

Analyzing Maintenance Therapy (MMT) on change of behavior (Drug dependence) and scale-down Risky behavior in self-report addicts to welfare centers

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Abstract

The aim of this study was to study effectiveness methadone maintenance therapy (MMT) and change behavior and scale-down Risky behaviors in self-report addicts to Mashhad welfare organization. Research method was semi-experimental, in case of pre/post test. Subject were 375 people in range of age (16-63) years old with available sampling method, were selected before starting MMT, (MAP) Maudsley addiction profile questionnaire are represented. Then, the samples during the 6 months collected methadone and after and end treatment, above questionnaire again completed by samples. Data after collection, evaluated using by correlation T-test the results indicated, MMT addicts cause be scale-down Risky behaviors and physical health and promote social-personal self-report addicts performance.

Keywords: MMT, (Drug Dependence), Risky Behaviors (AIDS, Hepatitis)

The 3rd millennium A.D in case of begin that human community encounter with numerous problem in different sections, such as: social changes and wakes of social-psycho. One of the most important socio-psycho effects in present era is extension drugs and appear related disorders (Mardelan & Lascoes, 2006).

Today expressions such as : Addiction drug abuse, opium, hashish, Are common and general expressions, that almost all people direct/indirect to this pointed? certainly, Vast application the expressions by people, could not be recognize more exactly, but can be predict, that increase and it's prevalence, every day more. with realistic view to drug abuse we simple understand drug abuse existed centuries, and now have no country in the world from drug prevalence be safe.

In 1964 World Health organization concluded, that addiction term is no longer scientific term and instead of recommendation drug dependence. However addiction word still gain currency among popular.

And used as follow:

- 1) Drug seeking
- 2) Withdrawal disability in result of mental and physical dependence of drugs
- 3) mental-physical health reduction in result of drug abuse

(Kaplan, Sadock, 1989).

Drugs are including type of different chemical component that can be physiologic effects in physiological, produce the great changes in behaviors (Shahidi,1996).The drug in terminology called psychoactive. The most drugs have side effects on brain, but although existence different, often also have similar together the configurations were:

- 1-consumption method
- 2-drug ability in entry to brain
- 3-drug interaction with nervous system
- 4-drug neutrality

That, in general drugs procedure and its duration role an important play. Drug abuse is the problem. Worldwide, and long-times engaged human, economical, political, social, cultural, physical. And effects involved irreparable and it is the problem that in its pathology contributed different factors. So, for overcome the difficulties need to all-comprehensive fight (Hajipour and Ansari, 2003).

In generality maintenance therapy (intervention) is a method for creating change of behavior, feeling (Fiers, 2004). Intervention (maintenance therapy) is two methods:

- 1-pharmacological therapy
- 2-psychological therapy

At the present, pharmacological therapies for addiction typically used for detoxification control from psychoactive drugs, and the basic purpose help to patient for remaining during the withdrawal for applying other treatments (gold &Miller,1995).

That in pharmacological therapies, exist MMT for reduction risky behaviors about injection addicts was used. methadone belong to OPIUM family. the most utilization in dependence treatment is to opium family such as Heroin codeine and morphine. Methadone is an artificial drug. It is produce from chemical in lab. other substances are natural such as morphine ,.....Heroin is a morphine like and processed by chemical method (Center of addiction and mental health,2002)(Dyaceral-morphin) methadone agonist long-term is recipient and like as property is the same as morphine. With oral use have anti-pain, syndrome alleviative drugs withdrawal in addicts and in reported consumption, effect continuous was existed. The medicine more than 30 years successful in addiction treatment was applied. (Blum, 1984)

More people medicated methadone, for drug dependence under remedied, are people deep attached to illegal drugs such as Heroin. Methadone for people, that regularly used methadone hel (pseudo-opium) and or contaminated to HIV/Hepatitis C medicated .Until help their health and infection risk distribution reduced by using of common injection.

Methadone therapy cause be immunity to infection (Center for addiction and mental health, 2002).

Prevention of Risky behaviors is the most important strategy for AID extension.

Recent tendencies in ground of preventive aspects for Health level promotion cause that researches focus on risky behaviors among special population recognition exposed to risk, was oriented (Wagner, 2001).

Risky groups are among prostitute, addicts, adults with non-controlled behaviors, garrisons people and that recognition the people is from ministry of health responsibilities in this people, exist behaviors that cause be transfer infectious disease, such as AIDS, hepatic and other haematic disease.

The behaviors are such as use of common injection (Ampoule) and common syringe among injections addicts, sexual relations without condom....The change gradual occurred and need to energy and time spend, more primary change process happen internal, and the person weigh up that if, the change be worth time and effort cost or no, special design apply for change (Mardelan & Lawscoez,2006).

