least 7 days), completed detoxification, lack of psychiatric drug consumption and not participate in other programs. Intervention plan carried out in 10 days (10 sessions) and each session was 1.5 hours. Mental health evaluation with The Symptom Checklist-90-Revised (SCL-90-R) questionnaire. Result showed significance difference for somatization, aggression and paranoid ideation. In general, our result showed that a period of cognitive behavioral therapy led to improvement of mental health in homeless women in recovery of narcotics addict.

Keywords: Mental health, CBT, homeless women, recovery of narcotics addict.

INTRODUCTION

Addiction to opium and heroin imposes heavy costs on individuals, families, and society as a whole. Opiates are a variety of substances that are given their name because they stem from being derived from opium. Opiates bind to an opiate receptor, which causes activation of specific nerve pathways, leading to the effect of the opiate substance. Drug use among women causes the dangers of social exclusion and legal penalties. Narcotics abuse remains a major drug problem in the Iran. A random household survey in rural areas of Northern Iran found opium addiction rate was 69/1000. The number of registered addicts in the same population was however, 11/1000. Thus there was many more opium abusers though not registered. The population in terms of registered addicts seemed to be very small and did not reflect the true picture within the society (Alemi 1978). A survey with a representative sample of 2519 university students found 4.4% reporting ever use of opium and out of this 0.8% reported currently using opium. Opium use was seen predominantly in men and early initiation was significantly associated with life stress (Ahmadi, 2006). But in recent years, women are also involved in drug addiction problems and addiction rates in women increased and an extensive program for addiction treatment and recovery of patients was done. Because addicted women are much more vulnerable than addict's men. A woman with a drug addiction, society can also affect children and their families, when women suffering from drug addiction, her elements of family are very susceptible for the destruction. Opioid dependence per se is associated with a significant reduction in quality of life as meaningful activities become replaced by time spent intoxicated or seeking opioids (Stein, 1998). In addition to

medical comorbidity associated with injecting drug use and violence, illicit opioid users have high rates of psychiatric comorbidity – in particular, depression and post-traumatic stress disorder (Ross, 2005). In Iran among treatment seekers in urban De-addiction center, major drug of abuse was opium (varying between 50 and 97%) (Ahmadi and Motamed, 2003). But, return to use after a period of treatment, is one of the most important issues for doctors and patients to be treated. Among the variables that are important in the treatment of women, is mental health and coping skills. Mental health (MH) is increasingly recognized by the public health community as critical to good health (Danner, 2001). The interconnections between chronic disease, injury, and mental illness (MI) are striking. For example, tobacco use among people diagnosed with a MI condition is twice that of the general population. In addition, the evidence is extensive for associations between MI and chronic diseases, such as cardiovascular disease, diabetes, obesity, asthma, arthritis, epilepsy, and cancer (Taylor and Sherman, 2004). MH and well-being are characterized by the presence of positive affect (e.g., optimism, cheerfulness, and interest), absence of negative affect, and satisfaction with life (Taylor and Sherman, 2004). As mentioned above, decrease of mental health is an unpleasure and dangerous occurrence in addictive women. Based on these findings, treatment and increase of mental health is very important and has vital role for addictive. A wide range of psychosocial interventions has been applied as adjunctive therapy in pharmacological treatments of opioid dependence. The most commonly applied approaches are currently various forms of cognitive behavioural therapy (CBT). CBT has become the leading treatment approach in a variety of psychological disorders including phobias, anxiety, obsessive-compulsive disorders, and there is evidence of its effectiveness in depression and eating disorders (Clark and Fairburn, 1997). Recently CBT has been applied to more severe and/or pervasive disorders including post-traumatic stress disorder, and schizophrenia, with some evidence of efficacy (Marks,1998; Haddock,1998). CBT is now the main treatment approach in alcohol, stimulant (e.g. cocaine, amphetamine) and cannabis dependence (Curran and Drummond, 2005). CBT in addiction is based on the principle that addictions are learned behaviours that are capable of being modified. Cognitive approaches primarily aim to change addictive behaviour through changes in faulty cognitions (e.g. dysfunctional beliefs) that serve to maintain the behaviour, or through the promotion of positive cognitions (e.g. self-efficacy) or motivation to change behaviour (Beck,1993). But interventions have not been studied so far after opium drug treatment. However, the aim of the present work was to study the effects of a period CBT on mental health of homeless women in recovery of narcotics addict.

MATERIALS AND METHODS

This study carried out with pre and post intervention plan. The study statistical society included all patients who in the spring of 2013 referred to the Sabz-e-Rahae (Marham) addiction treatment camp, Tehran, Iran that has ability to attend classes, understand and respond to the questionnaire. After the preliminary survey, 30 persons (15= intervention group and 15=control group) that are eligible to participate in the study were selected. All participants divided to 2 groups, each group was 15 subjects. All of participants certificated the consent form and has these conditions: 20-40 years old, homeless, cessation of opium use (at least 7 days), completed detoxification, lack of psychiatric drug consumption and not participate in other programs. Intervention plan carried out in 10 days (10 sessions) and each session was 1.5 hours.

