

## The Psychopathology of Heroin Abuse Injectors in Kashan Prison

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Drug abuse has high co-morbidity with mental disorders, thus, controlling and treating it requires multimodal treatment intervention. This cross sectional study evaluates personality traits of 67 IV heroin abusers in Kashan Prison. The utilized instruments included two parts: a demographic questionnaire and MMPI. The data obtained from the questionnaires were statistically analyzed by using Fisher exact test. Fifty (74/62) participants suffered from abnormal personality traits. Most of them were single and less than 30 years of age. Prominent personality traits were antisocial and depressed. There was a significant relation between abnormal personality traits and educational levels.

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### Introduction

In general, life time prevalence of drug abuse is about 20%. Many studies show that there is a relationship between personality disorder and substance dependency. Different studies show that 30%-60% of drug abusers or drug dependents are anti-social. This percentage increases if researchers eliminate the criteria of low age onset. A great percentage of drug abusers and drug dependents exhibit patterns of anti-social behaviors. These patterns can be either prior to using drugs or afterwards (1). Compared to those who are only anti-social, anti-social drug abusers are more likely to use illegal drugs, have more psychopathology, are less satisfied with their life and are more impulsive, alone and depressed (2). One of the etiologic factors of drug use is related to psychodynamics. Recent psychodynamic studies show that there is a relationship between drug abuse and depression (3). A study on a great number of drug abusers, came to this conclusion that more than 30 percent of patients had symptoms of clinical syndrome related to the criteria of axis I

psychiatric disorder, while 60% had symptoms of axis II personality disorders including, narcissism, antisociality, and borderline personality disorders, which have intense emotional states, lack of stability, and need special attention. Also, less than 15% did not show any psychiatric diagnosis, except substance disorder (1). A study in Iran (Kashan), showed that among opium users, 14% had anxious, 11.6% had depressed, 10.5% had schizoid and 10.1 had antisocial personality traits. Among heroin abusers, the most frequent personality traits were related to anxiety (17.6%), depression (14.4%), and antisociality (14.4%) (4). Drug users report greater involvements with crime than non-users, thus, are more likely to have criminal records (5). In the other hand, persons with criminal personality traits are more likely to be drug users than others. Among Swedish drug users identified in the criminal justice system, the majority was incarcerated for non-drug related offences, such as theft or violence (6). Several mechanisms may explain these associations. Drug users may be involved in crime to obtain money for drugs; drug users may also commit crime under the influence of drugs; and drug users, or a subset of drug users, may share characteristics that predispose them to criminal behavior (5). Some studies have found antisocial personality disorder (ASPD) to predict criminal behavior

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(7). However, other studies have reported no association with criminal behavior (8).

According to the previous research, personality traits especially anti sociality may increase individual tendency towards using drugs. Such disorders may cause the person to be reluctant in reaching out for psychiatric help and deny having any problems; therefore, they attempt to change their surrounding environment, and continue to abuse drugs and do not try to stop. Considering that drug abusers are involved in high-risk behaviors which lead to diseases such as AIDS and Hepatitis (1), it is imperative we should detect and treat psychiatric problems of this group for reducing harm and high-risk behaviors which in turn, is of great priority.

### Materials and Methods

This cross-sectional study was carried out among 73 prisoners who were heroin abusers. The study was done through convenience sampling and all participants were qualified for the required educational level considered in the study i.e. at least having graduated from junior high school. Participants answered the demographic questionnaire on age, job, education, and marital status; they were also asked to answer the Minnesota Multiphasic Personality Inventory (MMPI). The MMPI data was interpreted by a clinical Psychologist and Psychiatrist. The information was statistically analyzed by using Fisher exact test. The MMPI, a self report inventory, includes 71 items and is widely used and thoroughly researched objective personality assessment instrument. Hansly, Hanson, and Parker (1988) studied the reliability of MMPI and concluded that all scales are adequate with their reliability, ranging from 0.71 to 0.84 (9). Also, the reliability of this inventory was investigated and confirmed in Iran (10,11).

### Results

Seventy three drug abusers participated in the study but 6 were excluded due to their test

results being invalid. Seventeen participants (25.37%) did not have any disorder and 50 (74.62%) had abnormal clinical scale (personality trait). The mean age of this group was  $29.86 \pm 6.41$  years. Forty three (64.17%) were younger than 30 years of age. Forty one participants (61.19%) were employed, prior to entering prison, while 26 (38.8%) were unemployed. Thirty five participants (52.23%) were single and remaining was married. The education level of 45 (90%) of the IV heroin abusers was less than high school diploma and 5 (10%) had more than high school diploma. This study shows there is a significant correlation between abnormal personality traits and educational levels ( $p < 0.001$ ).

Of all participants, 45 (67.1%) were drug dealers, 15 (22.3%) were thieves, 2 (2.9%) were convicted for armed robbery, and 5 (7.4%) were imprisoned for other crimes. Of 50 participants who were found to be suffering from personality disorders, 12 (24%) were antisocial, 10 (20%) were depressed, 7 (14%) were hypomanic, 5 (10%) had hypochondriasis, 5 (10%) were hysteric, 4 (8%) were suffering from anxiety and 3 (6%) were schizoid. (Figure 1)

Among these personality scales, the rate of depression was the highest among married abusers (26.08%) and drug abusers older than 30 (27.2%). However, in single and younger than 30 years of age, antisocial scale was the most frequent one (Table 1). Also, drug abusers with their education level more than a high school diploma, had the highest percentage in depression than other scales (100%). The antisocial scale had a considerable percentage among those with educational level less than high school diploma (24.4%) (Table 1).

