



The effectiveness of methadone maintenance treatment on personality disorders' improvement of addict in prison

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Abstract

The aim of present study was effectiveness of maintenance treatment of methadone on personality disorders' improvement of addict people in prison of Golpayegan City in 2014. This study was conducted by semi-experimental method in pre-test and post-test on control group. Sample includes 30 prisoner who were addicted, and they divided into 2 groups by randomized sampling, experimental group (15 people) and control group (15 people). Experimental group was under treatment by methadone for 2 months, but control group wasn't treated and was waiting for taking methadone. In order to collect data, it was used SCL90 questionnaire. Findings: it was shown that average of total score of mental health in experimental group was better than control group. And scores of paranoid thoughts, psychosis, obsessive – obligatory, interpersonal sensitivity in experimental group is better than control group, meaningfully. Conclusion: Maintenance treatment is used as one of the detoxification methods to release drugs and reduce damages to prisoners. Methadone usage decreases behavioral and personality disorders by changing life style and person thoughts.

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Introduction

Addiction is considered as one of the major social deviations, which is basis for many social problems. In medical definition of addiction that is on the basis of symptomatology, is said; "addiction is a clinical syndrome with behavioral, cognitive and physiological demonstration that causes addicted person prefer taking abuse to other behaviors." (Sadook, 2003). Addiction in people with antisocial mental personality traits is observed more. In clinical and operational definition that the world health organization has offered addiction is an infectious illness that causes physical, mental and moral cheat and during it, social relations is hampered. Out of all of these definitions it can be said that addiction is a condition in which person is dependant either physically or mentally to a substance and taking abuse becomes necessary and is not able to quit it. His/her tolerance against taking abuse decreases gradually – (Ghomri – Rodtami – Nader, Il Beigi – Ghaleh Nei – 2013)

Prison environment for many people is considered as an opportunity to get familiar with offenses such as addition synchronized incidence of mental diseases and narcotic disorders are very common. Disorders concerning addiction are mental needs caused by the lack of special substance in the person's body.

The most important feature of it is mental and physical attachment. (Bayanzadeh and partners. 2007).

One of the addiction consequences is creating psychiatry nervous symbols. One of the main psychiatry recognitions that are in relation with taking abuse is personality disorders. Personality is applied about physical excitatory and social features that make person different from others. These features refer to permanent proper ties during time and haven't had much change from one situation to another situation and also they allude to person entity. Personality feathers are factors of knowing reasons of inclination to dangerous behaviors like

smoking taking abuse, addiction to alcohol and unsafe sexual relation. From psychological view, people who have bad usage of substances, have a vulnerable personality.

Personality feathers of addiction people are not only because of abuse substances, but these people be for addiction has had many personality and mental disorder that have increased after addiction. So the problem is not only abuse, but there is mutual relation between addiction personality and addiction.

Personality structure of some people is more agreeable for being addicted. (rezvan far -2007).

Personality disorders: these are a group of mental or psychological conditions that are not disease, but they are behavioral manners.

Feathers of these disorders contain behavior sample somewhat stable, unfixable and in compatible and result in problems to get in contact with others, and problems about law and their job.

These people think their behavior is natural and correct.

Personality disorder means incompatible and inflexible behaviors against situations and environment.

These disorders are paranoia, obsessed- obligatory interpersonal sensitivity psychosis. We can extend factors of personality disorders to biological reasons.

Genetic has a part in these disorders. it seems the role of elementary environment is very important. (Yekhbil 2010)

Paranoia personality disorder

It is chronic and prevalent and its specification is behavioral, functional and intellectual destructive patterns. These people fear crowded places and maybe become depressed. Psychosis is a group of

abnormal behaviors that contained legal term of madness. Madness is condition of a person who isn't able control herself / himself and maybe is dangerous for other people Interpersonal sensitivity; it contains insufficiency and person humility specially in comparison with others. Humility, lack of calmness and not be relax in relation to other people are symbols of this sensitivity. (Rangani-2006)

Obsessive thoughts: are opinions and imaginations that repeatedly come to the ill person mind and these thoughts causing chaotic, continuously and sick person tries unsuccessfully to encounter them. The main hostility of these obsessive thoughts disorder is obligatory and recurring actions and in point of view of patient, they are undesirable, obligatory, meaningless and foolish.

With regards to increasingspread of abuse between societies and taking abuse in prisons and dangerous behaviors like spreading HIV through consumption of abuse in prisons ; it is a serious problem for every society, and because psychiatry disorders beside addiction have destructive effects on physical health, psychological health, social and family health and also on social relations problems and results of this disease will cause enormous cost for governments therefore pay attention to addiction treat is necessary. (Lotfi kashani -2013)

Prevalent treatments for rescuing from addiction are medication and fast or superfast poison clearing and treatment with methadone and Buprenorphine.

