

# The Impact of Drug Addicts on Mental Health and Effectiveness of Conservative Treatment on it in Isfahan City

Farzaneh Monjezi<sup>1\*</sup>, Sedighe Ahmadi<sup>2</sup>, Mosen Lali<sup>3</sup>, Kobra Mohammadi<sup>4</sup>

<sup>1</sup>M.A, Counseling advisor, Counseling group, Research & Science, Khuzestan Branch, Islamic Azad University, Khuzestan, Iran, +989131707319

<sup>2</sup> PhD. Department of Counseling, Tehran Allameh University, Tehran, Iran.

<sup>3</sup> PhD, Associate Professor, Department of Clinical psychology, Esfahan cultural University, Esfahan, Iran.

<sup>4</sup> M.A, Family Counseling, Education, 3 area , Ahwaz, Iran.

\*Corresponding author's Email: [fm.esfahani@gmail.com](mailto:fm.esfahani@gmail.com)

## ABSTRACT

The present study aims to investigate the impact of drug addicts on mental health and effectiveness of conservative treatment on it in Isfahan city. The study is quasi- experimental with pre-test and post-test with two groups. The population of the city in the 2014 study was drug addicts. Sample survey of 36 people who were addicted to the drug rehabilitation center in four of the five was referred. Methadone or buprenorphine were treated with the doctor. The instruments used in the questionnaire of 28 questions (GHQ28), respectively. It is completed at the beginning of the pre-test. After three months of treatment, the two groups were assessed. The reliability of the questionnaire was 0.97. In order to perform data analysis and multivariate analysis of variance (MANOVA) dependent t-test was used. The results showed that the pre-test and post-test scores in both groups were significantly different. The type of narcotic substance had significant effects on general health ( $\leq 0.01$ ).

## Original Article:

Received 20 Feb. 2014

Accepted 13 May. 2014

Published 30 May. 2015

## Keywords:

Buprenorphine, Methadone, Addicts, Public Health, Maintenance Treatment

## 1. Introduction

Studies have shown that a high prevalence of substance use disorders and creates a lot of complications that can affect individuals and society. The effects of substance abuse on the individual consumer may be over, the transmission of infectious diseases, and mental health problems named. In most cases associated with other psychiatric disorders such as depression and anxiety. The effects of substance abuse on society include crime, legal problems, and the collapse of the foundation of the family and reduce productivity. (Singh, Debasish, 2004) Important in the treatment of substance-related disorder that the patient remains for a longer period of treatment, her condition improved outcomes and improved performance. It is better to focus on strategies to increase the policy of keeping the patient on the treatment route (Soleimani et al., 2013). Maintenance treatment (methadone and buprenorphine) is one of the main methods of treatment for opiate addiction (opium, heroin, juice, crack), respectively. During treatment, the patient experiences a series of medical treatments and medications and receiving psychotherapy. These drugs are taken by mouth syrup and tablets. And appropriate amounts prescribed constant (Farnam and Farhoodian, 2008).

## 2. Research History

The effectiveness of buprenorphine and methadone maintenance treatment of opioid dependent patients in research studies Habibollah Nataj (2014), Hafezi al (2004). Moqtadaee et al (2013), Abidi Zadegan et al (2008) has been approved. Habibollah search results (2014) found that MMT had no effect on resiliency clients.

While 0.97 to improve emotion regulation strategies of the participating subjects the group can be attributed to the effectiveness of methadone maintenance treatment Hafezi al (2004). The effect of high doses of buprenorphine for opiate detoxification examined. The results showed that high doses of buprenorphine doses much lower than it would be for a day, a few days to be effective. They could easily detox period behind them. Barnett (2009) found that MMT is the most effective way to treat drug abuse. Reduces the injection syringe pollution and prevent AIDS. Research also shows that programs can be an effective treatment for addicts in methadone maintenance treatment for heroin offer. Efficiency and effectiveness of methadone in the treatment of heroin use, psychological and social adjustment of status has been repeatedly confirmed in randomized studies (Marmany et al., 2007). Esteban et al (2003) concluded that the use of MMT, in addition to improved health, increased life expectancy, people are addicted to heroin. In contrast to the results of research Pless et al (2006) showed that methadone with psychiatric disorders, chronic pain and sleep disorders are associated. Rouhani et al (2012) the impact of methadone treatment on quality of life related to the study drug. In this study, quality of life and maintenance therapy in 200 patients before treatment and after one month and six months were compared. The results showed that methadone treatment in five axis questionnaire consisted of walking and moving, personal affairs, the usual activities, pain and physical discomfort, anxiety and depression has improved. The greatest impact on pain and physical discomfort, and anxiety and depression are common activities. If the least impact on gait and

