# Study of relationship between Effective Factors in Addiction Tendency with Psychological Dimensions of Addicts who referred to Health Settings in Urmia

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### **Abstract**

**Background & Aims**: Drug addiction and dependence is a chronic and recurrent disorder that has profound social, psychological, physical and economic effects that imposes heavy costs on individuals, families and communities as well as degrades personality. Drug addiction is the most widespread concern and preventable health risk in Iran.

Most of resources in Iran are reported from developed researches and theories of foreign researchers and no comprehensive effort has been done in order to evaluate psychological dimensions of drug users in Iran and Urmia society.

Materials & methods: In this study, 400 drug addicts referring to addiction centers of Urmia were studied. Variables of this study include demographic factors and data collection method includes interview and completing questionnaire. Subjects were surveyed by Symptom Checklist-90-Revised (SCL90R) standard psychiatric questionnaire and researcher made demographic questionnaire in order to investigate psychological problems. Appearance and content validity of researcher made demographic questionnaire were approved by faculty members in terms of factors affecting tendency towards drugs and were obtained through completing questionnaires by some addicts referring to centers; inter reliability was obtained after analyzing odd and even questions. Interviewers were from employees of forensics and faculty members of Urmia University of Medical Sciences. Finally data were analyzed using descriptive and inferential statistics by Spss16.

**Results**: Result showed that the most common psychological problems in 9 dimensions were respectively included: severe depression, severe anxiety, severe hypochondriasis, obsession-compulsion, extreme interpersonal sensitivity, extreme aggression, severe paranoid, severe phobia and severe psychosis.

**Conclusion**: The results of such studies can provide basic benefits and valuable information to health care experts in order to raise awareness about factors underlying drug addiction, mental conditions of addicts and affect positively the effectiveness of treatments by preventive measures.

Keywords: Addiction Tendency, Psychological Dimensions, Addicts, Urmia

Received 05 June 2016, accepted for publication 25 September 2016

## Introduction

Drug addiction is essentially a neurological injury. In this situation, neurological changes affect human willingness and addict turns to mandatory use of drug at any cost that result in psychological and moral decadence of him/her (1).

Individual effects of drug addiction is not entirely clear but the results of studies in this area show that addiction can affect all of the body organisms so that increasing trend of drug addiction and mental disorders are reported (2).

It is a chronic and recurrent disorder that has profound social, psychological, physical and economic effects imposes heavy costs on individuals, families and communities as well as degrades personality. Drug addiction is the most widespread concern and preventable health risk in Iran (3).

Studies of recent years, especially in western countries have shown high prevalence of psychiatric disorders among addicts to drugs (4).

Using banned drugs and drug abuse among youth is directly related to reduced life, accidents and violence. Psychological and physical addiction to these drugs is a major health problem of communities; if addict is deprived of drug, he/she will be affected by various physical and psychological complications associated with headache, weakness and neurological symptoms, he/she will feel pain in different parts of his/her body feels or he will cry without reason. In some cases, nausea, diarrhea, depression and irritability appears in person. Depression reactions are often associated with restlessness and anxiety and in some cases; suicidal tendency and death desire appear among drug users. Visual errors and sensory mistakes as well as hallucinations and consciousness darkness become evident in persons that must be considered in treatment of drug addicts based on some psychiatrists (5).

Various factors including poverty, family problems, marital problems, unsuitable patterns for synchronization and finally unemployment problem can be considered as the main reasons of addiction; as theoretical background of study shows that two individual and social categories are major factors of addiction (6).

Addicts get more of drugs from their friends and peers. Smoking and substance use of any kind are related directly with friends and groups relationship. In larger groups, such a model is dependent on social and cultural situations. In dense urban areas, users and non-users of drugs may be friends but don't transfer their habits to another one (7).

In studies related to drug dependence, psychosocial, etiologic, genetic and biological factors and psychological hypotheses were discussed. 90 percent of drug dependents are affected by mental disorder; however the most common psychiatric diagnoses include alcohol use disorders, major depressive disorder, and antisocial personality disorder and anxiety disorders. 15% of drug addicts attempt for suicide at least once in their lifetime. Since addiction is a complex subject and has psychologically many dimensions, any type of fight against uncontrolled and dangerous growth requires comprehensive and wide-ranging measures in social, economic, cultural and psychological dimensions (8).

