Research Article

Major Causes of Drug Abuse From the Viewpoint of Addicted Persons Referred to Addiction Treatment Centers of Tabriz City, Iran

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Abstract

Background: Addiction is a social disease that has physical and psychological complications. Determination of causes of drug addiction plays an important role in the health planning.

Objectives: The aim of this study was to determine to the major causes of drug addiction in addicts referred to addiction centers of Tabriz city, east Azarbaijan province, Iran, in 2015.

Patients and Methods: In this cross-sectional study, 525 drug addicts who were referred to the addiction centers of Tabriz, Iran, were enrolled. The researcher-made questionnaire included open and closed questions and aimed to evaluate the causes of drug addiction. The questionnaire's reliability and validity were evaluated and approved. Data were analyzed using descriptive statistics by SPSS software version 17.

Results: From a total of 525 addicts, 488 cases were male and 37 were female. Failures in life and escape from problems were the major causes of drug addiction. There was a significant difference between male and female addicted persons in most of the drug addiction causes (P < 0.05).

Conclusions: The tendency towards drug addiction has different causes. In the present study, the most common causes are failure in life and escape from problems. Given that the population of this study is limited to addiction centers, further studies should be performed on the patients referred to the hospitals or clinics.

Keywords: Drug Addiction, Drug Addicts, Opiate Alkaloids

1. Background

Drugs are considered as one of the main problems of the country's health and they caused the prevalence of some infectious diseases with a chronic and recurrent nature, which is threatening the health and human life. Addiction has engaged all industrial and nonindustrial societies along with malnutrition and environmental pollution; so that addiction had a growing trend during the recent years in Iran (1).

Rejections from friends, family relationships, loss of respect and occupation are included among the problems that can cause individuals to be addicted. Despite widespread tendency causes, preventive measures to reduce the damage caused by drug abuse have not well-known yet (2). However, appropriate spending for the control and prevention measures will cause to save millions of dollars annually for health and well-being of children and families and increase productivity and create good jobs (3).

Various social factors such as social disorganization, peer pressures, family factors, genetic factors, emotional problems, and mental health problems have been proposed as the etiology of drug abuse. The weakness in the family performance, problems, conflicts and family struggles are other causes of drug addiction (4). Kendler et al. found that parental divorce or high genetic susceptibility were the main causes of addiction in the high risk patients (5). Heidari et al. concluded that major steps are necessary for improving mental health, employment, and social economy to prevent addiction and reduce the tendency toward drug abuse (1). Currently, addiction and drug abuse is one of the major health problems in our country so that according to the reports of Drug Enforcement Headquarters, there are 2 million drug addicts in Iran (2.5% of the population) (4).

2. Objectives

The aim of this study was to investigate the causes of drug addiction among addicts referred to addiction cen-

ters in Tabriz city, Iran, which can be obtained with careful planning to reduce risk factors.

3. Patients and Methods

This cross-sectional study was conducted on 525 drug addicts referred to the addiction treatment centers of Tabriz city, east Azarbaijan province, in 2015. There were 14 addiction treatment centers for males and one for females in Tabriz in which on average about 50 - 60 addicted individuals were kept in each center. According to Morgan's table, with 99% confidential level and $\alpha = 0.05$ and the total population of addicts in the treatment centers (eight hundred individuals), 363 individuals as the sample size were determined while finally 525 patients were studied. Inclusion criteria included the addicts using provocative and illegal drug referring to addiction treatment centers in Tabriz, while the exclusion criteria included the presence of any mental disorder (level or content), and lack of cooperation to participate in the study. The study was approved by the ethics committee of Tabriz University of Medical Sciences with the number 12806 on 08.03.2015. Conditions of the study were explained to all addicts participating in this study and informed consent was obtained.

In this study, an evaluation tool was a researcher-designed questionnaire. After obtaining informed consent and explaining each variable to the participants, the questionnaire was completed by the researcher. Variables on the causes of drug tendency included obtaining a new experience (curious), recreation, learning from family members, friends' insistence, self-confidence increase, relaxation, getting more energy, a positive attitude towards drugs, escape from problems, failure in life, staying awake, pain relief and physical diseases. Each variable was designed based on the severity of their impact by the Likert scale of 4 (severe with score 4, moderate with score 3, poor with score 2, and a very poor with score 1). Validity of the questionnaire was evaluated by the face and content validity methods. The opinions of relevant specialists of Tabriz University of Medical Sciences were used, and revisions were made. To assess the reliability of the questionnaire, Cronbach's alpha was calculated as 0.82, which was an acceptable level of reliability.