ability to perform activities that have been personalized. And the process of recovery in the first month of growth has been more than six months. Beigi et al (2011), two of methadone and attendance NA to reduce stress and increase their level of optimism in the drug investigation. The results showed the mean scores of the members of NA in the hope of reducing stress were significantly higher than methadone treatment. As a result of active participation in the Association of NA could cause drug tolerance skills effectively and strengthen the will of the people to achieve goals. Parvareh, Kharadmand and Derijani (2010), the effect of conservative treatment and harm reduction counseling centers in Kerman social behavior were investigated. The results showed that MMT reduces risk and improves quality of life are dependent on opiates and hence can be effective in reducing infections such as HIV. MMT reduces joint injections, police and prison, was reduced domestic dispute. This study showed that methadone treatment centers in the social and behavioral counseling can reduce risk behavior and improve quality of life; caused considerable control in the transport of dangerous they are sick like AIDS and hepatitis, and in the community. Farhadinasab and Mani Kashani (2008), the impact of methadone treatment on depression crack addicts in the city of Hamadan. The results showed that after one month of treatment was methadone. Differences in rates of depression before and after treatment were statistically significant. So methadone therapy can reduce the incidence of depression among drug addicts effective.

To respond to the main research hypotheses, the following hypotheses will be studied:

- There were significant differences between methadone and buprenorphine in the pre-test and post-test component of public health in the two treatment groups.
- There is a significant difference between the consumer and public health components of drug maintenance therapy in the pre-test and post-test.

**3. Research methodology**

**3.1- statistical population, sample and sampling**

This research is a quasi-experimental pre-test and post-test to compare the two groups. The population of the study drug maintenance therapy in addiction treatment centers in the city was

in 2014. The first of five randomly selected. Then four refugee centers, Ariana, growth, Sama, who had refused to cooperate were selected. Research beginning from March to the Persian date Khordad 2014. Includes a person addicted to maintenance therapy with one of the four centers in the city were referred. After examination and diagnosis addiction specialist or buprenorphine maintenance treatment of methadone and were done. Of the 36 patients of the sample group (n = 18 methadone maintenance treatment, buprenorphine maintenance treatment = 18) were selected. The initial interview and motivational interviewing was conducted with participants. After the General Health Questionnaire (GHQ28) and Goldberg (1972) is as pre-test questionnaires. Questions and Answers notes were questionnaires were read. Then were treated during the process and the subjects were prescribed the drug for three months. After three months from July to September, the General Health Questionnaire (GHQ28) and Goldberg (1972) as the post answered. Pre-test and post-test data obtained through descriptive statistics mean, standard deviation, frequency, inferential statistics and multivariate analysis of variance (MANOVA), and was dependent T-test analysis. Data analysis was performed using the software Spss20.

**3.2- General Health Questionnaire (GHQ28)**

General Health Questionnaire 28 items by Goldberg and Hiller (1979) and has 4 physical symptoms scale (how people feel about the state of health), scale of anxiety and sleep disorders (reviewed anxiety, tension, insomnia people), Social Functioning Scale (ability to cope with the demands of professional and daily life), depression scale (check the status of mood and suicidal tendencies) measures. The questionnaire consists of 28 items 1 to 7 on the scale of physical symptoms. All questions are multiple choices and were scored from zero to three. Each subscale scores range from zero to 21 and total scores range from zero to 84 scales. At every scale from grade 6 and above the sum of the scores above 22 indicate signs of disease. So, the lower the score is more general health (Attorney, 1998). Three-retest reliability coefficient public health students split half and Cronbach's alpha, respectively 0.70, 0.96 and 0.90 have been reported (Naqvi, 2001). In this study, the Cronbach's alpha reliability coefficient was calculated 0.97.

**Demographic information**

*Table 1: Average age segregated group*

Age	methadone group		Bopronorfin group		Total	
	Number	Percent	Number	Percent	Number	Percent
Between 20-25 years	3	16.7	3	16.7	6	16.7
Between 26-30 years	4	22.2	8	44.4	12	33.3
Between 31- 35 years	2	11.1	3	16.7	5	13.9
Between 36-40 years	2	11.1	1	5.6	3	8.3
Between 41- 45 years	2	11.1	0	0	2	5.6
Between 46 -50 years	3	16.7	2	11.1	5	13.9
Between 51 -55 years and more	2	11.1	1	5.6	3	8.3
Total	18	100.0	18	100.0	36	100.0

