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# **Original Article**

# **Common Methods to Treat Addiction in Treatment- Rehabilitation Centers in Tehran**

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## Abstract

**Background:** This study was to determine common methods to treat addiction used by patients checked into Outpatient Treatment and Rehabilitation Clinics in Tehran.

**Methods**: The study was conducted in Social Security affiliated outpatient clinics including three governmental and several private centers in 22 districts of Tehran. Demographic data, personal information, social characteristics and information regarding prevention, treatment, and follow-up records of 1,372 patients were obtained and analyzed.

**Results:** A majority of cases referring to the treatment centers were male (95.2%). Patients were 14 to 75 yr (mean  $35.48 \pm 10.57$  yr); 61.7% were married and lived in rented homes in the city; 938/1372 (68.4%) had at least one previous attempt failure when seeking re-treatment. A majority of them (77.8%) had a history of 1 to 4 quit attempts; a number 63.1% had an abstinence period of 1 week to 6 months.

**Conclusion:** The majority of our understudy subjects had a history of previous attempts to treat their addiction with a maximum abstinence period of 6 months.

Keywords: Addiction, Rehabilitation, Abstinence, Methods

# Introduction

Human health and community development are inseparable. Anything that threatens the health of human beings is a threat to the development and welfare of the society and vice versa (1). Substance abuse is one of the most important public health hazards worldwide. According to United Nations Office on Drugs and Crime in 2006, two hundred million, or 5% of 15 - 64 year-olds of the world's population are drug abusers (2). Iran has a high rate of illicit drug abuse; the rate of consumption of illicit drugs in our country is alarming (3). According to accessible estimations, approximately 2 to 4 million Iranians have substance abuse; like many other countries worldwide, substance abuse is a major obstacle in Iran. Narcotics like opium are the main drugs used in Iran (4).

At present, in order to differentiate between physical and psychological aspects of drug addiction, the term "dependence" is used rather than the term "addiction". Dependency is a series of clinical symptoms and changes occurring in the behavioral, cognitive, and physiological status of an individual following drug abuse.

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During the recent decades, Iran has had an increase in drug abuse and related problems. Although opium smoking is not a new issue and has been present in this country for centuries, it has currently turned into a common social phenomenon associated with widespread, physiological, familial, and economic issues. Emergence of intravenous drug abuse along with transmission of infectious diseases such as HIV and HCV has added further to this dilemma (4, 5). Mojtahedzadeh et al. in their study in Iran in 2008 showed that 71% of intravenous drug abusers had AIDS or were HIV positive (6).

The national cost of drug abuse in Europe is 34 billion Euros annually, which is equal to 3 percent of the GDP (gross domestic product) in all European countries (7).

There are various ways to deal with drug abuse. However, a distinct efficient cure for drug dependence has yet to be found. Effective treatments reduce the symptoms, increase individual performance, and prevent relapse of illicit drug consumption. Medications offered for treatment of substance abuse should be taken regularly. Undoubtedly, lack of patient motivation and followup sessions reduces the efficacy of treatment accordingly. Many patients cannot adhere to the schedule and quit (8). An accurate understanding of the basis of drug addiction and treatment methods could enlighten the actual situation and help in planning strategies that are more efficient to fight against drug abuse (9). Many efforts have been undertaken for treating drug abusers in Iran. However, due to specific cultural and social issues that complicate the situation of substance abuse, only a few studies have been undertaken in this realm of science in Iran (3).

The present study aimed to assess the most common quitting methods as well as related factors in substance abusers seeking treatment in Tehran treatment and rehab centers.

### **Materials and Methods**

This was based on existing data and was undertaken from 2006 to 2009 in order to determine the factors influencing successful addiction treatment and common methods of addiction treatment used by patients checked into Outpatient Treatment and Rehabilitation Centers. Our understudy population included subjects referred for drug abuse treatment and rehabilitation. We conducted this study in outpatient clinics authorized by "Social Welfare Organization". We covered all three governmental treatment centers, but the private centers were not evenly distributed among the 22 districts of Tehran. They were mostly located in three regions and after discussing the issue with local authorities in every region we chose three private OPTs (Out Patient Treatment Centers) based on a triage system(qualitatively: highacceptable- weak). After coordinating with the authorities, 10% of the existing files and records, 1,372 patients, were studied. These clinics admit patients in the "first come first service" fashion. Data were collected using a checklist containing 78 questions, including demographic characteristics (8 questions), personal information (21 questions), information about treatment (35 questions), and information on prevention and follow-up (14 questions). At the beginning of this study, a qualitative sample study was performed by using methods such as observation and group discussions with therapists and their clients representing public and private substance abuse centers in Tehran in order to design the final checklist. Based on the initial draft, the final checklist was prepared. The draft was then piloted, approved and sponsored by faculties of Shahid Beheshti University of Medical Sciences. The checklist was finalized after collecting data. The study protocol was adopted by the Darius Research Center Ethics Committee. The England Registration Office scale was used in order to determine the family's social class. Individuals were divided based on occupation categories, (upper class skilled experts and managers' category, lower rank experts and managers' category, supervisors and clerks, semi-skilled workers and unskilled laborers. Using this type of social classification in comparison with some other social categories is more related to adverse health behaviors including smoking and alcohol use.

#### Successful detoxification

Drug detoxification criteria was based on Iranian National Guidelines on Drug Treatment and Rehabilitation which includes: Having a minimum of one negative urine test for drugs, starting treatment with naltrexone following the naloxone challenge test (NCT). Patients who remained opioidfree for at least 7-10 days, or finished their opioid agonists' therapy for the mentioned time-period were considered successfully detoxified patients.

