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Demographic Features of Patients in Methadone Maintenance Treatment, Referred To Private Mmt Clinic, Sari-Iran (2009-2010)

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Abstract

Introduction: Addiction to opioids poses serious problems for communities, families, and individuals. Solutions sometimes seem uncertain, difficult, and controversial. Most of patients can not tolerate drug abstinence permanently and they continue to live through preparing and using drugs permanently if there is no method of maintenance treatment. Methadone Maintenance treatment (MMT) has become a major intervention in the care and treatment of drug dependence in many countries. Now MMT is used as a maintenance method in Sari and we decided to evaluate this method in addicted patients in private MMT clinic.

Method and Materials: This cross-sectional descriptive study was performed from April 2009 to April 2010 in all patients who have been referred for treatment to the private MMT clinic during this year. The tools for searching were epidemiologic questionnaire, patients file and interview. Collected data was analyzed using the descriptive statistics.

Results: Data collected from 200 patients were analyzed. Most patients (142 patients) were urban. 44 patients (22%) had finished high school and 36 (18%) had higher educations. 155 patients use opium. 85 patients have treatment history of their addiction in recent years. 38 (19%) subjects had suspicious sexual relations. 67 (33.5%) cases had depression and 68 (34%) ones had aggressive behavior on the basis of DSM-IV criterion. 66 patients (33%) had full-time jobs.

Conclusion: This study shows the most common substance that use in Iran is still opium. And it uses in all range of ages. A large number of our patients had finished high school and higher education degrees. So it shows the importance of preventive strategies in society.

Key words: Demographic Features; Drug Dependence; Methadone

1. Introduction:

Addiction to opioids, or opioid dependence, encompasses the chronic and recurrent disorders.(1) Dependence is more common in men than women.(2) Although fumigation Opium materials was the dominant method for a long years in Iran (3, 4), but due to easy access to this materials, Prevalence of injecting drug use has rapidly increased.(5, 6) Methadone is a synthetic-opioid receptor agonist with pharmacological activity similar to morphine (7) used in maintenance therapy. It has a long half-life, and can be given orally once daily in tablet form with doses of 60–100 mg with supervision.(8) Administration of 20 to 80 mg of it can keep the patient in a stable situation.(9) Maintenance phase of methadone as a long term treatment, continue for years until the patient obtain the ability to success detoxification.(10) Number of Opiate Addicts is rising steadily in countries.(11) In our country a high percentage of people are facing this problem. Methadone maintenance therapy is associated with the following benefits: It can reduce illegal use of drugs, risky behaviors (12) especially the use of shared syringes that is associated with increases in the spread of infectious disease (e.g. HIV, hepatitis B and C).(7) Psychological and physical dependence can develop with the use of methadone, (13) but frees the patients from uncontrolled, compulsive, and disruptive behavior associated with opium addiction. So it is possible to maintain an addict on methadone without certain harsh side effects.(14) Overall methadone can reduce the rate of mortality and morbidity after drug abuse. Based on researches and empirical studies, methadone maintenance therapy improves physical and mental health of drug-dependent people. Success rate of methadone maintenance therapy is about 65 to 85 percent at first year and

50% after 7 years if the patients use methadone continuously and avoid using drugs during these years.(15) Considering the importance of mentioned subjects and also limited studies conducted with similar epidemiological study we decided to investigate the epidemiology of patients undergoing methadone maintenance and the relevant factors.

2. Method and Materials:

A cross-sectional descriptive study was performed with a target of evaluation of demographic features in 250 patients treated with methadone in private MMT clinic - Sari during 2010. 50 parsons of these patients were excluded from the study because of different causes such as: lack of satisfaction to participate in study, Psychosis, not referring and etc. Desired information and files were extracted by the students of Medical student with IN-CAS Substance Abuse Profile (ISAP) Version 1 questionnaire. In cases which records were incomplete, information was completed with interview with patients. Data results from 200 cases were analyzed with SPSS statistic software version 18.0 and descriptive statistics indicators.

3. Results:

The study included 200 addicted men with mean age of about 39.5 years old (SD = 11.304). In terms of age most common age was respectively 50 years (21 patients), 32 years old (11 cases), age 30 (9 cases) and 34 years (9 cases). Most patients (142 patients) were urban and 58 (29%) persons were rural. In this study, most cases were married (156 patients). In terms of age education 86 persons (43%) had elementary school degree, 34 cases (17%) had high school degree, 44 (22%) had finished high school and 36 (18%) persons had higher education (*Table 1*). Results of the review of drug abuse history have showed that 155 patients use opium that it allocated the most