*Table 2: Used Materials segregated group*

Group Materials	methadone group		Bopronorfin group		Total	
	Number	Percent	Number	Percent	Number	Percent
Opium	2	11.1	4	22.2	6	16.7
Juice	0	0	2	11.1	2	5.6
Heroin	7	38.9	0	0	7	19.4
Opium and Juice	6	33.3	11	61.1	17	47.2
Opium and Heroin	1	5.6	1	5.6	2	5.6
Heroin and creak	2	11.1	0	0	2	5.6
Total	18	100.0	18	100.0	36	100.0

**4.Results:**

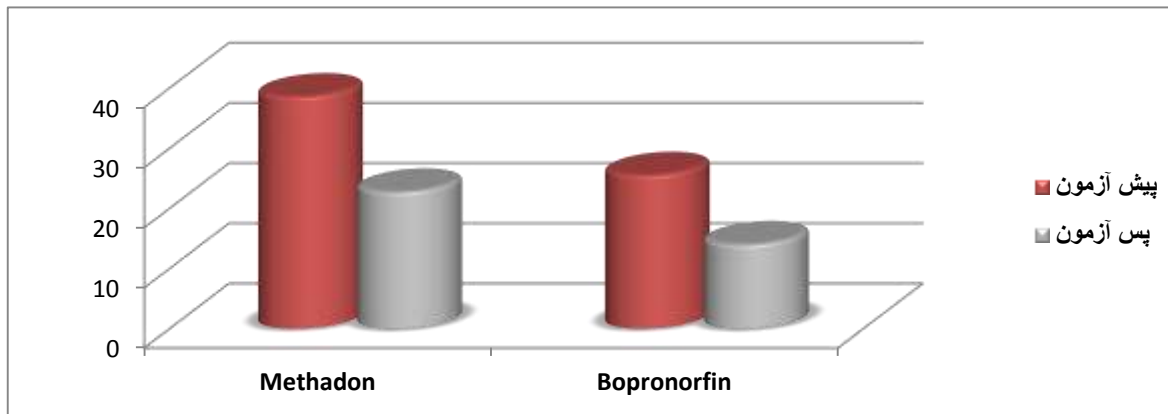
**4.1- descriptive results**

*Table 3: Median and Std. Deviation scores of general health in step pre and post test*

Variable	group	pretest			post test	
		Number	Median	Std. Deviation	Median	Std. Deviation
Somatic symptoms	methadone	18	11.00	5.68	6.33	4.79
	Bopronorfin	18	7.28	4.21	3.67	2.54
anxiety and sleep disorder	methadone	18	9.17	5.79	5.39	4.25
	Bopronorfin	18	6.39	4.91	2.83	2.89
Social Faction	methadone	18	10.17	4.29	7.06	4.70
	Bopronorfin	18	7.61	3.380	5.56	2.87
depression symptoms	methadone	18	8.17	7.16	3.89	3.91
	Bopronorfin	18	4.17	5.04	1.89	3.25
Total General health	methadone	18	38.50	20.32	22.67	14.89
	Bopronorfin	18	25.44	14.94	13.94	9.39

The results in Figure 1 - is shown

Table 3 Mean and standard deviation component of public health in the pre-test and post-test in both groups treated with methadone and buprenorphine are shown.



*Table 4: Median and Std. Deviation, Minimum, Maximum scores of general health segregated Used Materials*

Variable		Number	Median	Std. Deviation	Minimum	Maximum
Opium	pretest	6	32.67	12.35	19.00	49.00
	post test	6	19.00	12.36	11.00	44.00
Juice	pretest	2	10.00	.0000	10.00	10.00
	post test	2	9.50	2.12	8.00	11.00
Heroin	pretest	7	26.57	15.76	7.00	50.00
	post test	7	19.57	15.15	2.00	41.00
Opium and Juice	pretest	17	31.53	19.92	7.00	73.00
	post test	17	14.71	10.34	3.00	41.00
Opium and Heroin	pretest	2	41.00	7.07	36.00	46.00
	post test	2	23.00	5.66	19.00	27.00
Heroin and creak	pretest	2	65.50	10.61	58.00	73.00
	post test	2	46.50	6.36	42.00	51.00

Table 4 The mean, standard deviation, minimum and maximum scores for general health component in the pre-test and post-consumer material type is shown. As is seen in terms of the kind of material is consumed. The general health of the person affected. People who were taking heroin and crack, although they are two of the most significant public health problems were not the greatest.

