Research Article

Prevalence of Different Types of Mental Disorders in Addicts of Ahvaz City During Year 2016

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Abstract

Background: Addiction can lead to negative consequences in various areas of life. It affects addicts' mood and emotions. Therefore, the present study sought to identify mental disorders caused by addiction.

Methods: The present research was a descriptive study. The statistical population of this study included all addicts in Ahvaz city, referred to addiction treatment clinics, during year 2016. The research sample consisted of 281 addicts, who were selected by the multistage random sampling method. The data were collected through Symptom Checklist-90-R.

Results: The results of this study show that 50.17% of participants were suspected to have at least one mental disorder. Also, 12.45% of drug addicts had depression disorder, 10.32% had somatization disorder, 11.74% had anxiety disorder, 10.67% had obsessive-compulsive disorder, 10.32% had interpersonal sensitivity, 15.30% had hostility disorder, 12.09% had phobia disorder, 12.45% had psychotic, and 13.52% had paranoid ideation. Hostility (18.22%) was revealed to be the most frequent disorder among the users of herbal drugs, and paranoid thoughts and depression (12.87%) were the most frequent disorders among industrial drug users.

Conclusions: The results of this study indicate the effect of drug use on people's mental health and the prevalence of all types of mental disorders among addicts.

Keywords: Addicts, Prevalence, Mental Disorders

1. Background

Drug addiction is a relapsing chronic illness that appears as a result of drug use and brings about negative consequences in various domains of life (1). Drug abuse and its deleterious effects are among the most challenging issues in the health domain and medicine. Drug abuse imposes huge costs on the society and its social, psychological, hygienic-health, and economic consequences always exert a heavy burden on the society (2, 3). Drug use affects many different biological, psychological, and social aspects of human beings. The long-term consumption of drugs and the consequent emergence of addiction not only have a detrimental effect on the economic and social status of drug users or drug addicts yet also have a decisive role in people's psyche and emotions (4). An increasing rate of comorbidity of drug addiction and mental disorders has been reported in the related literature (5, 6). Research by the American society has shown that disorders, such as antisocial personality, different types

of phobia and anxiety disorders, major depressive disorder, and dysthymia are most highly related to drug abuse and drug dependence (7). In contrast to the normal population, symptoms of depression are common in people with substance abuse or drug dependence. About one-third to half of those with substance abuse or drug dependence have had depressive disorder diagnostic criteria at least once during their lifetime. In various studies, 35% to 60% of patients with drug dependence have been reported to have the diagnostic criteria of antisocial personality disorder (8). In a study conducted by Farrell et al. (9) in the United Kingdom, the prevalence of psychological disorders was compared between addicts and non-addicts, and it was revealed that the prevalence of these disorders was 45% in addicts and 12% in the ordinary population. Torikka et al. (10) conducted a study in Finland to investigate the relationship between depression and addiction in adolescents, during year 2001; they found that 37% of drug abusers had a history of depression, while only 8% of non-addicts had depression. Verthien et al. (11) car-

ried out a study in Germany by means of the SCL-90-R test and reported the existence of a relationship between the severity of psychological disorders and the increased rate of drug use. Ahmadi and Ahmadi (12) conducted a study on 522 drug addicts and showed that 105 (21%) had anxiety disorders and 274 (54.8%) had depression. Saisan et al. (13) showed that more than half of people with substance abuse were diagnosed with psychiatric disorders. In addition, 37% of alcohol users and 53% of drug addicts had at least one psychological illness. Haydari et al. (14) reviewed the psychosocial status of addicts in Sari, during year 2004. The results of their research showed that 89.4% of the sample units were suspected of having psychological disorders. The most common psychological pathologies in nine dimensions among the study population were respectively as follows, depression, sensitivity in interactions, anxiety, paranoid thoughts, obsession and compulsion, somatic complaints, aggression, phobias, and psychosis.

Mental health plays an important role in the etiology and treatment process of addicts. The presence of psychological disorders leads to resistance to treatment and relapse into addiction (15). In the same way, drug abuse and its accompaniment to psychological disorders impose huge costs on the health system of societies and may increase the mortality rate in addition to their excessive socio-economic expenses (16, 17).

The city of Ahvaz, the center of Khuzestan Province, has been the political, cultural, and social center of the southwestern region of the country at different times in the past. As a result, the inhabitants of this city have long been familiar with different cultures, even European cultures, due to colonialism in different periods. Drug use has a close association with the culture of religious beliefs, socioeconomic status, and the historical background of each country (18). In addition, research has shown that unemployment, poverty, addiction, crime, and felony are considerably high in Ahvaz (19). Therefore, the present study sought to identify the mental disorders followed by addiction in this city.