3.1. Statistical Analysis

Data were analyzed using descriptive statistics, mean and standard deviation (SD) with SPSS statistical software (model number: 17.0.1, SPSS Inc, Chicago, Illinois, USA). Normal distribution of the data was evaluated by the Kolmogorov-Smirnov test. Quantitative data were also assessed by an independent sample's t-test, while chi square test was used to compare the qualitative data. In all cases, P value < 0.05 was considered as statistically significant.

4. Results

From a total of 525 addicts, 488 cases were males and 37 were females. The mean age of the subjects was 35.16 ± 7.42 years. In terms of marital status, 191 (36.4%) were married, 308 cases (58.7%) were single, 17 cases (3.2%) were divorced, and 9 cases (1.7%) had a concubine marriage. In terms of employment status, 29 cases (5.5%) had government jobs, 356 cases (67.8%) were self-employed, and 140 cases (26.7%) were unemployed.

Table 1 demonstrates the causes of drug tendency of the studied addicts due to the gender. There was a significant difference between all studied causes between males and females (P < 0.05). Among the male population, the most common causes of tendency towards drugs with the very poor influence severity were obtaining a new experience (51.8%), learning from family members (43%), and getting more energy (30.7%), respectively. The most common causes of tendency towards the drugs with the severe influence severity on the male population were failure in life (35.7%), escape from problems (32%), and staying awake (30.3%), respectively.

The most common causes of tendency towards drugs in female population with very poor influence severity included positive attitude to drugs (37.8%), learning from family members, and friends' insistence (35.1%), respectively. The most common causes of tendency towards drugs in female population with severe influence severity were failure in life (83.8%), entertainment and recreation (64.9 %), and relaxation (64.9%), respectively. Failure in life was the strongest cause of tendency towards drugs among both studied female and male populations.

Additionally, given that quantitative scores were defined for each causes in terms of the severity of the impact (number 1 to number 4 for the severity of impact), then an independent sample's t- test was used as statistical evaluation to compare the severity of the effects of different causes of tendency towards the drugs in the studied population in terms of the gender and based on the quantitative variables. Table 2 shows mean, standard deviation, standard error of the mean and P value of each variable based on gender. The results showed that there was no significant difference between the genders in terms of the insistence of friends, a positive attitude towards drugs, and staying awake. There was a significant difference between the genders in other studied factors and also, the mean of these causes were higher in females. The highest mean values in the male population were reported for escape from the problems (mean 2.70), failure in life (mean 2.70), and

Table 1. Causes of Tendency Towards Drug Abuse Among Drug Addicts Referred to Addiction Centers of Tabriz City