The most important cure is methadone treatment all over the world. This treatment from 1964, always have had positive results, Methadone is a pure agonist and it has long effect and is m narcotic receiver. It is also from substances like opium and it is used iv curing heroin, codeine and morphine. (vazirian and partners -2005).

Methadone treatment has three important benefits:

1. Decreasing symbols of anxiety and depression.

2. Improvement bodily and mental condition of patient.

3. Improvement life quality

In fact, when there isn't a sign of mental disorder, addiction person can distinguish between nervous attacks from psychological disorder and nervous attacks from inclination to taking abuse: there for finds more motivation for leaving addiction and has less fear.

Methadone is replacing drug for abuse especially heroin, and is used in most of medicinal centers, also has long effect and this support cure is the best way for preventing HIV. This maintenance treatment decreases social damages and crime intensively and damage to smuggling abuse. (Karim Nejad and Partners- 2014)

Pictorial studies of brain show neurobiological disorders of taking abuse can remain for a long time. Block or intersecting tolerance is another important feather of these drugs.

Methadone blocks the effect of abuse like heroin in a normal dose and decreases possibility overdose. Because tolerance against this drug remains constant patient people even for 20 years use constant dose. Finally methadone as a drug has less problems. (Rezvan far 1989).

It should be considered the same goals of leaving abuse for understanding of methadone treatment:

1. Decreasing or elimination addiction symbols.
2. Decreasing or elimination severs inclination to abuse.
3. Prevention of regression.
4. To return physiological activity level that has been exterminated by abuse.
5. Decreasing crimes and improving social beneficial behaviors and improving psychological health.

This treatment decreases taking heroin and death because of taking it, also decreases crimes out of this

substance. It helps to patient to increase social conformity and social health. Furthermore prevents from prevalence of Infectious diseases by injection. The main effect is decreasing inclination to abuse, prevention leaving syndrome and inhibition euphoria condition that is a result of taking heroin. (Klason, 2008).

Purpose of maintenance treatment program with methadone in prison is reduction damage, no complete Quitting. Also, in this manner is tried to decrease physical, mental, and social effects of taking abuse. Methadone treatment by changing life style of patients, improves life skills and Communicative skills of addicted person. And this is a conclusion of quitting and avoiding addiction

That caused increasing psychological and physical health. (Yarmohamadi Vassel- Bayat- Tavakoli- Farhoodian- Farhadi- Sharifi- 2013) the purpose of this study was effect of methadone treatment on addiction people in Golpayegan jail, in 2014.

Main objective

The main of this study is to specify the effect of maintenance treatment of methadone on the state of imprisoned addicts' health.

Other aims of this study are:

1. To specify the effect of maintenance treatment of methadone on paranoid thought of imprisoned addicts
2. To specify the effect of maintenance treatment of methadone on psychotic reaction.
3. To specify the effect of maintenance treatment of methadone on interpersonal sensitivity
4. To specify the effect of maintenance treatment of methadone on the amount of obligatory obsession in addicts.

Review of literature

Paranoid thoughts in addicted people is interpreted as distrust and suspicion towards others so that their intentions are considered too be evil and biased and have excessive suspicious features without sufficient basis believing that others have exploited or deceived them with no specific reason. They suspect their friends' honesty and loyalty and due to their fear they don't tend to trust people. Ordinary sayings or incidents are usually interpreted by them as something threatening and they cannot deal with others' mistakes or faults easily.

In biological approach genes are involved in this kind of disorder and it seems that the role of in which condition a person is brought up is remarkable. The present study is corresponding the ones carried out by Mahmoudi and colleagues (2013), Yarmohamadi Asl and colleagues (2013), Arefnasab and colleagues (2007), Ghamari and colleagues (2009), Shahmoradi (2009), Bayanzadeh and colleagues (2007), Sahebi and colleagues (2009), Ahmadvand and colleagues (2006), Mosas (2013), Lewinson and colleagues (1997), Gusa and colleagues (2001), Fitcher (2001).

Sensitivity disorder in interpersonal relationships is categorized in adaptive disorder which emphasizes on the intense inefficiency and inferiority especially in comparison with others. Underestimating you, sense of not being calm, discomfort and noticeable sadness in relationship with others are the demonstrations of this aspect of this issue. Other questions in this field of test include sensitivity, shyness, inferiority and the sense of not being understood by others. Maintenance methadone treatment can improve life skills as well as communicative skills through changing lifestyle. It is caused by being away from addiction which rises physical and psychological health. Present study is corresponding the ones carried out by Mahmoudi and colleagues (2013), Yarmohamadi Asl and colleagues (2013), Arefnasab and colleagues (2007), Ghamari and colleagues (2010), Shahmoradi (2010), Bayanzadeh and colleagues (2007), Sahebi and colleagues (2010), Ahmadvand and colleagues

(2006), Mosas (2013), Lewinson and colleagues (1997), Gusa and colleagues (2001), Fitcher (2001).