Instrument

In order to obtain general demographic data we used The General Demographic Questionnaire.

The Symptom Checklist 90 (SCL-90):

is a psychiatric self-report inventory. The 90 items in the questionnaire are scored on a five-point Likert scale, indicating the rate of occurrence of the symptom during the time reference. It is intended to measure symptom intensity on nine different subscales (Derogatis.1973). It has been shown to have a good reliability as its internal consistency is high. Results concerning its validity are controversial; it discriminates patients from normal controls, thus having some rough discriminant validity, but there have been problems in replicating the original dimensions in factor analytical studies. The SCL-90 has been used widely as an outcome measure, as a measure of mental status, and as a screening instrument.

The ninety items of SCL-90-R test assesses the following nine aspects:

- 1- Somatization
- 2- Obsessive-compulsive disorders
- 3- Interpersonal sensitivity
- 4- Depression
- 5- Anxiety

- 6- Aggression
- 7- Phobic anxiety
- 8- Paranoid ideation
- 9- Psychoticism

Derogates in 1983 used internal validity and test-retest reliability to assess the 9 aspects of this test. The internal validity of the SCL-90-R test was satisfactory for nine aspects with the highest and lowest association being for depression (0.90) and psychoticism (0.77), respectively.

Intervention Plan

- Session 1 Symptoms of substance and scale of change
- Session 2 Introduce of cognitive behavioural model and functional analysis
- Session 3 Recovery process
- Session 4 Leadership the temptations, people, places and everything
- Session 5 Create a support system and reference preparation for change
- Session 6 Emotions leadership and Identify of opinion associated with drug
- Session 7 Warning Signs of Return
- Session 8 Dealing with high risk situations
- Session 9 Problem-solving steps
- Session 10 Recovery and maintaining a healthy life

Data Analysis

Data analysis was conducted with descriptive and inference statistics. In descriptive statistics analysis, means and standard deviation and in inference statistics part of the analysis, co variance was used to analyze research hypotheses. All analysis was done by SPSS 16 software.

RESULTS AND DISCUSSION

Descriptive data shown in table 1. For determine the effects of intervention on the profile of mental health subjects, statistical analysis perform at 95% confidence level. Result showed significance difference for somatization, aggression and paranoid ideation. These findings certify that 10 days intervention program led to improvement of mental health in homeless women in recovery of narcotics addict. But other aspect of mental health not showed significance differences (Table 2.).

Table 1. Descriptive result of SCL- 90-R test in two groups

		Intervention group		Control	
		Mean	SD	Mean	SD
Somatization	Pre intervention	17.64	11.11	31.11	6.71
	Post intervention	9.96	7.23	21.88	10.56
Obsessive-compulsive disorder	Pre intervention	12.48	6.38	25	5.13
	Post intervention	10.11	6.8	20.42	6.83
Interpersonal sensitivity	Pre intervention	10.31	7.23	19.37	3.71
	Post intervention	6.88	6.38	14.87	8.41
Depression	Pre intervention	17.53	10.96	32.55	5.15
	Post intervention	9.41	9.08	24.5	9.5
Anxiety	Pre intervention	12.66	9.81	25	3.28
	Post intervention	6.54	6.3	18.71	8.21
Aggression	Pre intervention	4.88	4.76	15.87	4.88
	Post intervention	3.89	3.98	11.75	6.12
Phobic anxiety	Pre intervention	5.41	6.17	14.5	3.98
	Post intervention	4.42	4.84	9.55	5.64
Paranoid ideation	Pre intervention	8.44	5.14	14.66	2.75
	Post intervention	5.04	4.09	12	4.82
Psychoticism	Pre intervention	9.60	6.62	24.25	3.91
	Post intervention	6.84	7.21	18.87	8.79

Table 2. Covariance analysis of SCL- 90-R aspects after intervention

	df	F	Sig	Effectiveness
Somatization	2	6.11	0.017	0.12
Obsessive-compulsive disorder	2	1.41	0.242	0.03
Interpersonal sensitivity	2	0.52	0.475	0.01
Depression	2	2.84	0.099	0.06
Anxiety	2	0.25	0.619	0.01
Aggression	2	4.98	0.031	0.1
Phobic anxiety	2	1.26	0.268	0.03
Paranoid ideation	2	17.15	0.001	0.27
Psychoticism	2	0.02	0.875	0.01