**4.2-Inferential results**

**Hypothesis 1:** between the consumer and public health components of drug maintenance therapy in the pre-test and post-test, there is a significant difference

Table 5: Results of MANOVA on the average post-consumer material components of the pre-control

Test name	Value	Hypothesis DF	Error DF	F	Sig. (p)	Partial Eta Squared	Observed Power
Pillai's Trace	.658	20.000	104.000	1.024	.442	.164	.709
Wilks' Lambda	.425	20.000	77.232	1.135	.334	.192	.622
Hotelling's Trace	1.162	20.000	86.000	1.249	.237	.225	.803
Roy's Largest Root	.981	5.000	26.000	5.104c	.002	.495	.959

As can be seen in Table 5, a control test was significant only at Roy's largest root test. To indicate that the difference between the groups in terms of the type of material used in at least one of the variables (components of public health), there were no significant differences ( $P = 0.2$ ,  $F = 5.104$ ). The effect or difference equals 0.495. I.e. 0.495% of individual differences in general health component scores of the effects of the substance, Statistical power is equal to 0.959, the possibility of a Type II error is 0.041. The difference in the depression scale in other words, in terms of what kind of material consumption, a component in rates of depression had an impact.

**Hypothesis 2:** between pre-test and post-test component of public health in the two treatment groups, there were significant differences between methadone and buprenorphine.

Table 6: Comparison of pre-test and post-test T-dependent component of public health in the two groups

Variable	group	Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Somatic symptoms	Methadone	4.67	4.365	1.029	2.496	6.837	4.53	17	.000
	Bopronorfin	3.61	3.363	.7927	1.939	5.283	4.55	17	.000
anxiety and sleep disorder	methadone	3.78	4.833	1.139	1.374	6.181	3.32	17	.004
	Bopronorfin	3.56	3.382	.7971	1.874	5.237	4.46	17	.000
Social Faction	methadone	3.11	3.563	.8397	1.339	4.883	3.71	17	.002
	Bopronorfin	2.06	3.152	.7430	.4878	3.623	2.77	17	.013
depression symptoms	methadone	4.28	5.131	1.209	1.726	6.829	3.54	17	.003
	Bopronorfin	2.28	3.177	.7488	.6977	3.858	3.05	17	.007
Total General health	methadone	1.58	13.37	3.152	9.183	22.48	5.02	17	.000
	Bopronorfin	1.15	10.79	2.544	6.132	16.87	4.52	17	.000

Table 6 compares the results of pre-test and post-test in both groups addict component of public health, Buprenorphine treatment shows. As you can see significant value obtained in all components of public health has shown the difference between the pre-test and post-test at the  $P < 0.01$  There is significant. Thus the hypothesis of pre-test and post-test in both addict groups' component of public health, there is a buprenorphine treatment is approved.

**5. Conclusions and suggestions**

The first hypothesis of this study is the effect of the type of drug used and the general health maintenance therapy in the pre-test and post-test study of the city. The results of the analysis showed that the type of material and general health of drug users there are significant differences in maintenance therapy. Thus, the hypothesis ( $P \leq 0.01$ ) was confirmed. What type of material used to say that the person has had an impact on the general health of the individual. People who use heroin and crack, they would suffer more psychological and physical effects. The greatest problems were the result of public health. The results partly with research

Booth (2004), Dastjerdi et al (2010) are consistent. Booth and colleagues demonstrated that the intensity dependence of the treatment affects survival. People with higher dependence severity and mode of administration of intravenous and co-dependency was a matter of survival for the treatment of mood was less severe problems. Dastjerdi and colleagues also showed that the risk behaviors associated with substance use. People who were heroin users had the highest percentage of high-risk behavior. And then the consumers of opium and the sap was crack. The first hypothesis of this study is the effect of the type of drug used and the general health maintenance therapy in the pre-test and post-test study of the city. Thus, the hypothesis ( $P \leq 0.01$ ) was confirmed. What type of material used to say that the person has had an impact on the general health of the individual, people who use heroin and crack, they would suffer more psychological and physical effects. The greatest problems were the result of public health. The results partly with research Booth (2004), Dastjerdi et al (2010) are consistent.

The second hypothesis of the study, the pre-test and post-test scores of public health component in treatment groups, methadone and buprenorphine compared. The results of the analysis showed