In the article, the object of change of behaviors is drug dependence U.S.A psychiatry Association (1994), the symptom, consider on based of symptomatology , behavioral, physiological were recognized (Lawson, G.W, Lawson, A.W, & Rivers 2007).

Addictive drug have side effect on person, that in result of use for exposed to it's direct, created. The side effect can be long/short term. Short-term effect include: confidence feeling temporal and loss skills. Long-term effects usually with body destruction, such as lung, liver...

In addition of direct effects, it's use have other side effects they have been demonstrated in job and family position. In family position, there are family problems such as: violence child-oppressive, wife violence, children neglect education problems, disorders, divorce

In job position, the person affected with social-economical falling, that partly became unemployed and occurred unpleasant events (Ghadiri, 2001). So in MMT, it is assume can be change behaviors and increase performance.

The question propounded in the article, that is; Can MMT change behavior and scale-down risky behaviors and increase socio-personal performance in addicts?

However, highly effective treatments organized by authors, and according to clinical results, pharmacological therapies for addiction was applied. However, studies result that acted for addiction by internal/external Academic centers, not only for remediated patients but, refer to study concluding.

singel el at) 1997 study in research to investigate related cost using by drug injection and drug dependence, shown that cost illegal drug approximate 1.3 million \$ estimated that is 10% relate to drug used.

In longevity also treatment cost for a person with HIV estimated 153000\$ that shown more use drug to form of injection and cause be HIV distributed in worldwide.

Leverenty el at 1998, concluded, drug abuse cause be behavioral characteristic in addicts (Farhdi, 2003).

Resulted that programming concerning syringe and ampoule can be achieve for HIV reduction epidemic.

In the course of study analyzed by Rostami(2003) he concluded that present articles about fast detoxification for correct judgment and certainty make-decision is insufficient, and it is necessary more studies applied.(Imani el at)2004 in study he found relationship between behavioral characteristic and serum prevalence scale Hepatitis(B,C) and HIV virus in Share Kord injection addicts and concluded that injection addicts relation to normal community have more suffering to this infections and the most important risk factor suffering from the infections is use of syringe common and injection addiction.

(Alauy el at) 2006 also in another study, found relationship between hepatitis serum prevalence and injection addiction for clients to Ahwaz city rehabilitation centers. The study indicated that HIV probably transfers by blood. So, blood donor screening can be prevent from epidemic disease such as hepatitis ...

(Mohamad) and his colleagues (2005) concluded that hepatitis B is one of carrier virus hepatitis by blood that in prisoners is more than public.

In research suggested by (Roseno, el at 2000), they found that used pharmacological therapy and intervention, drug abuse was reduced, that of course in addicts obtained the fight against addiction, drug was different meaningful.

In the study suggested by (Nourani Poor, 2004) he concluded that the addicts more exposed to change of attitudes and according to the study, the most effect methods investigated for them.

(Ehasanmanesh & Karimi 1992) in the study with view background of obtained studies for addiction, concluded that rate of drug abuse in different provinces vary 2.5% of all population. With due attention to one of the basic problems of public Hygienic that people are encountered, is expansion drug abuse MMT either to form of detoxification or to form of preservation can be help for problem resolve. And also cause be prevention of transfer HIV/Hepatitis supporting present hypothesis, illustrative, that MMT cause be scale-down risky behaviors and drug dependence for addicts.

Research Hypothesis

Basic hypothesis:

H₁: MMT cause be scale-down risk behaviors in self-report addicts.

H₂: MMT cause be change of behavior (drug dependence) in self-report addicts.

Sub hypothesis:

MMT cause be increase mental, physical health in self-report addicts.

MMT cause be increase socio-personal performance in self-report addicts.

Method

The present study, by reason of samples selection randomly is a semi-experimental planning from type of post/pre test. In the plan, MMT as a independent variable and change of behavior and scale-down risky behaviors for addicts considered as a dependent variable.

Statistical population and sample the present study statistical population includes all people call to Mashhad Welfare Organization for withdrawal. The statistical sample include 375 samples that who had experienced addiction and sampling based on aim and selected by using Morgan table.

Map=Maudsley Addiction Profile

The profile was short and abstract and interviewer analyzed by distributed questionnaire, the measurements done in 4 sections:

1-Drug abuse

2-Risky behaviors

3-Mental and physical health

4-Social-personal (individual) performance

The scale was such valid scale and it's psychometric characteristic satisfactory was reported. ($\alpha=81\%$), ($V=70\%$)

Permanent the scale with cut in two equal parts calculated using by speirmann formula.

($\alpha=0.84$) (Wartenberg A.A 2005).

The research data obtained by MAP complete questionnaire by pre/ post test

In the study, more ever using of cumulative tables and descriptive correlation diagrams, central trend index and dispersion, average and standard deviation was used also for response to study hypothesis and also for analyzing statistical significance of each correlation and average, used T-test and pre/post test for groups.