statistics. Of the total patients, about 127 cases were smoker, 80 ones have used crack, 62 patients used crystals and 46 ones have consumed cannabis. It should be noted that most studied patients have use multiple substance simultaneously. The main input substance of most patients was opium (103 cases) and crack (65 cases) respectively (Figure 1). 85 patients have treatment history of their addiction in recent years. Based on our study in these 200 patients about risky behaviors, these results were obtained: 32 (16%) patients had a history of drug injection. Among the total, 38 (19%) subjects had suspicious sexual relations in the past year. During the past year 27 (13.5%) patients had a history of imprisonment for at least one time. 20 (10%) patients have mentioned an experience of physical beatings and conflict. Based on the results of an interview 43 (21.5%) of patients had a history of chronic disease that 40 (20%) of them were received medical treatment for their physical illness. Associated Psychiatric disorders were determined from patient's records and based on DSMVI criterion for diagnosis. 67 (33.5%) cases with depression, 63 (31.5%) cases with anxiety, and 29 (14.5%) patients had illusion, 68 (34%) ones had aggressive behavior, 14 cases (7%) had self injuring, 24 cases (12%) had a history of suicide and 19 (9.5%) of them had hospitalization experience due to their Psychiatric disorders. Laboratory results of HIV and HCV tests existed in patient's record shows that only 2 (1%) persons were HIV Positive and 1 (0.5%) of them was HCV Positive. Another factor in our study was to review the job of these 200 patients that 66 (33%) of them had full-time jobs, 67 (33.5%) were unemployed, and 49 (24.5%) had part-time job. 3 patients (1.5%) were being educated and 15 (7.5%) were retired. There was an interesting point in the results of our

interviews with patients which was the rate of family history for addiction in first degree relatives. 41 patients have mentioned this disturbing history in their family (*Table 2*).

4. Discussion

In our study, the most common age group has been 50 years. Also in the study of razzaghi and et al in Tehran and Mazandaran provinces 30-34 age group had the highest frequency that is largely in line with our study. The rate has been reported between 25-29 years in Khorasan and Kermanshah province.(4) In our study 36 patients had the most rate of education, which shows this problem; involve all range of people in society. In study of national research group, addicted persons of Kermanshah, Isfahan, Kerman and Tehran, had the highest level of education respectively, 6.7, 6.7, 7.3, and 8.3 percent.(4) This shows the importance of prevention for addiction in all levels of educational. It needs to train some teachers and specialists to achieve to this goal. 66 Percentage of patients have had full-time jobs that included the most frequency. It shows the positive role of methadone in increasing the efficiency of clients that is consistent with the logic of MMT. In study of National Research Group in Tehran and Mazandaran 32% and 20.7%, patients reported unemployed respectively.(4) In our study 141 (71%) Patients were living in urban areas that show availability of consumed drug substances is one of the most important risk factors for these range of society. In our study 78% (156 patients) were married that this rate was relatively higher compared to other studies. High percentage of married persons in various studies indicates that these groups have higher motivation for treatment. Opium was the highest abused substance among addicts with about 155 cases. It represents the type of material used in the geographic area that opium

is the most common abused substance. Also in the study of Razaghi and colleagues (4) the most common reported consumed material was Opium (72%) and then heroin (13%) and cannabis (13%). While crystalline was the most common used material in the study of Behdani .F and et al.(12) The main substance used in our study was opium and also in study of Ali Farhoudiyan.(16) This shows that unlike many parts of the world that use derivatives of opium as their main substance and do not use opium, the common form of abused substance in our country especially in our region is still opium. Most people in our study (42.5%) had not the history of drug addiction treatment that this conveys the neglectfulness of patients to treatment. A large percentage of clients have had significant psychiatric disorders that have been mainly from the type of depression, anxiety and aggression. Also 19 patients have mentioned the history of hospitalization following these disorders. These results are similar to broum and colleague's reports noted that depression and anxiety were most common associated disorders in these patients.(17) In study of bolhary and et al the rate of Depression, anxiety and aggression was respectively 12.6%, 23.5% and 37.1%.(18) In our study, only two cases have been HIV positive and one patient has been HCV positive that there is variety of reasons for the etiology of infections in these patients suggested that one of them is being injected. According to study of taraghi and et al 67% of registered cases of positive HIV had been due to drug injection. Hepatitis B and C are more common between injected addict persons rather than non-addicted populations.(19) MMT may play a significant role in reducing the levels of IDUs.(20) And also results demonstrate that medication with methadone can be highly effective in decreasing

HIV risk behaviors when the dose is optimized.(21) Another subject which examined in our study was high-risk behaviors. 38 of our patient had a history of injection while in the study of Ramli.M and et al 83% noted this history.(22) In our study 38 patients have been suspected of having sexual relations with multiple sex partners, but in Singapore study this problem was 2.4%. In our review 38 people have had a history of imprisonment last year but this rate of about 28 people in study of Ramli.M and et al. (22) 13 people of our study had a history of selling material while in Singapore study 7 patients had this record. Also in our study, 20 ones had experience of battered. We conclude that this group practiced high-risk behaviors such as needle sharing, unprotected and deviant sexual activities and criminal activities and etc. 43 of our studied patients have had chronic diseases that 40 of them have been used medical treatments for their physical illness. So about a quarter of patients are addicted and have chronic illness simultaneously that they should pay more attention to both problems. In our study 41 patients have had a history of drug addiction in their first degree relatives that it had a disturbing statistics in our community and shows the impact of family on person behaviors and this indicated the need to education within the family and raising awareness of them. MMT treatment have been able to keep ability and social and economic performance of patients to an acceptable level according to statistics. It should be mentioned that some people in MMT are not good candidates for this modality of treatment and other strategies such as BMT, detoxification and relapse prevention could promote their requirements.