Discussion

Our result showed significance improvement for somatization, aggression and paranoid ideation in intervention group compare to control group. The most comprehensive systematic reviews of the literature on psychosocial treatments for opioid dependence have been carried out by the Cochrane Collaboration. A recent review of stand-alone psychosocial treatments for opiate dependence (Mayet, 2004) found that 'enhanced outreach counselling' and contingency management had significantly better outcomes than standard therapy, but these effects were not sustained in the longer term. Minozz (2005) examined 10 studies of naltrexone for opioid dependence and found that naltrexone maintenance, with or without psychosocial intervention, was more effective than placebo alone in reducing heroin use and incarceration. However, this review did not provide a clear conclusion regarding the additional benefits of psychosocial intervention combined with naltrexone. Amato et al. (2004) examined the effect of psychosocial interventions in the context of opiate detoxification from both methadone and buprenorphine. The results based on 8 studies showed benefits of a variety of psychosocial interventions in terms of completion of treatment, results at follow-up and compliance, but not in terms of heroin use during treatment. In general, our result showed that a period of cognitive behavioral therapy led to improvement of mental health in homeless women in recovery of narcotics addict. These findings are accordance with previous studies.

Often the precise nature of the psychosocial interventions under study, or the context in which the therapy is applied is not clearly defined. So the generalizability of the findings of this review is, in many cases, unclear. Nevertheless, it is the case that some forms of psychosocial intervention have been more extensively studied in a wider variety of clinical settings with a wider range of subject populations.

REFERENCES

- Ahmadi J, Fallahzadeh H, Salimi A, Rahimian M, Salehi V, Khaghani M and Babaebeigi M. 2006. Analysis of opium use by students of medical sciences. *Journal of Clinical Nursing*. 2006 15, 379-86.
- Ahmadi J and Motamed F. 2003. Treatment success rate among Iranian opioid dependents. *Substance Use and Misuse*. 2003, 38,151-63.
- Alemi AA. 1978. The iceberg of opium addiction. An epidemiological survey of opium addiction in a rural community. *Drug and Alcohol Dependence*. 1978, 3, 107-12.
- Amato L, Davoli M, Ferri M, Gowing L and Perucci CA. 2004. Effectiveness of interventions on opiate withdrawal treatment: An overview of systematic reviews. *Drug and Alcohol Dependence*,73, 219-226.
- Beck AT, Wright FD and Newman CF. 1993. *Cognitive Therapy of Substance Abuse*. Guilford Press, NY, USA.
- Clark DM and Fairburn CG. 1997. *Science and practice of cognitive behaviour therapy*. Oxford University Press.
- Curran HV and Drummond C. 2005. State of Science Review: Psychological Treatments for substance misuse and dependence. *Foresight Brain Science, Addiction and Drugs Review*.
- Danner DD, Snowdon DA and Friesen WV. 2001. Positive emotions in early life and longevity: findings from the Nun Study. *J Pers Soc Psychol* 2001;80(5):804-13.
- Derogatis LR, Lipman RS and Covi L. 1973. SCL-90: An outpatient psychiatric rating scale—Preliminary Report. *Psychopharmacol. Bull.* 9, 13-28.
- Haddock G, Slade PD, Bentall RP and Reid D. 1998. A trial examining the long-term effectiveness of focusing and distraction in the management of auditory hallucinations. *British Journal of Medical Psychology*, 71, 339-349. eScholarID:1d18052
- Marks IM, Lovell K, Noshirvani H, Livanou M and Thrasher S. 1998. Treatment of posttraumatic stress disorder by exposure and/or cognitive restructuring. *Archives of General Psychiatry*, 55, 317-325.
- Mayet S, Farrell M, Ferri MMF, Amato L and Davoli M. 2004. Psychosocial treatment for opiate abuse and dependence. *Cochrane Database of Systematic Reviews (Online)*. 4. CD004330.
- Minozzi S, Amato L, Vecchi S, Davoli M, Kirchmayer U and Verster A. 2006. Oral naltrexone maintenance treatment for opioid dependence. *Cochrane Database of Systematic Reviews (Online)*, 2, CD001333.

- Ross J, Teesson M, Darke S, Lynskey M, Ali R, Ritter A and Cooke R. 2005. The characteristics of heroin users entering treatment: findings from the Australian treatment outcome study (ATOS). *Drug and Alcohol Review*. 24(5):411-418.
- Stein MD, Mulvey KP, Plough A and Samet JH. 1998. The functioning and wellbeing of persons who seek treatment for drug and alcohol use. *J Subst Abuse*, 10(1):75-84.
- Taylor SE and Sherman DK. 2004. Positive psychology and health psychology: a fruitful liaison. In: Linley PA, Joseph S. *Positive psychology in practice*. Hoboken (NJ): John Wiley and Sons, Inc; 2004.