Therefore with regard to the prevalence of psychiatric among addicts, we decided to conduct a study to determine psychological problems dimensions on drug addicts referring to addiction treatment center in Urmia in 2013. The results of such studies can provide basic benefits and valuable information to health care experts in order to raise awareness about factors underlying drug addiction, mental conditions of addicts and affect positively the effectiveness of treatments by preventive measures.

# **Materials and Methods**

This study is descriptive. The study population consisted of addicts referring to treatment centers of Urmia. Data collection was done using a questionnaire containing demographic data by interviews. Study tools included Symptom Checklist- 90-Revised (SCL90R)

and demographic questionnaires and options were always, often, sometimes, rarely or never. Variables of this study included demographic factors and data collection method included interview and completing questionnaire. Subjects were surveyed by SCL90R standard psychiatric questionnaire and researcher made demographic questionnaire in order to investigate psychological problems. In this study, psychological problems of these subjects including severe depression, severe anxiety, severe hypochondriasis, obsession-compulsion, extreme interpersonal sensitivity, extreme aggression, severe paranoid, severe phobia and severe psychosis were studied.

Questions were provided by executives and completed by 10 eligible participants of study twice during two weeks in order to determine the reliability of tools; then gained answer were examined two times about any of questions in terms of coherence, continuity and available solidarity was obtained. In general, tools were set in two sections.

The first part of questionnaire contained questions on individual characteristics of patients and the second part included SCl90 questionnaire questions in order to determine the psychological aspects of addicts. Descriptive study was conducted to assess psychosocial addiction. Anonymous questionnaire was given to all people. Descriptive study was conducted in order to assess psychosocial state of addicts, so all subjects filled out questionnaires in the presence of investigators or trained interviewers after sufficient explanation about completion of questionnaires, confidentiality and receiving consent. Meanwhile, those who were illiterate subjects were supported by researcher in order to complete the questionnaire. The subjects consisted of people who had passed at least one month from drug rehabilitation. Measurement instruments of this study included SCL90R standardized test in order to evaluate psychopathology of addicts; individual and social demographic questionnaire included variables such as:

gender, age, education level, and marital status, place of residence, occupation, and so on. SCL90R test contained 90 questions in nine scales of physical complaints, obsession-compulsion, interpersonal sensitivity, hostility, phobic anxiety, depression, anxiety, paranoid thoughts and psychosis that are based on 5-point Likert scale as no, a little, somewhat, very, extremely (23). Inferential and descriptive statistical methods including means compare, chi-square and ANOVA were used in order to evaluate and interpret findings based on research questions; all statistical analyses were carried out by using SPSS computer program.

Data collection method was interview and questionnaire completion. Descriptive statistics were obtained using a questionnaire. Finally SPSS16 software was used for data analysis, so descriptive statistics were obtained using a questionnaire and chisquare test was considered for significance level in comparison, and it was done using data analysis through calculating mean, standard deviation, T-test of independent groups and ANOVA.

### Results

In this study, 400 drug addicts referring to treatment centers of Urmia with mean age of  $35.2 \pm 11.3$  years and mean number of siblings  $2.19 \pm 0.27$  were studied. 368 subjects (92%) were living in city and the rest were living in rural areas. 64.25% of subjects were married and 4.25% were divorced and others were single. 38.25% were illiterate or had elementary school, 18% had guidance school, 42% had high school and diploma, and 1.75% had university education. In terms of housing, 28.25% had private housing, 35.25% had leased housing and 36.5% lived in father. 54% of subjects referred for the first time and 47% of addicts reported consumption age between 21 to 25 years and 100% were male.

Addiction duration of subjects was as Table 1.