Psychosis occurs as a result of psychological diseases in neural system caused by physical diseases such as strokes. In some cases concussions are observed except neural system, endocrine system controls body's actions. This system has some glands which release hormones. So these two systems are related to each other and this connection is effective on health. Disorders in endocrine system have plenty of disadvantages on behavior and health.

People with psychosis lose exposure to reality. Personality structure is destructed and they lack time, place orientation. and the addicted people with hallucination have weird behavior and inappropriate emotional reactions and finally get infected to intense mental disorders.

Obsessive disorders are categorized in depression disorders which in biological approach, it is due to disorders in insufficient serotonin addiction which can rise these disorders. Some studies in which cerebral images of people with obsession and the other obsessive addiction taking drugs were compared revealed that respectively the second d group have less obsessive actions but there is no relations to genes in this case through Nepharine and serotonin and Gaba as neurotic transfer or decrease the rate of tension in people as a result, they feel more calm with less tension.

Material and methods

Sample society and method of sampling

This research is semi-experimental that uses accidental pre-test and post-test plans within control group. People of this research were all of the addicted people in Golpayegan prison. Criteria for choosing these patients were:

1. Period of their jailing not be less than six months.
2. Having at least one year addiction.
3. Depend on abuse, not for amusement.

4. Minimum treatment with methadone one day and maximum 6 months.

5. Minimum conviction be more than 6 months so can take part at all of treatments ways.

6. Elementary education or higher.

There is manner of sample assignment and samples were divided to two groups with using accidental assignment, these two groups were called ((experiment and control groups)) or ((experimental and control groups)). With attention to criteria there were 15 people in every group. In general there were 30 people.

At first two groups were tested by psychological health test (SCL- 90) that was carried by clinical psychologist theme, was prescribed two months taking methadone, 40-80 milligram daily to experimental groups. After 2 months, these patients were evaluated again by (SCL-90) test, and for analyzing conclusions was used covariance analysis.

Tool

Psychological health questionnaire (SCL90)

This test is contained 90 questions to evaluate psychological sign that is recorded by replier. Initial form was introduced by Derogatis LR, Lipman RS, Covi L (1973) and on the basis of clinical experiences and analyzing psychometric inquiries was reviewed and finally was prepared the last form.

Answer to the questions is determined in a 5 degrees scale of discomfort that are form (any=code 0) to (severity=code 4). This test has 90 articles. These 90 articles contain 9 different dimensions:

Physical pains, obsession and obligation, sensitivity in counteract behavior, depression, anxiety, aggression, phobia, paranoia thoughts, and psychosis.

There are seven additional questions that are not included between these nine dimensions.

For final consideration has been used from repeated test and internal stability. According to results that have acquired from alpha and Curd Richardson coefficients; the most correlation for none dimensions is relative to depression (%9), and the least is relative to psychosis with %77, and this shows that all of the indexes were satisfactory. So questionnaire has a high constancy. Bagheri yazdi and partners reported its constancy coefficient by repeated test was %97 and sensitivity, feather and efficiency respectively were %94, %98, %96.

Findings

Conclusions showed that %13.3 (4people) were 20-25 years old, %40 (12 people) were 25-30 years old, %20 (6 people) were 30-35 years old and %26.7 (8 people) were 35 years old and higher. In other words, the most percent of repliers were 25-30.

40 percent (12 people) had elementary education, 46.7 percent had junior education (14 people), and 13.3 percent (4 people) were diplomat. The most percent of repliers were abuse between 1-5 years, 30 percent (9 people) between 6-10 and 16.7 percent (5 people) were taking abuse between 11-15 years and were addicted.

Prison period of 60 percent (18 people) was from 1 to 8 years, 40 percent (12people) were in prison for eight years or more.

3.3 percent (1person) had **Cannabis** (hashish) and opium addiction, 6.7 percent (2 people) were taking heroin, 16.7 percent (5 people) were taking heroin and **Crack**, 6.7 percent (2 people) were consuming, heroin and **Cannabis** (hashish), 3.3 percent (1 person) were crack and **Cannabis** (hashish) addict, 10 percent (3 people) were crack addict, 6.7 percent (2 people) were consuming **Cannabis** (hashish), 16.7 percent (5 people) were taking opium, 6.7 percent (2 people) were taking opium and heroin, 10 percent (3 people) were consuming opium and methamphetamine, 10 percent (3people) were consuming all of these abuse.

