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Original

Evaluation of Sociodemographic Determinants in Narcotic Users Referring to Center for Methadone Maintenance Therapy of Yazd, Iran

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Abstract

Introduction: Addiction is a habit or behavior that is often hard to quit. It is estimated that 190 million persons are substance users around the world. Substance abuse creates tolerance after a while. Shortly after taking the drug, a person will not enjoy as the beginning of its use; that is why the amount of substance used is gradually increased. The purpose of this study was to find the reasons of tendency to narcotics among addicted individuals referred to methadone maintenance therapy (MMT) center in Yazd.

Materials & Methods: This study was a descriptive-analytic study on 100 addicts referred to methadone maintenance treatment center (MMT) in Yazd. Data was collected by a pre-designed questionnaire with acceptable validity and reliability. Data was analyzed using SPSS statistical software and employing descriptive statistics such as percentage, ratio, mean, standard deviation and statistical tests such as t-test and chi- square was performed.

Results: 41.9 % of addicts were unemployed, 4.77% married and 5.64% had elementary education. The most common method of substance consumption was inhalation (2.40%). Heroin was the most frequent type of substance used (1/51%)

The relationship between marital status and type of substance used, and age of onset of drug use was significant. The frequency of substance consumption was significantly different regarding the history of drug use in father, brother and spouses of patients in both sexes.

Conclusion: Results of the current study showed that subjects at an early age (adolescence and early adulthood), individuals with low educational status, those with unstable jobs and low income, presence of addicted individuals among first-degree relatives can be the causes leading to addiction in the community.

***Keywords*:** Methadone/therapeutic use; Opiate Substitution Treatment/methods; Narcotics/therapeutic use

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Introduction

Addiction is a habit or behavior that is often hard to quit. A person may be addicted to alcohol, drugs or gambling. Many persons seek shelter in addiction to deal with life's problems. The use of alcohol, drugs or gambling, alleviates our pain for a while but finally it becomes a problem; a problem that breaks down the families [1].

Substance abuse creates tolerance after a while. Shortly after taking the drug, a person will not enjoy as the beginning of its use; that is why the amount of substance used is gradually increased. So he (she) should use a more potent substance or other drugs which explains the reason for addiction to multiple drugs [2].

Drug addiction converts a person to a mobile collection of diseases and creates problems for him (her) self and community.

The addicted person not only endangers his (her) health but also poses a heavy burden on the society. Besides the threat to society, such individuals are mostly law-breakers and may do any illegal actions in order to find the substance. Addicted person lacks moral and social values and can not obey the law. Addiction, even affects the fetus and the generation [3].

Drug addiction prevents people from understanding their potentials and thus acts as a barrier to social development. Social and economic damages caused by drug abuse impose similar intolerable pressure on social infrastructures in developed and developing countries [4].

The number of drug users reaches to 190 million persons around the world. Official statistics reported that in our country there are 1.2 - 2 million addicts with mean age of 18 years; so it is estimated that 11 million persons are involved with the problems of addiction.

The annual growth of addiction in Iran in the past 30 years was 8%. [5] Iran is also among the countries that regarding special geographical position (i.e. neighboring with Afghanistan, as the world's largest producer of opium and heroin and also with Turkey that is a highway for transit of drug), faces this growing dilemma [6].

In 1998, there were 160775 prisoners in the country among whom about 60% were related to addiction and substance abuse. On this basis, in Iran, one person from each 400 persons is in prison. In the past 20 years, approximately 1,530,836 kilograms of various narcotics have been seized. Nearly 381,812 smugglers in these years and 699,557 drug addicts were identified and arrested. About 25,652 addicts were admitted in drug rehabilitation centers from 1985 till 1998 which is only a part of the real figures of this complex and worrying situation [7].

Extent and prevalence of addiction is so high that 30% of the funds of police, 60% of the budget of prisons organization and 70% of the activity of revolution courts is dedicated to this issue [6].

The money that addicts spend to purchase substance and their negative impacts on other individuals shows huge losses on the human society.

Review and study the information in this area demonstrates that teenagers as the vulnerable stratum are at a greater risk. Addiction among the young individuals in a society is the underlying

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damage and entire degeneration of that community [8].

The purpose of this study was to find the reasons for tendency to narcotics among individuals referred to methadone maintenance therapy (MMT) center in Yazd in order to identify effective factors on addiction and look for methods to prevent it.

Materials & Methods

This study was a descriptive-analytical study on 100 addicts referred to methadone maintenance treatment center (MMT) in Yazd. Sampling was done as census of all people with registered file in this center and who were willing to cooperate.

After evaluation of records and documents, 93 patients were identified eligible for inclusion. Data was collected by a questionnaire with previously-documented acceptable validity and reliability. The questionnaire included 8 questions about demographic information and 10 questions about the consumption methods, the type of used substance, communication of the addict with other persons such as friends, parents and relatives. Data was analyzed by SPSS statistical software using descriptive statistics such as percentage, ratio, mean, standard deviation and statistical tests such as t-test and chi square test. 95% confidence interval was considered for the result.

Results

Were married and 22.6% of them were single, 65% of addicts had primary and secondary education and 35.5% had secondary education and higher (Table 1).

Table1: Normal distribution of subject according to demographic factor

Qualifications	*Situation*	*Number*	*Percent*
Age	<30	33	35/5%
	30-39	30	32/3%
	40≥	30	32/3%
Marriage	Single	21	22/6%
	Married	72	77/4%
Job	Unemployment	39	41/9%
	Employment	27	29%
	Free	27	29%
Education	Primary school	32	34/4%
	Secondary school	28	30/1%
	High school	33	35/5%

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The most common methods of consumption were inhalational and oral (Table 2).