#### Data analysis

Data collected were analyzed using SPSS for Windows version 16 software (Microsoft, USA). A *P*value  $\leq 0.05$  was considered statistically significant.

# **Results**

A majority of cases referring to the treatment centers was male (95.2%). The mean age of patients was  $35.48 \pm 10.57$  yr (range 14 to 75 yrs). More than 20% of subjects were illiterate or had elementary level education; 35.9% had high school or middle school level education, 32.4% had diploma, and 10.9% had a college degree. However, education level was insignificant. Totally, 30.6% were single, 61.7% were married and the remaining (7.7%) were divorced, separated or widows. Although, many were from low socioeconomic classes, but this number was not significant (Table 1).

Profile	Number	Percent
Gender (male)	1306	95.2
Age	35.48±10.57*	-
Marital status		
Single	420	30.6
Married	846	61.7
Divorced, Widowed	106	7.7
Housing		
Owned	349	25.4
Rent, Mortgage, other	1023	74.6
Education		
Illiterate or primary school	285	20.8
Second grade or High school	493	35.9
Diploma	444	32.4
College Degree	150	10.9
Social Class		
Experts and Managers	116	8.5
Skilled workers	304	22.2
Semi-skilled workers	427	31.1
Unskilled workers	525	38.3
Permanent residence		
City	1364	99.4
Rural Province	8	0.6
* Mean ± SD		

Table 1: Demographic characteristics of patients studied

Out of 1372 patients, a majority, 938 (68.4%) had at least one previous attempt failure when seeking re-treatment. A majority of them (77.8%) had a history of 1 to 4 quit attempts; a significant number 63.1% had an abstinence period of 1 week to 6 months. A total of 38.4% of participants used self therapy on their own, 15.4% sought outpatient treatment, 1.7% chose inpatient treatment, 9.3% preferred checking in rehabilitation centers, camps, prisons or NA (Narcotic Anonymous) services and 35.3% used a combination of aforementioned methods or had already tried other methods (Table 2).

 Table 2: Drug abuse profile in patients studied

Profile	Number	Percent
Quit history		
yes	938	68.4
no	434	31.6
Number of quit attempts		
1 to 4 times	730	77.8
5 to 10 times	130	13.9
More than 10	78	8.3
times		
The longest period of		
abstinence	19	2
Less than 1 week	592	63.1
1 week to 6	152	16.2
months	130	13.9
6 months to 12	45	4.8
months		
More than 12		
months		
unknown		
Treatment method		
Self therapy		
In-patient	360	38.4
Out-patient	300 144	36.4 15.4
Rehabilitation	144	13.4
centers, camps,	10	1.7 9.3
or NA	87 331	9.3 35.3
More than one	331	30.3
method		

A total of 38.4% of participants used self-therapy, 15.4% sought outpatient treatment, 1.7% chose inpatient treatment, 9.3% preferred checking in rehabilitation centers, camps or NA (Narcotic Anonymous) services and 35.3% used a combination of aforementioned methods or had already tried other methods (Table 2).

# Discussion

The results of this study revealed that despite advances in medical sciences in the field of addiction treatment and access to several detoxification treatments in Iran (3), our study results demonstrated that many are still not interested in such treatments and prefer self-therapies. Although, self-therapy is usually adopted by highly motivated individuals seeking to quit substance abuse, it was not associated with greater success.

In this study, approximately 70% of cases had a history of addiction treatment and had repeated quit attempts, but the longest abstinence period reported was six months. A study done by Taghva et al. showed that 54.5% of cases relapsed to substance abuse within six months after addiction treatment (10). Many factors (including economic and social) must be considered and addressed for detoxification to be successful. Effective communication between the therapist and patient decreases the risk of relapse (8, 10-12).

In this study, number of women presented to the substance abuse treatment centers was much less than men, which is in agreement with many other study results (4, 6, 9, 10, 12, 13). It seems that in order to change public attitude towards addiction as a disease more efforts should be made focusing particularly on women like establishing special addiction treatment centers for this gender (14, 15).

Various age groups have different tendencies towards substance abuse and adolescents and young adults are the most vulnerable groups. Social, physical and personality changes occurring in adolescents in this period of life, curiosities, and challenges by friends and peers, are the most important factors playing a role in youth addiction (16). The average age of participants in this study also showed that a wide age range of people check into the clinic for addiction treatment which was in accord with other studies (9, 13, 17, 18). The most critical age for initiation of drug abuse was reported to be 12 to 18 years of age (16). Therefore, since addiction starts relatively early, young age groups should be considered as the target populations for drug abuse control programs, and their motivations and incentives for using or quitting should be assessed (13, 16).

Many of our study subjects presented to the substance abuse treatment centers had middle school or high school educational level, and a small percentage of them had a college degree, which was in concord with many other studies in this field (6, 9, 15, 19). Education is a protective factor affecting individual talents and choices and low level of education can lead to substance abuse. Thereby, reducing social inequalities and providing learning opportunities may help in protecting families from illicit drug abuse (20, 21).

Participants in this study were from low socioeconomic classes and therefore another study on people of higher socioeconomic classes can provide useful information in this respect. We hope that the results of this study can be useful for planning more successful substance abuse treatments, help in making necessary changes in treatment and rehabilitation programs, and provide common solutions to suit individual circumstances.

# **Ethical considerations**

Ethical issues (Including plagiarism, Informed Consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc) have been completely observed by the authors.

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