Causes of Drug Use	Severity								P value
	Too weak, %[a]		Weak, %[a]		Moderate, %[a]		Severe, %[a]		
	Male	Female	Male	Female	Male	Female	Male	Female	
New experiment (Curious)	253 (51.8)	4 (10.8)	114 (23.4)	5 (13.5)	64 (13.1)	13 (35.10)	57 (11.7)	15 (40.50)	< 0.001
Recreation	144 (29.5)	3 (8.1)	194 (39.8)	4 (10.8)	77 (15.8)	6 (16.2)	73 (15)	24 (64.9)	< 0.001
Learning from family	210 (43)	13 (35.1)	100 (20.5)	4 (10.8)	126 (25.8)	4 (10.8)	52 (10.7)	16 (43.2)	< 0.001
Friends insistence	131 (26.8)	13 (35.1)	118 (24.2)	4 (10.8)	102 (20.9)	3 (8.1)	137 (28.1)	17 (45.9)	0.018
Self-confidence increase	121 (24.8)	5 (13.5)	139 (28.5)	3 (8.1)	149 (30.5)	6 (16.2)	79 (16.2)	23 (62.2)	< 0.001
Relaxation	136 (27.9)	2 (5.4)	160 (32.8)	2 (5.4)	110 (22.5)	9 (24.3)	82 (16.8)	24 (64.9)	< 0.001
Getting more energy	150 (30.7)	5 (13.5)	122 (25)	1 (2.7)	124 (25.4)	10 (27)	92 (18.9)	21 (56.8)	< 0.001
Positive attitude towards drugs	106 (21.7)	14 (37.8)	173 (35.5)	2 (5.4)	117 (24)	5 (13.5)	92 (18.9)	16 (43.2)	< 0.001
Escape from problem	95 (19.5)	6 (16.2)	108 (22.1)	2 (5.4)	129 (26.4)	6 (16.2)	156 (32)	23 (62.2)	0.002
Failure in life	110 (22.5)	2 (5.4)	109 (22.3)	2 (5.4)	95 (19.5)	2 (5.4)	174 (35.7)	31 (83.8)	< 0.001
Staying awake	139 (28.5)	10 (27)	79 (16.2)	3 (8.1)	122 (25)	4 (10.8)	148 (30.3)	20 (54.1)	0.015
Pain relief	135 (27.7)	7 (18.9)	118 (24.2)	5 (13.5)	97 (19.9)	5 (13.5)	138 (28.3)	20 (54.1)	0.012

[a] Data are presented as No. (%).

5. Discussion

Drug addiction is one of the major problems in developing countries. Since these countries have young populations, they are at greater risks of addiction. The young population expose to a higher risk as a major and the most vulnerable groups. Problems of puberty, adolescents and youth identity crisis and mental conditions can be considered as important factors for tendency of this age group towards addiction (6). The use of drugs in adolescents who their friends have a positive attitude towards drugs is higher, even up to two-thirds of the causes for using the drugs is how much close friends talk about the drugs, and a friend suggests them to accept the use of drugs (7). As well as pleasure, curiosity and escape of psycho-social problems are the major causes of early drug use for the first time (8).

Heidari et al. concluded that low self-esteem, successive failures in life, and observational learning from addicted family members were the most common causes of tendency towards drug (1). Yuki Maehira et al. investigated the factors influencing relapse of drug usage in Bangladesh during 5 months after drug withdrawal and concluded that the relapse rate is higher in women. In the male population, the most common factors influencing relapse included unstable housing, living alone, and high income. In the female population, the most common factors of relapse included having no child for emotional support and working as a sex worker (9). Mir Lotfi et al. evaluated

the attitudes of students in the dormitory of Zahedan City towards the drug abuse and they concluded that there are different causes for tendency towards the drugs while staying in dormitory is one of the most critical periods in people's lives and necessary and appropriate measures should be performed to solve social and mental problems in this period (2). Kilpatrick et al. also reported that the age of first use is obviously related to the future consumption patterns. As the drug usage is started sooner, it is correlated with the greater and more widespread use of other drugs (10).

In our study, the causes of tendency towards drug use among the male population ranged from high to low were failure in life, escape from problems, staying awake, friends' and peers' insistence, pain relief, a positive attitude towards drugs, increase of the self-confidence, getting more energy, relaxation, recreation, learning from the family members, and gaining a new experience (curious). In the female population this ranking of causes included: failure in life, relaxation, recreation, increase of self-confidence, getting more energy, escape from problems, gaining a new experience (curious), pain relief, staying awake, friends' and peers' insistence, learning from family members, and a positive attitude towards drugs.

Eskandari investigated the factors affecting the tendency towards abuse of industrial drugs and classified the discussed factors that included: encouraging friends and conformity with their youthful lifestyle (hedonism), need of the euphoria, lack of tools for entertainment, preconceptions (e.g, relaxation, escape from problems, increase of self-esteem, etc.), addiction of other family members, curiosity (gaining a new experience), lack of public aware-

Table 2. Comparison of Means (Standard Deviation) of Drug Trends Among the Addicted Population According to Sex