**Table 1:** Duration of drug addiction by addicts

consumption	Relative frequency percent	Absolute frequency (number)
	relative frequency percent	riosorate frequency (framoer)
0-1 year	12	48
1-2 years	23.25	93
2-5 years	46.25	185
Over 5 years	18.5	74
Total	100	400
	1-2 years 2-5 years Over 5 years	0-1 year 12 1-2 years 23.25 2-5 years 46.25 Over 5 years 18.5

Table 2: Factors affecting addicts' trends based on preference

ъ	Factors affecting addicts' trends (based on preference)		ъ.
Row			Percent
1	Friends encouragement and conformity with them	392	98
2	Curiosity	382	93
3	Lack of proper tools for leisure time	368	92
4	Need for euphoria	280	70
5	Lack of control and supervision in families	184	46
6	Lack of public awareness from drug abuse effects	94	23.5
7	Free from social pressures such as poverty, working conditions and degree orientation	85	21.25
8	Addiction of other family members	50	12.5
9	Quarrel between parents and children	46	11.5
10	Lack of interest between parents	28	7
11	Lack of education continuance requirements	26	6.5
12	Illiterate or low-literate father	22	5.5
13	Crowded house due to number of people	18	4.5
14	Lack or absence of father	8	2

28.25% of subjects had prison history and 71.75% did not have this history.

5.25% of addicts had hospitalization history due to mental illness, depression, anxiety and illusion. However, none of patients mentioned suicidal tendencies in study that was due to their conditions in rehabilitation centers and hope to leave and return to normal life. Some subjects (13%) had history of suicide attempts in previous years. 94.5% of subjects claimed

that they were supported by their family and relatives; so most of them had better relationship with their families due to their action for rehabilitation; in severe cases of addiction, there were hostile behaviors among them.

There was significant relationship between father's level of education and smoking among factors related to people tendency to drug addiction (P = 0.05) and other

demographic factors did not have any effect on this issue.

The analysis of data related to factors affecting addicts' tendency indicated that friend's encouragement and conformity with them was the highest reason of addiction (98%) and absence of father was the least reason of addiction (2%). (Table 2).

The study showed that the most common psychopathology with 9 dimensions included: anxiety, depression, aggression, obsession-compulsion, paranoid thoughts, interpersonal sensitivity, hypochondriasis, phobias and psychosis.

The results of SCL90R questionnaire showed that 35 subjects (8.75%) suffered from severe depression, 98 subjects (24.5%) suffered from severe anxiety, 53 subjects (13.25%) suffered from severe hypochondriasis, 94 subjects (23.5%) suffered from severe obsession-compulsion, 42 subjects (10.5%)

suffered from severe interpersonal sensitivity, 112 subjects (28%) suffered from severe aggression, 23 subjects (5.75%) suffered from severe paranoid thoughts, 29 subjects (7.25%) suffered from severe phobia and 4 subjects (1%) suffered from severe psychosis (table 3).

A large part of subjects suffered from psychological problems as below.

242 subjects (60.5 percent) suffered from moderate depression, 216 subjects (54%) suffered from moderate anxiety, 48 subjects (12%) suffered from moderate hypochondriasis, 112 subjects (28%) suffered from moderate obsess, 42 subjects (10.1%) suffered from moderate interpersonal sensitivity, 89 subjects (22.5%) suffered from moderate aggression, 102 subjects (25.5%) suffered from moderate paranoid, 16 subjects (4%) suffered from moderate phobia and 21 subjects (5.25%) suffered from moderate psychosis.

**Table 3:** Psychological state of addicted people obtained from SCL90 questionnaire

Row	Mental disorders	Severe (Score over 3 for each part)	Average (Score over 2.5 for each part)
1	Depression	35 (8.75%)	242 (60.5%)
2	Anxiety	98 (24.5%)	216 (54%)
3	Hypochondria	53 (13.25%)	48 (12%)
4	Obsession -compulsion disorders	94 (23.5)	112 (28%)
5	Interpersonal sensitivity	42 (10.5%)	96 (24%)
6	Aggression	112 (28%)	89 (22.5%)
7	Paranoia	23 (5.75%)	102 (25.5%)
8	phobia	29 (7.25%)	16 (4%)
9	Psychosis	4 (1%)	21 (5.25%)