### Discussion

Most of our sample were young people; i.e. 43 (64.17%) were under 30. It has been mentioned that the age of onset of drug abuse is between 17 and 25 (1). Most of the participants of this study began using drugs at the same time (17 to 25 years of age). Also, it

**Table 1.** The Prevalence of personality traits in 50 heroin abuse Injectors in Kashan's Prison based on the related factors (2006)

Personality traits		D n (%)	Hs n (%)	Hy n (%)	Pt n (%)	Pd n (%)	Pa n (%)	Sc n (%)	Ma n (%)
Employed	N=30	4 (13/3)	2 (6/6)	4 (13/3)	4 (13/3)	7 (23/3)	3 (10)	2 (6/6)	3 (10)
Unemployed	N=20	6 (30)	3 (15)	1 (5)	0 (0)	5 (25)	1 (5)	1 (5)	4 (20)
Under 30 years old	N=32	5 (14/2)	4 (12/5)	4 (12/5)	3 (9/3)	10 (31/2)	2 (6/2)	2 (6/2)	4 (12/05)
Above 30years old	N=18	5 (27/7)	1 (5/5)	1 (5/5)	1 (5/5)	2 (11/1)	2 (11/1)	1 (5/5)	3 (16/6)
Less than high school	N=45	5 (11/1)	4 (8/8)	3 (6/6)	2 (4/4)	11 (24/4)	4 (8/8)	3 (6/6)	4 (8/8)
More than high school	N=5	5 (100)	1 (20)	2 (10)	2 (10)	1 (20)	0 (0)	0 (0)	3 (60)
Married	N=23	6 (26/08)	2 (8/6)	1 (4/3)	3 (13/04)	5 (21/7)	2 (8/6)	0 (0)	3 (13/04)
Single	N=27	4 (14/8)	3 (11/1)	4 (14/8)	1 (3/7)	7 (25/9)	2 (7/4)	3 (11/1)	4 (14/8)

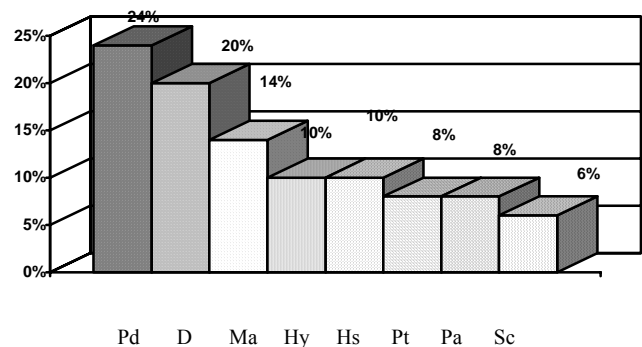
is stated in various studies that the pattern of using drugs changes considerably with age, and among teenagers and young people the amount of drug abuse increases as their age goes up and reaches its peak between 18 and 20 years of age (19.6%); after which, the amount of drug abuse generally decreases (12). Of course other factors such as being a teenager, identity crisis, confusion, and the role of peer pressure could affect these patterns (12). Various research mentions the fact that younger drug abusers are affected by different psychiatric disorders, in particular mood disorder and disruptive behaviors than non drug abusers; and teenager drug abusers with psychiatric disorders along with stressors, low social skills and lack of involvement in productive activities are more at risk of recurrence (12). This shows the importance of paying more attention to teenagers and problems of young adult.

According to this study, educational level of most IV drug abusers was less than high school diploma (84.9%), and there is a significant relationship between abnormal personality traits and education level. This finding was consistent with previous studies too (1).

The most frequent personality traits among heroin abusers were antisocial behavior (24%), depression (20%), and hypo manic (14%), while other traits have lower frequency. These findings are also confirmed by other investigators (13,14).

This study shows that most drug abusers are single. This finding also confirmed previous studies (4). Among single drug abusers, antisocial personality was the most frequent trait (25.9%). Married IV drug abusers are more likely to experience

depression (26.08%). This could be due to the amount of pressure married prisoners tolerate in prison. This pressure may come from different sources such as feeling responsible towards family and meeting their needs etc. The next prevalent personality trait was antisocial personality entailing 2.7% of the married drug abusers.

**Figure 1:** The frequency of personality traits in heroin abusers in Kashan's Prison (2006)

Antisocial traits are more frequent among IV drug abusers younger than 30 years of age (31.2%), while depressive traits are more frequent among older than 30 (27.7%). In various resources, teenagers and young drug abusers have more co morbid disorders, especially high prevalence of mood disorder, disruptive and impulsive behaviors, than non-drug abusers (12). Furthermore, the clinical scale of antisociality was more prevalent than other scales (24.4%) among those with educational level less than high school. Among the unemployed IV drug abusers, depression was the most significant scale than other. In various studies, the relation between unemployment and mental disorders was

verified (1). In this study, 30 prisoners who were IV heroin abusers, held job before going to prison and among them, 7 (23%) were antisocial. It should be noted that from these IV drug abusers (who were employed), 22 (71.3%) had jobs with the lowest salary (labor work) and their job was not permanent. In general, most of them did not have a full-time job. Based on the previous studies, income and job conditions can predict substance dependency during a lifetime (1). Therefore; the presence of criminal actions, increasing the antisocial personality including robbery, vandalism and fighting can be explained (1).

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