

Epidemiology of Drug Abuse (Chronic Intoxication) and its Related Factors in a MMT Clinic in Shiraz, Southern Iran

Fazel Goodarzi¹, Parissa Karrari², Nastaran Eizadi-Mood³, Omid Mehrpour^{2*}, Roya Misagh¹, Saeede Setude¹, Mohammad Amrollahi¹

ABSTRACT

Background: Drug abuse is a major health problem in many countries. Noticing the different patterns of drug abuse in different areas, we evaluated the epidemiology of drug abuse and related factors in Fars province, Southern Iran.

Materials and Methods: In a one-year cross-sectional study, from March 21st, 2009 to 2010, all subjects referring to Addiction Treatment Clinic of Shiraz University were evaluated. Demographic data including age, gender, marital status, occupation, level of education, type of drug, route of abuse, initiation time, and cause of drug abuse were recorded.

Results: The majority of the participants were multi-drug abusers (92%). Opium was the most commonly abused drug, solely (5.3%) or in combination with other drugs (88.7%). Mean age of the first experience of drug abuse was 20.66 years (ranging from 12 to 45). The Most common routes were smoking and ingestion (31.6%) followed by smoking (14.9%). Mean duration of drug abuse was 12.3±8.7 years (ranging from 1 to 38). The major reasons for drug abuse were temptation by friends (28.9%) followed by seeking pleasure (21.9%). A history of substance abuse in the family was reported by 41.9% of the participants.

Conclusion: Identifying the patterns of drug abuse in different parts of Iran may necessitate using different strategic protocols.

Keywords: Drug Abuse, Factor, MMT

INTRODUCTION

Iran has close proximity with Afghanistan, the major producer of opium in the world, and opium has been used in Iran since many years ago (1). Being situated in the vicinity of major opium production center makes transferring tons of opium to the rest of the world possible (40% by Iran) (2). Consequently, Iran faces many problems as it is a good place for drug trafficking providing easy access to illegal drugs in spite of close control by the government (3). Because of the rapid distribution of drugs produced in Afghanistan and the emergence of worldwide drug trafficking routes (4), it is now a malignant social event with widespread social, psychological, familial, and economic consequences (5). Unclear statistics, social and political conservativeness, and more importantly,

its multidimensional nature (6), make this problem more complex than it seems to be.

The last nationwide study of drug abuse in Iran in 2007 (RSA 2007) showed the presence of 1.2 million substance abusers in Iran for a total population of 75 million people (1.6%) (7). The greatest percentage of addicted population in Iran belongs to youngsters under 25 years of age (about 60%), and students form a major portion of this population (8).

Surveys have shown an emerging trend of addiction in Iran. Despite the United Nations International Drug Control Program, the rate of addiction in the Islamic Republic of Iran rises at least 8% each year (9).

Although studies on substance abuse have been a priority for Iranian institutions, there is very little research on the outcomes of substance abuse in the southern Iran (10).

1- Department of Clinical Toxicology and Forensic Medicine, Shiraz University of Medical Sciences, Shiraz, Iran

2- Department of Clinical Toxicology and Forensic Medicine, Birjand University of Medical Sciences, Birjand, Iran

3- Department of Clinical Toxicology, Isfahan University of Medical Sciences, Isfahan, Iran

*Corresponding Author: Omid Mehrpour, Department of Clinical Toxicology and Forensic Medicine, Faculty of Medicine, Birjand University of Medical Sciences, Ghaffari Avenue, Birjand, Iran

Email: omid.mehrpour@yahoo.com.au, omehrpour@tums.ac.ir

The main objective of this study was to investigate the epidemiology of drug abuse and factors associated with it in MMT (methadone maintenance therapy) Clinic in Shiraz, Fars province, southern Iran. The findings will help us to design future prevention and treatment plans.

MATERIALS AND METHODS

In a one-year cross-sectional study, conducted from March 21st, 2009 to 2010, all subjects referring to Addiction Treatment Clinic of Shiraz University were evaluated. Demographic data including age, gender, marital status, occupation, and level of education, as well as the type of drug, route of abuse, initiation time, and causes of drug abuse were recorded. Data collection was done using questionnaires and the questions asked verbally with the subjects and their attendances' consent (father, mother, wife/husband, and protector) through interviews. Subjects were interviewed two or more times in order to build confidence in them. The questionnaire was filled by the general physician and the psychologist in charge of the clinic.

The research was carried out according to the local ethics review committee of Shiraz University of Medical Science which approved the study protocol. SPSS version 16 (Chicago, Illinois, USA) was used for data analysis.

RESULTS

During the study period, 114 drug abusers were evaluated; there were more men (n, 105) than women (n, 9). The mean age was 35.11 ± 11 years, ranging from 17 to 70 years. Table 1 shows the age distribution of drug abusers. Unemployment (64.9%), marriage (50.9%), and high level of education were observed in 64.9, 50.9, and 7.9% of the subjects, respectively.

The majority of the subjects were multi-drug abusers (92%). Opium was the most commonly abused drug in this study, solely (5.3%) or in combination with other drugs (88.7%). Intravenous drug abuse (IVDA) in combination with other routes was seen in 42 subjects (37%). IVDA alone was not observed in any drug abusers. The distribution of the type of drug abuse among participants is shown in Table 2.