Causes of Drug Abuse	Male Mean $\pm$ SD (SEM)	Female Mean $\pm$ SD(SEM)	P Value
New experiment (curious)	1.85 $\pm$ 1.05 (0.047)	3.05 $\pm$ 0.99 (0.16)	< 0.001
Recreation	2.16 $\pm$ 1.01 (0.045)	3.38 $\pm$ 0.98 (0.16)	< 0.001
learning from family	2.04 $\pm$ 1.06 (0.048)	2.62 $\pm$ 1.36 (0.22)	0.002
Friends' insistence	2.50 $\pm$ 1.16 (0.05)	2.65 $\pm$ 1.38 (0.23)	0.466
self-confidence increase	2.38 $\pm$ 1.03 (0.05)	3.27 $\pm$ 1.10 (0.18)	< 0.001
Relaxation	2.28 $\pm$ 1.05 (0.05)	3.49 $\pm$ 0.84 (0.14)	< 0.001
Getting more energy	2.32 $\pm$ 1.10 (0.05)	3.27 $\pm$ 1.04 (0.17)	< 0.001
Positive attitude towards drugs	2.40 $\pm$ 1.03 (0.05)	2.62 $\pm$ 1.38 (0.23)	0.218
Escape from problem	2.70 $\pm$ 1.11 (0.05)	3.24 $\pm$ 1.14 (0.19)	0.005
Failure in life	2.70 $\pm$ 1.17 (0.05)	3.67 $\pm$ 0.82 (0.13)	< 0.001
Staying awake	2.57 $\pm$ 1.19 (0.05)	2.92 $\pm$ 1.32 (0.22)	0.091
Pain relief	2.49 $\pm$ 1.17 (0.05)	3.03 $\pm$ 1.21 (0.20)	0.007

Abbreviations: SD, standard deviation; SEM, standard error of the mean.

ness of the effects (positive attitude towards drugs), and escape from the pressures of life (escape from problems), respectively (11). As it is obvious, general tendency in the different studies are somewhat similar to each other and their differences may be due to the rankings which could be due to the studied people or the study conditions, but the overall structure is almost identical.

Molavi et al. have introduced depression, parental divorce, socializing with the wrong people, the desire to smoke and academic failure as the factors of tendency towards drugs (12). In some cases there is also a high propensity to drug usage due to the lack of awareness of drug abuse (13). Using the attend training of life skills can change people's attitudes towards drugs effectively, especially in adolescence (14, 15). More importantly, most of the causes of tendency to drug abuse are social, cultural, economic and psychological problems (8). Authoritative parents are the most important factor in preventing the tendency toward drug use (16). On the other hand, Berjas et al. in their research concluded that people's family and peer groups could take them at the risk of drug abuse and addiction (17). The influence of peers on adolescent drug tendency has been proven. It is assumed that the use of drugs by young people is in response to the influence of the peer group (18).

The results of the present study showed that several factors in the etiology of drug abuse and addiction are effective. Therefore, in order to combat this phenomenon, any attempt that is carried out by considering only one factor is doomed to fail. On the other hand, all these factors cannot be influenced only by application of one method, however in a society several approaches should be used at the same time. Different approaches should also be applied in the prevention that they cover all the causes. Although the need to prevent is an obvious fact, choosing a prevention method also is not easy, because the causes of drug use are various, interconnected, and multidimensional (19). Even among the studied genders in this study, prioritization of tendency causes to drug abuse is different.

One of the limitations of this study, according to the descriptive nature of the study, was the lack of the control group. Another limitation of the study was the low number of the female participants. Also, in some cases due to poor cooperation of the subjects, they were excluded from the study.

Finally, it can be concluded that the tendency towards addiction has many different causes, and these causes are slightly different based on the priority of the two genders. However, the main attention to the family, friends, and support from individuals in cases of difficulty or failure in life, as well as religious factors can prevent the further spread of addiction.

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Footnotes

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References

1. Heidari H, Sharif Malmir M, Kamran A, Beiranvand N. Comparison of Addiction Causes from the Viewpoint of Addict patients and their families who referred to Khorammabad Addiction Withdrawal Centers[in persian]. *J Health Syst Res.* 2013;**8**(7):1017–26.