As you can see from the tables 1, 2, 3 (appendix), treatment with methadone has decreased paranoia thoughts symbols, psychosis, obsessive, and obligation, inters personal sensitivity and also has improved condition of mental health.

Table 1. For considering difference between personality disorders between 2 groups (experimental and control) was used from covariance analysis that was single variable.

Standard deviation	Average	Type of test	
3.11	10.69	Pretest	Paranoia
4.07	6.4	Posttest	
4.73	10.25	Pretest	Interpersonal Sensitivity
3.27	6.19	Posttest	
5.78	15.9	Pretest	Obsessive-compulsive
4.30	7.6	Posttest	
4.36	13.65	Pretest	Psychosis
4.15	6.7	Posttest	
0.620	1.92	Pretest	GSI
0.241	0.54	Posttest	

Table 2. Descriptive statistics of personality disorders in type test of control.

Standard deviation	Average	Type of test	
4.44	9.15	Pretest	Paranoia
4.50	8.25	Posttest	
5.37	13.48	Pretest	Interpersonal Sensitivity
5.19	12.32	Posttest	
5.04	15.21	Pretest	Obsessive-compulsive
6.15	13.65	Posttest	
6.15	14.89	Pretest	Psychosis
4.74	13.46	Posttest	
0.49	1.52	Pretest	GSI
0.47	1.39	Posttest	

Table 3. Results of covariance analysis for considering effect of methadone treatment on improvement of personality disorders.

Size effect	Significant	Statistics f	Variables
0.487	0000	20.22	Paranoia
0.572	0003	78021	Psychosis
0.308	0001	20.14	Obsessive-compulsive
0.28	0000	11.54	Interpersonal Sensitivity
0.601	0002	80.96	GSI

Discussion and results

The purpose of this study was effect of maintenance treatment with methadone on personality disorders of addicted people in prison. Result showed that there was difference between effect of this method over people of control and experimental groups, so the addicted people who were under this treatment had better condition.

Conclusions showed that methadone treatment decreases paranoia thoughts, and psychosis which is in conformity with discoveries of Yarmohamadi Vassel and colleagues (2007) Mousas (2013). Result of this research revealed that methadone treatment has had effect on decreasing symbols of obsession obligation, inter personal sensitivity and this conclusion has conformity with discoveries of Yarmohamadi Vassel and colleagues (2013), Shahmoradi (2010), fisher (2004). In general results revealed that methadone treatment has had an important effect on psychological health of addicted people and is in conformity with Mahmoudi and colleagues (2013), Yarmohamadi Vassel and colleagues (2013) Levinson and colleague (1997), Gousap and colleagues (2001) discoveries.

Excitement and complex behaviors resulted from brain and nervous path toward brain through shocked spinal-cord, are transformed to other areas. Nervous transformers have some types like acetyl Collin, Gama acid aminoboutiric (GABA), serotonin, Duplin,

Norepinephrine. Abnormalities in addition to nervous system, also endocrine system controls body activities. Endocrine system has composed of some tumor that oozes hormones. Therefore nervous system and endocrine system are in relation to each other, and this relation has effect on psychological health and psychosis. Disorder in endocrine system can has expansive problems, for example additional hormone of thyroid caused anxiety and extreme sensitivity. Genetic effects are one other biological sense and can cause cancer, basic mental diseases or other complicated diseases. Treatments from biological view incline to decrease or eliminate signs of disorders.

Conclusion

Methadone helps to patient to give up taking abuse and prepare possibility for better life. It decreases pain and helps to patient's energy and movement power.

Methadone not only decreases or disrupts absolutely taking abuse, but also is caused psychological health and decreasing social state of addicted person is turned to a patient, and patient doesn't suffer during treatment and has psychological and physical calmness same consuming time, and can be trans formed to a creative person. After consuming methadone, they expressed that have better mental and spiritual condition and also have been accepted by their family and others, it is recommended to psychiatrists to pay more attention for choosing antagonist drugs beside dopamine, serotonin as main prescription or compound treatment with other drugs. There was some limitation in this study, such as:

1. This research was performed in Golpayegan jail.
2. And we can't generalize its result to other places with different conditions.
3. And because of short time, there wasn't possibility for performing follow-up period.

Suggestions

It was suggested that such study was performed by continuous following, doing home assignment under

relatives of addicted and in other related centers for addicted.

In order to generalize results to larger societies, it's necessary to do studies like this on different age range and also women.

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Resources

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