Methodology

This methodology as follow:

Among the clients call to public/private clinics for withdrawal, and in MMT method participated 375 persons were selected.

To samples before applying independent variable, represent MAP, then MMT to form of oral for 6 months medicated for addicts. After 6 months (during treatment), rate of change behavior (behaviors characteristic) and performance analyzed by above questionnaire, until in comparison with pre/post test marks, influencing method was estimated.

Table1
Average, standard Deviation and standard Errors

Indices	Phase	Number	Average	Standard deviation	Standard errors
The mark for drug injection times	Pre test	173	5.2869	11.30970	0.58559
	Post test	173	0.2198	1.79154	0.09276
The mark for common injection tools	Pre test	109	0.0804	0.68703	0.03557
	Post test	109	0.0107	0.10314	0.00534
The mark for sexual relations by condom	Pre test	263	4.2453	6.68813	0.34537
	Post test	263	5.9520	8000620	0.41344
The mark for drug dependence	Pre test	375	1.99	1.823	0.139
	Post test	375	1.1590	1.03536	0.7872
The mark for physical problems	Pre test	375	17.3307	4.73665	0.24460
	Post test	375	9.3733	3.03797	0.15688
The mark for mental problems	Pre test	375	24.1947	6.06312	0.31310
	Post test	375	12.3760	3.67022	0.18953
The mark for family problems	Pre test	375	5.6133	7.29935	0.37694
	Post test	375	2.3067	3.41815	0.17651
The mark for job performance	Pre test	338	9.36	11.824	0.643
	Post test	338	14.2041	12.65227	0.68819

Table2
T-test results for grades Average in 2 steps(pre/post)Test

Indices	T	Degree free (D.F)	Statistical sufficient	Average
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The mark for drug injection times	8.528	372	0.001	5.06702
The mark for common injection tools	1.934	372	0.054	0.06971
The mark for sexual relations by condom	-4.083	374	0.001	-1.70667
The mark for drug dependence	5.368	172	0.001	0.83256
The mark for physical problems	30.705	174	0.054	7.95733
The mark for mental problems	40.328	374	0.054	11.81867
The mark for family problems	10.262	374	0.001	3.30667
The mark for job performance	-8.013	337	0.001	-4.84024

Results

The first hypothesis, in the study predicted MMT could be decreased risky behaviors.

The result indicated after 6 months of treatment we examined the statistical significance of each sample compared, these results shown rate of risky behaviors was reduced and could be say, MMT cause be reduce risky behaviors in addicts.

($t=53$), this result in 0.01 was meaningful. So, zero hypothesis is rejected and second basic hypothesis (99%) is supported and could be say MMT cause be reduce change of behavior (drug dependence) in addicts.

Also, according to the table t obtained have 0.05 meaningful. So zero hypotheses is rejected and first sub hypothesis the study 95% supported and could be say MMT cause increase mentally & physical health in addicts. Also according to table ratio (R_t) obtained (-8.013) in 0.01 level is meaningful. So zero hypotheses is rejected and second sub hypotheses the study (99%) is supported and could be say MMT cause be increase socio-personal performance in addicts.

Discussion

In the case of good result should be care essential points. The first, the methods and therapies apply exactly and the second analysis continue and using by its feedback completely step.

In our community activated 3 medical centers.

1-public out-patient centers

2-public in-patient centers

3-private centers (clinics)

In none of centers, there isn't regular programming and long-term concerning treatment. So no statistics concerning relapse have not existed.

Research and evaluation concerning MMT due to below subjects is necessary

*increase understanding, acceptance and support level for MMT

*programming promotion

*applying the best methods for supply target groups

*therapy effects important

*injury reduction relevant to drug dependence

HIV epidemic risk in Iran is serious. Expansion the epidemic can produce social, political, economical side effects in country. And its control is national duty.

Quick intervention in risky groups specially injections addicts, is a key for this complication. In the case of delay about risky groups, epidemic expansion to other social groups will loss opportunity and sources and epidemic control will be very difficult.

The result indicated that above approach has meaningful reduction on risky behaviors in addicts. With due attention to the basic present study was scale-down risky groups, the result shown MMT in all sample cause be reduce behavioral characteristics and as a result, HIV virus transmission and hepatitis was reduced.

With analyzing of above mentioned and general review can be concluded that the study with MMT for addiction was effective. So the first hypothesis result confirmed and this result confirmed with singel , Farhoodi.....

The result shown that MMT confirmed and comparison of pre/post test MAP marks, explained pre/post test marks reduction and this result is confirmed on effectiveness MMT on the behavioral characteristics.

The finding confirmed Roseno, Nourani poor, Ehsan manesh.....results.

The result shown MMT cause be increase mental and physical health and social-personal performance in self-report addicts.

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