2. Mir Lotfi P, Javadimehr M, Adrome M. Attitudes of Students Living in Dormitories of Zahedan University of Medical Sciences Towards the Causes of Drug Addiction. *Int J High Risk Behav Addict.* 2015;**4**(2):e7310. doi: 10.5812/ijhrba.7310v2.

3. Wade N. Testing genes to save a life without costing you a job. The New York times on the Web. 1997 :5.

4. Hojati H, Alvestany S, Akhundzade G, Heydari B, Sharif Nia S. H. Study on Mental health and its relationship to quality of life in addicts. Journal of Shaheed Sadoughi University of Medical Sciences [in persian]. *High Risk Behavior Conference.* 2010;**18**(3):207–14.

5. Kendler KS, Ohlsson H, Sundquist K, Sundquist J. Peer deviance, parental divorce, and genetic risk in the prediction of drug abuse in a nationwide Swedish sample: evidence of environment-environment and gene-environment interaction. *JAMA Psychiatry.* 2014;**71**(4):439–45. doi: 10.1001/jamapsychiatry.2013.4166. [PubMed: 24576925].

6. Jahangir P, Gholamzadeh Natanzi AH. The Relationship between social control and a tendency to drug abuse in youth [in persian]. *Studies of Social Security.* 2011;**26**:129–55.

7. Petraitis J, Flay BR, Miller TQ. Reviewing theories of adolescent substance use: organizing pieces in the puzzle. *Psychol Bull.* 1995;**117**(1):67–86. [PubMed: 7870864].

8. GhoreishiZadeh SMA, Torabi K. Factors contributing illicit substance dependence among treatment seeking addicts in Tabriz. *J Andeesheh Raftar.* 2002;**29**(8):21–8.

9. Maehira Y, Chowdhury EI, Reza M, Drahozal R, Gayen TK, Masud I, et al. Factors associated with relapse into drug use among male and female attendees of a three-month drug detoxification–rehabilitation programme in Dhaka, Bangladesh: a prospective cohort study. *Harm Reduc J.* 2013;**10**(1):1.

10. Kilpatrick DG, Acierno R, Saunders B, Resnick HS, Best CL, Schnurr PP. Risk factors for adolescent substance abuse and dependence: data from a national sample. *J Consult Clin Psychol.* 2000;**68**(1):19–30. [PubMed: 10710837].

11. Eskandari M. Factors Affecting the tendency to abuse of synthetic drugs [in persian]. *Social Secur Stud.* 2009;**21**:11–32.

12. Molavi P, Rasoolzadeh B. Factors affecting the trend of youth to drug use [in persian]. *J Fundamental Mental Health.* 2004;**6**(21-22):49–55.

13. Azami A, Mohammadi M, Masoomi R. Tendency to Narcotics among People Over Ten Years of Age in Ardabil Province, 2002. *J Ardabil Univ Med Sci.* 2005;**5**(1):16–21.

14. Bahreini-Borujeni M, Ghaedamini-Harouni GH, Saedzadeh HR, Sepehri-Borujeni K. Examination of the four effectiveness methods of preventive from drug abuse on changing attitude towards drug abuse in the high schools boys. *J Shahrekord Univ Med Sci.* 2014;**16**(2):43–51.

15. Sohrabi F, Hadian M, Daemi HR, Asgharnezhad Farid AA. The effectiveness of healthy behavior training program in changing attitude of students towards substance abuse. *J Behavior Sci.* 2008;**2**(3):5–6.

16. Gandomani Seifi MY, Saffarinia M, Kalantari Meybodi S. Typology of parenting (combination of parenting style father and mother) and their effect on drug trends in boy adolescents. *J Res Addict.* 2013;**7**(25):11–24.

17. Berjas F, Govari F, Mohammad Ali Zadeh S, Haghdoost AA. The opinions of hospitalized addicts in Kerman rehabilitation centers about factors affecting their tendency toward drugs. *J Res Behav Sci.* 2011;**9**(4):279–86.

18. Bauman KE, Ennett ST. On the importance of peer influence for adolescent drug use: Commonly neglected considerations. *Addict.* 1996;**91**(2):185–98.

19. Authors group . Factors affecting the tendency of high school students to Drug abuse and methods of prevention. *J Stud Counter Narcot.* 2014;**6**(2021):63–78.