



Personality Traits and Their Relationship to Demographic Features in Addicts Referring to a Drug Rehabilitation Center in the City of Isfahan, Iran

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Abstract

Background: : Addiction is one of the most serious social damages and due to its progressive nature in all aspects, adversely affects people's physical and psychological health. Hence, this paper investigates the characteristics of drug addicts in a drug rehabilitation center in the city of Isfahan.

Methods: In this cross-sectional study conducted in 2012, the population consisted of all addicts that referred to Shefa Drug Rehabilitation Center. A sample of 201 individuals was selected randomly. Two questionnaires were drawn up to collect data; the first questionnaire examined demographic characteristics and the second was the 71-item Minnesota Multiphase Personality Inventory short form. Chi-square test, Fisher's exact test and Kruskal-Wallis test were used in SPSS20 to analyze the data.

Results: Overall, 98% of participants were men, 65.7% were married, and 13.3% were unemployed. Depression and hypomania were respectively the most and the least prevalent disorders among individuals with high-risk psychological profiles of clinical scales respectively. Psychopathic deviation and schizophrenia were seen among the unemployed more than the employed ones.

Conclusion: Considering the fact that depression was the most common personality disorder among the addicts participating, it is recommended that this disorder be given priority in investigations in the treatment programs of these patients. In addition, the scales of disorder, schizophrenia, mental infirmity, mental deviation, and paranoia had a significant relationship to aggression, delirium and hallucination, which must be taken into consideration in the treatment of such patients.

Keywords: Addiction, Personality disorder, Drug, MMPI, Psychological characteristics

Introduction

Addiction is a biological, mental and social illness viewed as one of the four prominent social damages interlinking poverty, unemployment and di-

vorce (1). Because of its progressive nature through all aspects of life, addiction endangers people's health, and its adverse effects on mental, physical,

social, emotional, spiritual and cognitive health are clear (2). Addiction is based on an uncontrolled desire to enjoy and reduce stress in a person with personality and behavior disorders (3, 4).

It seems that personality traits have significant effects on individuals' behaviors; addiction is no exception to this rule. Askari believes that personality traits and predisposition are related addiction (5). Around three quarters of patients who sought treatment for drug abuse had a history of psychiatric disorders and two-thirds suffered from psychiatric disorders along with their drug abuse (6), and, about 90% of them also suffered from a psychiatric or personality disorder, simultaneously (7). From a psychological perspective, drug abusers have a personality trait of vulnerability (8).

Nearly 30% - 60% of drug addicts meet the diagnostic criteria for antisocial personality disorder, while this is 2% - 3% in the normal population (9). The most prevalent psychiatric diagnoses include major depressive disorder, alcohol-related disorders, antisocial personality disorders, and anxiety disorder (7, 10).

Assarian et al. in Iran (7) studied opium and heroin addicts, demonstrating that the most frequent psychological characteristics in these addicts were hysteria and depression. There was a significant correlation between abnormal personal characteristics and educational level (11).

Depression and psychopathic deviation had the highest frequency among personality disorders (3). There was a significant difference between the case and control groups in terms of hypochondria and hysteria (12). The psychopathic deviation disorder and paranoia had the highest distribution (13). Schizophrenia, hypochondrias and psychasthenia were the most prevalent clinical scales (14). Identification and understanding of behavioral factors are therefore necessary to prevent these problems. In this regard, understanding personality traits of drug addicts is one of the important factors (15, 16); a better understanding of drug addicts' personality disorders allows for more comprehensive planning to treat these patients according to their dominant personality, and provides policymakers in the health and drug control

sectors with opportunities to develop more efficient preventive programs in the society.

Regarding the importance of the problem of addiction, different approaches have been considered in a macro level. One approach to reduce the demand for drugs includes the three areas of prevention, treatment, and harm reduction. Drug rehabilitation centers are considered as one of the important tools of performing these macro policies (17).

The establishment of drug rehabilitation centers in the society provides addicts with the possibility to access the services more easily. Addicts enjoy the social and clinical support by visiting these centers to undergo treatment for addiction. Also, such centers help to minimize the possibility of return to addiction. In fact, in these centers, addicts enjoy the advantages of the existence of social capital which has an important and effective influence on their self-esteem (18).

Therefore, in order to help achieve this aim, this paper investigated the personality traits of drug addicts in a drug rehabilitation center in the city of Isfahan. It sought the following objectives: 1. determining the demographic characteristics of the sample, 2. determining addicts' psychological profiles as divided by the type of drug, and personal and social characteristics, and 3. determining the relationship of psychological profiles to type of drug as well as personal and social characteristics.