## UCT Journal of Social Sciences and Humanities Research

Between the pre-test and post-test scores of public health component in both treatment groups, there were significant differences between methadone and buprenorphine. Thus, the hypothesis ( $P \leq 0.01$ ) was confirmed. The results partly with research and Howard (2006), Aref Nasab et al (2007), Pournaghash Tehrani (2007) are consistent. Sufi lineage and colleagues (2007), the effect of MMT on mental health and addiction to opium and heroin were studied for six months. The results showed that the pre-test scores and all levels of management (the first six months) on all subscales and total scores were significantly different GHQ. Which represents mental health treatment is from the first month of treatment and maintained until the end of treatment results. The results of this study, shows the use of MMT in the treatment of opioid dependence and its positive impact on mental health. Pournaghash Tehrani (2007), methadone maintenance treatment and detoxification methods reducing anxiety and depression compared drug-dependent persons. Of the 45-day detoxification and maintenance treatment were treated for 90 days. The results showed that both methods of detoxification and maintenance treatment caused a significant decrease in anxiety and depression was related to drugs. However, there is no significant difference between maintenance and detoxification. In other words, the time had no effect. Lack of follow-up results are not homogeneous groups, small sample size limits the number of study. Recommended to researchers and scholars repeat the study with a larger number and also in terms of duration of treatment, follow-up tests is not a homogenous consumer material. Also with regard to the efficacy of buprenorphine and methadone maintenance treatment centers addiction treatment is recommended and encouraged.

**Acknowledgments**

The work of doctors and consultants working in the addiction treatment centers, migrant, Ariana, growth, Sama is grateful for the completed questionnaire.

**References:**

[1]. Singh J, Debasish B.( 2004). Ultrarapid opioid detoxification: Current status and controversies. *J Postgrad Med* .50(3): 227-32.

[2]. Soleimani, R., Najafi, K, Allahi, M, Sharghi, A. (2013). Prevalence of anxiety and depression in patients treated with methadone. *Guilan University of Medical Sciences*. Volume 22, Number 87: 69- 64.

[3]. Hafezi, M., Asadi, Seyed Mohammad, Mohammad Razzaghi, Oman, Makri, A (2004). High doses of buprenorphine in opiate detoxification in one day: a clinical trial. *Journal of thought and behavior*. Tenth year, 3: 202-195.

[4]. Farnam, Robert; Farhoodian, A. (2008). Meet with methadone and buprenorphine: A Guide for Families. Printing, Isfahan University of Medical Sciences.

[5]. Habibollah Nataj, Leila (2014). Effectiveness of substance abuse treatment with methadone (MMT) to improve emotion regulation strategies and resiliency drug treatment seekers. The first congress of Health Psychology. 6.

[6]. Moqtadaee, Kamal; Salehi, M., Afshar, Hamid, Taslimi, M., Abrahami, Asiya (2013). The executive functions among heroin abusers treated with methadone norm. *Journal of Behavioral Sciences*, 11 (3): 207- 196.

[7]. Barnett PG. (2009). Comparison of costs and utilization among buprenorphine and methadone patients. 104: 982-992.

[8]. Maremmanni, I., Pani, P. P., Pacini, M. & Perugi, G. (2007). Substance use and quality of life over 12 months among buprenorphin maintenance-treated and methadone maintenance-treated heroin addicted patients. *Journal of substance abuse treatment*, 33, 41-48.

[9]. Peles, E., Schreiber, S. & Adelson, M. (2006). Variables associated with perceived sleep disorders in methadone maintenance treatment (MMT) patients. *Drug and Alcohol Dependence*, 82, 103-110.

[10]. Beigi, Ali-Mohammadi Far, MA; Farahani, MN, Mohammad Khani, S. (2011). Stress and coping styles of hope among the members of Narcotics Anonymous and maintenance therapy. *Journal of Substance Abuse Addiction Studies*. Fifth Year, No. 20: 72- 55.

[11]. Parvareh, N., Kharadmand, A., Derijani, M. (2010). Effectiveness of harm reduction in opioid dependent patients in methadone maintenance treatment centers conducts community consultation. *Addiction and Health Journal*, Volume 2 (2: 1): 29-26.

[12]. Farhadi Nasab, A., Mani Kashani, KH (2008). The effect of crack addicts methadone therapy on depression in. *Journal of medical sciences*. Volume 16 (2): 50- 44.

[13]. Abidi Zadegan, A., Moradi, A., Farnam, Robert (2008). Assessment of executive functions in patients undergoing methadone treatment. Recently in the journal *Cognitive Science*, 10 (3): 75 -81.

[14]. Esteban, J., Gimenez, C., Barril, J., Aragones, A., Climent, J. M., & de la Cruz, P. (2003). Survival study of opioid addiction in relation to its adherence to methadone maintenance treatment. *Drug Alcohol Depend*, 70 (2), 193–200.

[15]. Rouhani, S., Salariyeh, Iraj; Abedi, Saleh, Kheirkhah, Farzan (2012). Effect of methadone treatment on quality of life of people dependent on drugs. *Journal of Mazandaran University of Medical Sciences*, Volume 23, Number 87: 55-47.