Table2: Normal distribution of subject according to method of consumption

Method of drug consumption	*Frequency*	*Percent*
Smoking	35	40/2%
Injection	10	11/5%
Eatable	23	26/4%
Smoking - eatable	13	14/9%
Smoking- injection	6	6/9%
Total	87	100%

The most widely used substances were heroin (51.1%), opiates (42.4%) and opium latex (33.7%). (Table 3)

Table3: Normal distribution of subject according to kinds of material consumption

Material consumption	*Frequency*	*Percent*
opium	39	42/4%
Heroin	47	51/1%
Crack	13	14/1%
Cannabis	12	13%
Opium's juice	31	33/7%

There was not a statistically significant association between age and type of substance used in the studied patients.

In terms of substance consumption gender difference was only observed between the frequency of crack, cannabis and opium sap consumption, so that none of the women mentioned a history of consumption of this substances, so the consumed opium or heroin.

The relationship between marital status and type of substance used was only significant between the frequency of crack use among married and singles.

Also the relationship between the age of beginning drug use and marital status was statistically significant. So age of beginning of the substance consumption was less than 20 years in Most single individuals, but it was more than 20 years in the majority of married persons.

There was no significant difference in the frequency of substance use among different levels of education and different jobs; however the substances with the highest frequency of use among persons with different levels of education and different jobs were opium and heroin.

Difference between the frequency of history of drug use in spouses of male and female patients was statistically, so that 75% of women and 0% of men had a history of substance use in their spouse. However there was a significant difference between fathers and brothers of male and female patients so that men with addicted father or brother were more than women.

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Present study was a cross-sectional study and was designed to evaluate the epidemiologic characteristics of addicts admitted to methadone treatment centers (MMT) in Yazd.

In this study, from all subjects 95.7% were males and 4.3% were females; it seems that this sex ratio is comparable with statistics from other centers in the country that men have tendency for substance abuse more than women due to a variety of reasons, although the frequency of addicted women is increasing, particularly among low age groups.

Age distribution of patients referred to the center was almost identical in different age groups; however it was slightly higher among less than 30 year-old individuals. This shows that concern about high prevalence of tendency to drugs among the young, especially individuals between 15-30 years is real and there is a need to find a solution for this problem. In this regard adolescents, school students, university students and other young adults should be the center of the focus and especial training and changing their attitude is an effective strategy.

In two studies that were conducted in Tehran, 89% of individuals were in the age 15-40 years that is consistent with the results of this study [1, 5]. In this study, the highest percentage of subjects were unemployed although because the study was cross-sectional, it is not a correct judgment about this subject that addiction has caused their unemployment or their idle has caused the tendency to addiction.

Maybe unemployment or being in jobs that don't cause aspects of giving depth in the personality of people or jobs that in some conditions require the person to be awake at unusual hours of night and day such as jobs that require shift work provides the way for tendency of individuals to drug use.

In the study conducted by Khadije Dehghani and colleagues unemployment rate for individuals with drug addiction was 42.98% which is consistent with the results of this study [2].

In this study, 77.4% of subjects were married that seems that due to obligatory addiction test before marriage in the country, the majority of individuals become addicted after marriage, in this regard the most appropriate justification can be considered as their jobs and companionship with unsuitable friends and close companionship with the addicted parents and brothers and relatives that even marriage is not a barrier for this people to become addicted. Although failed marriages and also economic and cultural poverty are involved in this matter.

About two thirds of subjects had primary and secondary education which confirms that why the majority of persons were unemployed. Nowadays the relationship between educational level and employment status of persons and their income is considered more and considering that poverty is one of the main reasons that cause people to use drugs, probably subjects in this study didn't have enough income, although we didn't ask their income. In the study by Azamy.a and colleagues in Ardebil 55.61% of individuals were illiterate that indicates a high rate of addiction among people with lower educational level [3].

Inhalation was the most frequent method of drug consumption which is consistent with the study in Kohkiluyeh Boyer Ahmad [9]. In the current study

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heroin was the substance most frequently consumed which is consistent with the results of study in Tehran. It seems that between the traditional narcotics, consumption of heroin is easier than opium and other drugs. Consumption of opium and its sap was in the second order of consumption.

In a study which was conducted in Kohkiluyeh Boyer Ahmad, opium was most frequently consumed.

In this study, the presence of an addicted father or brother showed the highest percentage of family relationship among addicted persons, so as 31.8% of them had addicted brothers and 25.9% had addicted fathers which shows the important role of parents' influence on children. This relationship has been proved in the a case - control study [5], so that 12.1% & 11.1% of cases had addicted fathers and brothers, respectively; while similar rates in control group were 1% and 1%. Also in the study which was conducted in Ardebil, 54% of addicts had some persons in their first-degree family with history of addiction [6] In two other studies the condition of family, guardian and its other members, income and poverty had a direct effect on the frequency of addiction [4, 7].

There was a significant relationship between age of addicted individuals and their age when they began to consume drugs, as the majority of among the students and through mass media individuals younger than 30 years and individuals between 30-39 years have mentioned that they have begun to consume drugs before the age of 20 years. These results are in line with the findings of the study that has expressed average age of onset of drug use 16.7 year. Although the results of the study are initial estimate of demographic and epidemiological features, but future researches with prospective designs should be directed to determine risk factors and their power and intensity of involvement in the phenomenon of addiction.

Discussion

Results of the current study showed that people at an early age (adolescence and early adulthood), persons with low educational status, individuals with unstable jobs and low income and a first-degree relative with history of addiction can be the risk factors and predictors of addiction in the community.

It is recommended that professionals and custodians arrange necessary actions with employing the necessary measures and mechanisms, especially preventive measures through the use of necessary training.

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