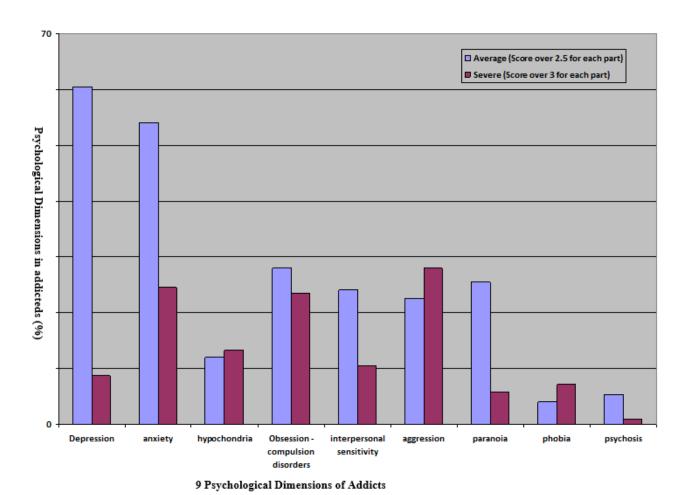


figure1: psychological state of addicted people obtained from SCL90 questionnaires

# Discussion

Addiction is a physical and mental disease that endanger individual, family and community health in all aspects of life due to its progressive nature; it is experienced as stress with mental and physical symptoms including concerns about burden of addiction, concerns about behavior and physical and psychological health of addict, reduced social communication of family, negative effects on relationship between family members, interpersonal sensitivity and mood or emotional symptoms such as anxiety, depression, feelings of helplessness, anger and guilt (24).

Today, a quarter of deaths are attributable to drug addiction and according to reports, those at high risk of suicide attempts, include addicts, homeless people and people with mental health problems. So that the highest number of deaths are related to addicts suffering from mental disorders and suicide (25).

Drug addiction is also affected by biological, social, psychological and cultural factors and high rate of comorbidity of this phenomenon and psychiatric disorders is emphasized in etiology such as depression, anxiety and personality disorders (26).

In this regard, epidemiological data show that more than half of people with addiction disorders have mental disorders. A study reported prevalence of mental disorders on addiction 90.3% and the most prominent disorder is anxiety disorder of 31.8%. Also, a relationship was observed between drug dependence and depression disorder (27).

In this study, mean age of addicts referring to treatment centers of Urmia was  $11.3 \pm 35.2$  years and mean number of siblings  $2.19 \pm 0.27$  were studied. 368

subjects (92%) were living in city and the rest were living in rural areas. 64.25% of subjects were married and 4.25% were divorced and others were single. 38.25% were illiterate or had elementary school, 18% had guidance school, 42% had high school and diploma, and 1.75% had university education. In terms of housing, 28.25% had private housing, 35.25% had leased housing and 36.5% lived in father. 54% of subjects referred for the first time and 47% of addicts reported consumption age between 21 to 25 years.

Another study on social status of addicts showed that mean age of subjects was 33.6 years and addicted men were 14 times women. 56.7% were married, 12.4% were illiterate, 33.8% had guidance school and 5.2% had higher education, addiction prevalence in cities was 10.5 times the rural. 20.5% were unemployed and the highest prevalence (28.6 percent) was observed among workers (28). Also, the results of study showed that 84.2% of subjects were in urban areas. Mean age of subjects was 34.41 years and study results showed that 60 to 70 percent were illiterate or less educated and there was no statistically significant relationship between education level and psychological disorders (29).

The study showed that the most common psychopathology with 9 dimensions included: anxiety, depression, aggression, obsession-compulsion, paranoid thoughts, interpersonal sensitivity, hypochondriasis, phobias and psychosis.

Also, 35 subjects (8.75%) suffered from severe depression, 98 subjects (24.5%) suffered from severe anxiety, 53 subjects (13.25%) suffered from severe hypochondriasis, 94 subjects (23.5%) suffered from severe obsession-compulsion, 42 subjects (10.5%) suffered from severe interpersonal sensitivity, 112 subjects (28%) suffered from severe aggression, 23 subjects (5.75%) suffered from severe paranoid thoughts, 29 subjects (7.25%) suffered from severe phobia and 4 subjects (1%) suffered from severe psychosis.