2. Methods

The present research was a descriptive study. The statistical population of this study included all addicts of Ahvaz city, who referred to addiction treatment clinics, during year 2016. The research sample consisted of 281 addicts, who were selected by the multistage random sampling method. For this purpose, 12 addiction treatment centers were randomly selected from different addiction treatment centers of Ahvaz, which were located in the north,

south, east, and west of Ahvaz (three centers from each region). Then, 25 participants were selected from each center, randomly. Following the researchers' explanation of the importance of the research to the participants, SCL-90 was distributed among them to measure their psychological symptoms. The data were then analyzed using SPSS 23 and were expressed as mean ± standard deviation and frequency. Structured interviews, extracted from DSM-V-TR criteria, were used to diagnose drug dependency and the SCL-90-R test was employed to assess the psychological status of the participants in the current study. The entry criteria of the research included the diagnosis of abuse of or dependence to one or more drugs, being male, being a resident of Ahvaz, and providing an informed consent to participate in the research. It is noteworthy to mention that the minimum period of drug use was one year.

2.1. SCL-90 Questionnaire

This test was first designed to illustrate the psychological aspects of patients with physical and mental illness and consists of 90 items that evaluate mental symptoms. It is completed by respondents. The original form of the test was introduced by Derogatis et al. (20) and was revised on the basis of clinical experiences and psychometric analyses of the test and, thereby, its final version was prepared (21). The items of this test include nine dimensions of mental illness symptoms and three global indices. These nine dimensions, include somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism (21). The psychometric features of this tool have been reported satisfactory for application in Iran by Nourbala et al. (22). In this regard, the researchers referred to the studies conducted in this domain in order to become informed about the cut-off point of the checklist in the Iranian society. Bayani et al. (23) assessed the mental health status of teachers in Golestan province, using the average cut-off point of 2.5 for sub-scales and the cut-off point of 1.3 for examining the global severity index.

3. Results

The mean ± standard deviation of the participants' age was equal to 36.74 ± 12.93 years. In addition, the mean and standard deviation of the time duration of drug use by participants equaled 21.7 and 6.27, respectively. In terms of the type of drugs, 45.2% of the participants used herbal drugs, 35.9% took industrial drugs, and 18.1% used both of the two types. Moreover, 22.8% of the participants used oral drugs, 24.6% used drugs through injection, 30.6% used drugs via inhalation, and 18.1% used drugs through more than one of the above-mentioned methods.

Table 1. Mean and Standard Deviation of the Checklist Scores for Psychiatric Disorders in Addicts

Mental Disorder	Mean ± SD
Depression	18.19 ± 11.08
Somatization	16.19 ± 9.74
Anxiety	13.29 ± 8.88
Obsession and compulsion	13.88 ± 7.94
Interpersonal sensitivity	12.21 ± 7.51
Hostility	8.97 ± 5.78
Phobia	8.72 ± 6.25
Psychosis	13.45 ± 8.94
Paranoia	19.30 ± 1.97
Extra	10.20 ± 6.26
GSI	1.36 ± 0.77

Table 2. Frequency and Percentage of Each Psychiatric Disorder in Addicts[a]

Mental Disorder	Herbal Narcotics	Industrial Substances	Total
Depression	18 (12.08)	17 (12.87)	35 (12.45)
Somatization	15 (10.06)	14 (10.60)	29 (10.32)
Psychosis	20 (13.42)	15 (11.36)	35 (12.45)
Anxiety	17 (11.40)	16 (12.12)	33 (11.74)
Obsession and compulsion	16 (10.74)	14 (10.60)	30 (10.67)
Interpersonal sensitivity	17 (11.40)	12 (9.09)	29 (10.32)
Phobia	18 (12.08)	16 (12.12)	34 (12.09)
Hostility	27 (18.12)	16 (12.12)	43 (15.30)
Paranoia	21 (14.09)	17 (12.87)	38 (13.52)

[a] Values are presented as frequency (%).

The results showed that 50.17% of addicts had experienced at least one psychological disorder based at the cut-off point of 1.3, according to global severity index, while this value equaled 47.65% for the users of herbal narcotics and was equal to 53.03% for the users of industrial substances. The results also showed that hostility (18.22%) was the most frequent disorder among the users of herbal drugs and paranoid thoughts and depression (12.87%) were the most frequent disorders among industrial drug users.