5. Conclusion

This study shows that the most common substance that use in Sari is still

opium. And it uses in all range of ages. A large number of our patients had finished high school and higher education degrees. So it shows the importance of preventive strategies in our region.

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TABLE 1. General Characteristics of the Methadone Study Patients. General Factors of Patients in Methadone Maintenance Treatment Such as Basic Demographics, Treatment History, Risky Behaviors and Family and Social Status are Mentioned in This Table.

Factors		Characteristics ^a	MET ^b
Basic Demographics	Age	Mean	39.5
	Residency	Urban	142 (71)
		Rural	58 (29)
	Marriage	Married	156 (78)
		Single	40 (20)
		Armistice	1 (0.5)
		Died wife	0
		Divorced	1 (0.5)
	Education	Elementary school	86 (43)
		High school	34 (17)
Finished high school		44 (22)	
Higher diploma		36 (18)	
Treatment History			85
Risky Behaviors		Injection experience	32 (16)
		Suspicious sexual relations	38 (19)
		Imprisonment	27 (13.5)
		Physical beatings and conflict	20 (10)
Family and Social status	Family history of addiction		41 (20.5)
	Job	Full-time jobs	66 (33)
		Unemployed	67 (33.5)
		Under education	3 (1.5)
		Part-time job	49 (24.5)
	Retired	15 (7.5)	

^a Absolute frequencies are accompanied by percentages (in parenthesis). For continuous variables, mean (standard deviation) or median (range) are reported, as specified in the "Characteristics" column.

^b Methadone

TABLE 2. Psychiatric and Medical Status. Past Medical History, Drug History and Psychiatric Status of Patients in Methadone Maintenance Treatment

Factors		MET a*
History of chronic disease		43 (21.5)

Medical treatment for physical disorders		40 (20)	
Psychiatric status	Depression	67 (33.5)	
	Anxiety	63 (31.5)	
	Illusion	29 (14.5)	
	Aggressive behavior	63 (34)	
	Self injuring	14 (7)	
	History of suicide	24 (12)	
	Hospitalization experience	19 (9.5)	
Serology for infectious disease	HIV b	Negative	76 (38)
		Positive	2 (1)
		Unknown	122 (61)
	HCV c	Negative	76 (38)
		Positive	1 (0.5)
		Unknown	123 (61.5)

* Absolute frequency is accompanied by percentages (in parenthesis).

^a Methadone

^b Human Immunodeficiency Virus.

^c Hepatitis C Virus

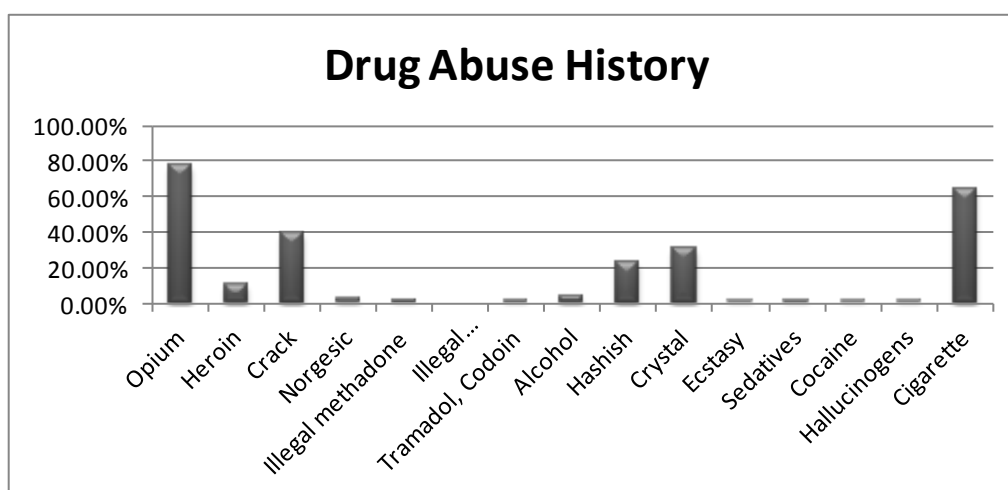


Figure1. Drug Abuse History of Patients

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