The results of a study based on SCL-90-R test scales showed that mental disorders of addicts group was higher than normal population in all measures except physical complaints and interpersonal sensitivity (30).

In another study, the highest observed disorders among addicted individuals included Paranoia thoughts, depression, obsession-compulsion, interpersonal sensitivity and physical complaints (29).

In one study, the most common symptoms among subjects included depression, interpersonal sensitivity, anxiety, paranoid thoughts (31).

Extensive studies show that people with mental disease experience drug dependence 2.7 times more than those without mental disorders; interaction between psychological, characteristic and environmental factors affect drug dependence in ways that go beyond the simple properties of drug substances (32).

In current study, 242 subjects (60.5 percent) suffered from moderate depression, 216 subjects (54%) suffered from moderate anxiety, 48 subjects (12%) suffered from moderate hypochondriasis, 112 subjects (28%) suffered from moderate obsess, 42 subjects (10.1%) suffered from moderate interpersonal sensitivity, 89 subjects (22.5%) suffered from moderate aggression, 102 subjects (25.5%) suffered from moderate paranoid, 16 subjects (4%) suffered from moderate phobia and 21 subjects (5.25%) suffered from moderate psychosis.

Another study shows that 15-40% of persons with mental disorder have drug addiction (33).

Having psychological problems leads to impairment of tasks, lack of motivation, anxiety, fear and concern and leads the person to spend a significant portion of its intellectual force for such problems and tend towards drug abuse in order to escape from problems (34).

Various reports of psychiatric disorders in Iran are associated with high incidence of substance abuse (35).

According to mental test, there was significant difference between mental health and marital status and period of addiction based on psychological testing (P<0.05). There was no significant relationship between mental health and other demographic variables based on results.

In the case of drug abuse etiology, various factors have been discussed in theory and research such as family, social unrest, peer pressure, genetic, emotional and psychological factors (36).

Mental disorders make difficult drug rehabilitation (37).

In the current study it was found that addicts have had varying degrees of mental health problems. According to studies conducted in America, nearly 50% had comorbidity of mental disorder and addiction and 43 percent had comorbidity of anxiety and addiction (38).

In a study, primary and secondary mental disorders among drug addicts were more than public and three depressives, anxiety and antisocial personality disorders were observed more than any other abnormalities (39).

Comorbidity of depression and drug addiction create serious damages to addict including reduced quality of life and multiple problems in rehabilitation of addicts as well as it imposes enormous social and economic burden to community that suicide among young addicts is at its top (40).

It was found that simultaneous incidence of mental illness and substance use disorders is very common (41).

Epidemiological data showed that more than half of people with addiction disorders have mental disorder. Another study showed that 15- 40% of persons with mental disorder have drug addiction (42).

Another study indicated a significant and positive relationship between psychiatric symptoms (depression and anxiety) and psychosocial functioning level and drug abuse and noted that drug abuse and mental disorders are not separate from each other but they are

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 Lundgren M, Amodeo M, Chassle D. Mental health status, drug treatment use and needle sharing among injection drug users. AIDS Educ Prev 2005; 17(6): 52-3. elements of a collection that are affected by other aspects of life (43).

In one study, the most common disorders among addicted people included paranoia thoughts, depression, obsession-compulsion, interpersonal sensitivity, and physical complaints (29).

Finally, a study suggested that using psychotherapy or behavior therapy may be effective on addicts with mental disorder through suppressing the symptoms of anxiety and depression improving mental and physical health and quality of life. In fact, when signs of mental disorder disappeared, in a new stage, addicts can discriminate between mental disorders and panic attacks and desire to drug abuse and have a greater incentive and less fear for rehabilitation (44).

## Conclusion

Finally, given the high rate of mental disorders and its severity among drug-dependent persons, it is essential to pay more attention to this group mental health through activating counseling centers and conducting comprehensive programs in order to improve psychiatric and psychological treatments; it reveals the need for mental health education development and implementation. Accordingly, acknowledgment and organized education are proposed in order to prevent and reduce problems of society and psychological, social and economic problems.

# Acknowledgments

This study was financially supported by Forensic Medicine Organization (Code: 119153). We are grateful to all the staff and participants for their participation in this project.

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