4. Discussion

The present study aimed at investigating the prevalence of mental disorders among addicts of Ahvaz city. The results of this study showed that at least 50.17% of the sample units were suspected of having at least one mental disorder. This finding is inconsistent with that of the study carried out by Parvizifard et al. (24), who reported a value of 72.3% for the prevalence of mental disorders in Iranian addicts. This inconsistency can be accounted for by the use of different data collection instruments in the two studies. Similarly, this finding is inconsistent with the research findings reported by Heidari Pahlavian et al. (25), who showed that at least 63.5% of drug addicts were suspected of having mental disorders. They reported a higher prevalence of psychological disorder than that of the present study. The reason for this difference can be attributed to the use of different cut-off points in the two studies. In the present study, the cut-off point was considered to be 1.3 while this point in Heidari Pahlavian et al.'s research was considered equal to one. The prevalence of psychological disorders in Khantzian and Treece's (26) research was higher than that of the current study. Khantzian and Treece examined mental disorders in a sample of drug addicts by using the DSM-III criteria and arrived at the conclusion that 77% of the sample units had the criteria for diagnosis with one or more axis I diagnostic disorders and 65% of them had the necessary criteria for diagnosis with an axis II disorder (26). This difference can be attributed to the use of different data collection tools in the two studies. The prevalence of psychological disorders in this study was higher than that of Torikka's research. Torikka et al. (10) reported the prevalence of mental disorders in addicts to be 37%. This difference can be due to the different socio-economic factors existing in various societies and also due to the difference in the statistical populations. The prevalence of mental disorders followed by addiction in the American society was reported equal to 50% (27) and this rate in the French society was reported to be 51% (28). This is consistent with the results of the present study.

The results showed that hostility was the most frequent disorder among the users of herbal drugs, and paranoid thoughts and depression were the most frequent disorders among industrial drug users. This finding is consistent with that of the research conducted by Bosak et al. (29). They showed that the frequency of psychological disorders in addicts varied depending on the type of drug; however, in general, a higher frequency of psychological disorders was reported in crystal consumers. Industrial drugs create harmful effects on consumers' physical and psychological health through the extraordinarily dangerous compounds used in their manufacture and production (30).

These substances cause malfunctioning in the transmission and metabolism of neurotransmitter systems of the brain, such as dopamine, norepinephrine, epinephrine, serotonin, glutamate and opioids, and other vascular and metabolic lesions in important brain re-

gions, such as frontal and prefrontal lobes, which play an important role in consciousness, behavioral, and emotional aspects (31, 32). Drug abuse is a maladaptive pattern of drug use, in which an individual turns to inappropriate consumption of drugs and this results in serious emotional, cognitive, and behavioral damage (33). Many studies have shown that the majority of individuals with drug dependence have at least one mental disorder (34, 35). Research has also shown that disorders, such as antisocial personality, varieties of phobias and anxiety disorders, major depressive disorder, and dysthymia are most highly related to drug abuse and addiction (7).

Narcotic drugs are chemical materials that influence the brain's communication device and intervene in how to send, receive, and interpret information through brain cells. Some narcotics, such as heroin and hashish can activate nerve cells due to the similarity of their chemical structure to natural neurotransmitters. This structural similarity allows the narcotic drug to deceive the receptors, to become attached to the nerve cells, and activate them. These substances imitate the action of the chemicals present in the brain and cause the transmission of abnormal signals through the network, yet they do not activate the nerve cells like natural neurotransmitters. Other narcotic drugs, such as amphetamine or cocaine can release natural neurotransmitters in excessive amounts and/or inhibit the natural regeneration of chemicals in the brain. This disorder causes a highly intensified message and eventually engenders an issue to the communication paths (36). On the other hand, due to the effects that narcotics have on different parts of the brain, such as the brain stem, limbic, and cortical cortex, the nervous system becomes more vulnerable to mental and physical disorders (36). One of the limitations of this research was that the research was conducted solely on addicts of Ahvaz city; therefore, caution should be exercised in generalizing the results. Due to the high prevalence of psychological disorders followed by addiction, it is suggested that therapies, such as group psychotherapy, family therapy, and supportive psychotherapy should be considered for these patients. It is also recommended that the officials of the Counter Narcotics Headquarters follow-up the status of these patients after abstinence by hiring social workers.

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Footnotes

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