Mean age of the first experience of drug abuse was 20.66 years (ranging from 12 to 45). The most common routes were smoking and ingestion (31.6%) followed by smoking (14.9%). Mean duration of drug abuse was 12.3 ± 8.7 years (ranging from 1 to 38).

The main causes of drug abuse were temptation by friends (28.9%) followed by seeking pleasure (21.9%). Also, 41.9% of the participants had a history of substance abuse in their family. Distribution of the cause of drug abuse among the participants is shown in Table 3.

Table 1. Age distribution of drug abusers

| Age | Frequency No.(%) |
|-------|------------------|
| 10_14 | 22 (19.3) |
| 15_19 | 47 (41.2) |
| 20_24 | 28 (24.6) |
| 25_29 | 9 (7.9) |
| 30_34 | 4 (3.5) |
| 35_39 | 3 (2.6) |
| 40_44 | 1 (0.9) |

Table 2. Distribution of the kind of abused drug among participants

| Illicit Drugs | Number (%) |
|------------------------|------------|
| Opium (Alone) | 6 (5.3) |
| Opium + Other drugs | 101 (88.7) |
| Shireh (opium residue) | 2 (1.8) |
| Shireh + Other Drugs | 75 (65.7) |
| Heroin (Alone) | 0 (0) |
| Heroin + Other drugs | 73 (64.2) |
| Alcohol + Other drugs | 43 (37.8) |

Table 3. Distribution of the cause of drug abuse among participants

| Cause of drug abuse | Number | Percent |
|---------------------|--------|---------|
| Friends | 33 | 28.9 |
| Seeking Pleasure | 25 | 21.9 |
| Family | 11 | 9.6 |
| Friends & Family | 10 | 8.8 |
| Curiosity | 8 | 7.0 |
| Difficulty in Jail | 1 | 0.9 |

DISCUSSION

Gender

In our study, substance abuse was more common in males which may be indicative of the fact that Iranian culture is almost permissive for males (11, 12). This finding was also similar to the findings of other studies (5). RSA (2007)

showed the male-to-female ratio to be about 9: 1 (13) although social and cultural factors may have some impacts on identifying the frequency of real drug abuse in women in previous studies (5). This is in contrast to a study carried out in the United States showing that lifetime use did not vary significantly according to sex (14).

Age

Mean age of participants was 35.11+/-11 years. In another study conducted by Meysamie et al (2003), mean age was shown to be 45.8 years (15). In the present study, the mean age for initiating drug abuse was 20.66 years which is in accordance with the study conducted by Day et al (mean age= 20 years) (16).

Education

In this study, 44.7% of the abusers had education up to secondary level. People with university educational level were a small group. In a study that was performed in rural area by Meisamy et al, 31.8% of the participants were illiterate, 22.3% could read and write. Educational status has been shown to be important in tendency to abuse drugs (15). Also, most of the abusers in a study conducted in an Indian city (modern and industrialized) were educated up to primary (38.9%) and secondary (39.1%) levels, respectively (17).

In prevention strategies, it is important to target educational messages about addiction and its adverse effects to the level of education in different populations of audiences (18).

Occupation

In this study, two thirds of the participants were unemployed. Unemployment has been considered a significant risk factor for opium use. Substance abusers are likely to lose their job because of low attendance and poor concentration at work (15). People use and abuse drugs for different conflicting reasons, and several studies have reported the complex etiology of psychoactive drug use (19-21).

Marital status

The number married drug abusers was a little more which was similar to the study performed by Mokri et al (5).

Drug use history

Opium was the most commonly abused drug by the participants. The findings were similar to those of other studies carried out in

other parts of Iran (5). Although different parts of Iran may have different distributions, it should be mentioned that it is very difficult to obtain LSD and American crack (with cocaine base) due to poor access in Iran (22). This can be due to the high price of new drugs in Iran and also the long history of opium use and its residue in this area (8).

Route of exposure

In our study, smoking and ingestion were the most common routes of exposure. In Iran, different forms of opium are smoked, eaten/drunk, or rarely injected (7).

Family history

Family history of substance abuse was observed in half of the participants. The use of drugs by parents is a particular concern, as parental drug use is a risk factor for the children (22). Evidence has shown that family environment and mental health are related to opium addiction (23). In a study conducted by Day et al (2006), pattern of family history of drug abuse was reported to be more common in mother's family (65%) (16).

Causes of drug abuse

Temptation by friends, seeking pleasure, family (access to drugs), and curiosity were the most common reasons for starting drug abuse in our study. In the other studies, temptation by friends was also the main reason (16).

It is important to note that substance users prefer to initiate opium use to make the communication with their friends more enjoyable. Drug use in this community is a sort of group activity, and for safety issues drug users are reluctant to accept non-users into their group. This means that if one is not a drug user, they will lose the majority of their friends (4).

At this critical stage of life, secondary and high school level, lack of sufficient connection between teenagers and their parents to guide them may play a key role in drug abuse.

It seems that parents and schools fail to play a significant role in primary prevention in Iran, and families in which the father is a drug user pose a very significant risk factor (7). Studies have shown that, for many adolescents in Iran, age of drug use onset is under age 18, and many of them use drugs for the first time at school or friends' homes (24).

CONCLUSION

Identifying the epidemiology of drug abuse and its related factors might be helpful in preventing it. It is necessary for medical professionals and those involved in this field to enhance and coordinate their efforts to reduce the related factors for drug abuse. Identifying the patterns of drug abuse in different parts of Iran may demand different strategic protocols.

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