Materials and Methods

Design

In this analytical cross-sectional study performed in 2012, the population consisted of all addicts who had referred to Shefa Drug Rehabilitation Center, Isfahan, Iran. To perform this study all ethical codes were to observe. Personal information of participants that completed the questionnaires, remains confidential and only the required data was analyzed. Participants completed questionnaires by the consent and knowledge and the ethics committee approved this study. A sample of 201 individuals was selected randomly.

Questionnaires

Two questionnaires were used to collect data; the first questionnaire examined family, social, and economic demographic characteristics of the subjects and the second one was Minnesota Multiphasic Personality Inventory (MMPI). The 71-item MMPI short form was developed by Kincannon (19) and it is used widely in Iranian studies (3, 7, 11-13), so its validity is proved (20). Besides, the reliability of this questionnaire has been examined and verified (21). This test consists of 11 standard scales, 3 of which are related to validity scales and the other 8 scales are related to clinical or personality scales. The 3 validity scales include L, F, and K scales. Clinical scales are hypochondrias (Hs), depression (D), hysteria (Hy), psychopathic deviation (Pd), Paranoia (Pa), psychasthenia (Pt), schizophrenia (Sc), and mania or hypomania (Ma) (11). These characteristics are explained as follows:

1. L scale (5 items, this validity scale is used to detect attempts by individuals to present themselves in a favorable light.)
2. F scale (15 items, it measures exceptional and deviant responses provided by individuals. High scores on this test can be considered as a general pathological index.)
3. K scale (16 items, it is developed to detect individuals who attempt to present themselves in the best possible way.)
4. Hs scale (14 items, hypochondria is a psychological disorder which refers to individuals' excessive preoccupation for their health. The patient suffers from painful emotional perceptions, and tends to attribute them to nonexistent bodily disorders and to ask for help.)
5. D scale (20 items, it is characterized by low activity, fatigue and low energy, substantially decreased interest in enjoyable activities, sadness, stress, lack of mental focus, hopelessness and desperateness, loss of confidence, insomnia or constant sleeping, weight loss or gain, slowness of thought, feeling of guilt, and thoughts of suicide.)
6. Hy scale (25 items, it is characterized by preliminary social behaviors, need to be

loved and helped out by others, childish reactions to failures, physical and psychological disorders without bodily origin.)

7. Pd scale (19 items, it includes characteristics such as lack of responsibility, lack of moral perception, inattention to others, uncontrolled behaviors and actions, lack of feeling of guilt, impulsiveness and immediate satisfaction of needs, and inability to show sympathy or loyalty.)
8. Pa scale (13 items, it includes characteristics such as chronic suspicion, lack of trust in others and ascribing one's own undesirable tendencies to others, irritability, and rigidity in morals and logic.)
9. Pt scale (16 items, it is related to stress, anxiety, and irrational and unfounded apprehension.)
10. Sc scale (20 items, it is characterized by odd behaviors and actions, isolation, misanthropy, sense of difference from others, feeling of not being understood by people, loneliness, and dissatisfaction with family status.)
11. Ma scale (12 items, it is characterized by high activity, intense emotional states, interruption in the train of thought, pleasure accompanied by self-confidence, indifference, and mobility and restlessness.) (3).

Exclusion and inclusion criteria

The inclusion criteria included addicts who visited this center for treating addiction and receiving health care and who were willing to fill both questionnaires. In addition, another inclusion criterion was those who had at least 6 months of experience in addiction. The exclusion criterion was incomplete questionnaires.

Analysis

This study was conducted under the aegis of Daman Sanat Sepahan Company of Isfahan, Iran. Considering its vision of promoting applied knowledge and contributing to evidence-based decision-making, this company laid the foundation for conducting research, and, finally, after confirmation by its research and development unit, the

findings were finalized. When questionnaires were completed and gathered, data were drawn and compared by considering their keys on the profile, and then they were analyzed individually. For data analysis, various methods of descriptive statistics such as frequency distribution, mean, standard deviation, percentage, and of inferential statistics such as Chi-square, Fisher's, and Kruskal-Wallis test as well as SPSS20 software (Chicago, IL, USA) were used.

Results

Demographic Results

Overall, 98% of participants were men. Seventy percent lived in the city of Isfahan and others lived in neighboring cities. Eighty five percent (85%) of the participants had a high school di-

ploma or a lower degree, and 15% of them had academic education. 65.7% were married, 28.9% were single and 5.5% were divorced. Forty six percent of the participants owned their houses and 54% lived in rented houses. 13.3% were unemployed, 12.7% were employees, and 74% were self-employed. Table 1 indicates that, among different groups, cigarette was used more than other types of drugs. After cigarettes, alcohol had the second highest frequency of consumption. Unemployed people were more inclined hashish and methamphetamine after cigarette.

The average age of participants was 37, the oldest was 67 and the youngest was 20. The average age of drug abusers was 21, the youngest person was 11 and the oldest was 47. The average age of drug addicts was 24. The youngest person was 12 and the oldest was 49.

Table 1: Frequency distribution of drug type divided by demographic characteristics

Demographic Characteristics		Cigarette n (%)	Hashish n (%)	Methamphetamine n (%)	Alcohol n (%)	Total n (%)
Gender	Male	174 (89.2)	39 (20.1)	38 (19.7)	55 (28.6)	197 (98)
	Female	4 (100)	2 (50)	1 (25)	2 (50)	4 (2)
Marital status	Married	117 (89.3)	21 (16.2)	15 (11.5)	30 (23.1)	132 (65.7)
	Single	50 (87.7)	18 (31.6)	21 (37.5)	23 (41.1)	58 (28.9)
	Divorced	11 (100)	2 (18.2)	3 (27.3)	4 (40)	11 (5.5)
Education	Diploma and Lower degree	151 (89.9)	35 (20.8)	35 (21)	50 (30.1)	170 (85)
	Academic de- gree	26 (86.7)	6 (20.7)	4 (13.8)	7 (24.1)	30 (15)
Home status	Owner	79 (86.8)	21 (23.3)	18 (20)	27 (30.3)	92 (46)
	Tenant	99 (92.5)	20 (18.7)	21 (19.8)	30 (28.3)	108 (54)
Occupation	Unemployed	19 (86.4)	7 (31.8)	7 (31.8)	6 (27.3)	22 (13.3)
	Employee	19 (90.5)	2 (10)	3 (15)	4 (21.1)	21 (12.7)
	Self-employed	109 (89.3)	25 (20.5)	19 (15.6)	34 (27.9)	123 (74)

Eighty percent of the participants started drug abuse with cigarette, 62% with opium, 15% with

hashish, 15% with other drugs, and 23.6% had also experienced drug injection. At the time of

completing the questionnaires, 89.4% of participants smoked cigarette and 20.7% smoked hashish, 19% used methamphetamine, and 29.1% of participants drank alcohol.

MMPI Results

As illustrated by Table 2, among individuals with abnormal or high risk psychological profiles, L scale and K scale had respectively the highest and lowest percentages among validity scales respec-

tively. Among the clinical scales, depression and hypomania were the most and least prevalent scales, respectively. A comparison of low risk, at risk, and high risk sections reveals that in all scales, except K scale, at risk individuals have high scores. Table 3 indicates that, among validity scales, L and F were mostly relevant to men and women, respectively. Among the clinical scales, depression was highly related to men, and women's share was higher in schizophrenia scale.

Table 2: Psychological profiles divided by addicts' range of risk

Scales	Low risk		At risk		High risk	
	n	%	n	%	n	%
L	25	12.4	116	57.7	60	29.9
K	101	50.2	90	44.8	10	5
F	51	25.4	120	59.7	30	14.9
Hs	40	19.9	143	71.1	18	9
D	26	12.9	126	62.7	49	24.4
Hy	66	32.8	101	50.2	34	16.9
Pd	55	27.4	121	60.2	25	12.4
Pa	77	38.3	97	48.3	27	13.4
Pt	53	26.4	121	60.2	27	13.4
Sc	64	31.8	96	47.8	41	20.4
Ma	80	39.8	108	53.7	13	6.5

Table 3: Frequency distribution of personality traits as divided by demographic characteristics

Demographic Characteristics		L	K	S	Hs	D	Hy	Pd	Pa	Pt	Sc	Ma	Total
		n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n
Gender	Male	60 (30.5)	10 (5.1)	28 (14.2)	18 (9.1)	48 (24.4)	34 (17.3)	24 (12.2)	26 (13.2)	26 (13.2)	39 (19.2)	12 (6.1)	197
	Female	0	0	2 (50)	0	1 (25)	0	1 (25)	1 (25)	1 (25)	2 (50)	1 (25)	4
Marital status	Married	46 (34.8)	8 (6.1)	19 (14.4)	10 (7.6)	27 (20.5)	20 (15.2)	12 (9.1)	15 (11.4)	15 (11.4)	20 (15.2)	7 (5.3)	132
	Single	12 (20.7)	2 (3.4)	11 (19)	5 (8.6)	16 (27.6)	10 (17.2)	10 (17.2)	8 (13.8)	11 (19)	18 (31)	5 (8.6)	58
	Divorced	2 (18.2)	0	0	3 (27.3)	6 (54.5)	4 (36.4)	3 (27.3)	4 (36.4)	1 (9.1)	3 (27.3)	1 (9.1)	11
Education	Diploma and lower degree	50 (29.4)	9 (5.3)	28 (16.5)	14 (8.2)	43 (25.3)	29 (17.1)	24 (14.1)	27 (16)	26 (15.3)	38 (22.4)	13 (7.6)	170
	Academic degree	9 (30)	1 (3.3)	2 (6.7)	4 (13.3)	6 (20)	5 (16.7)	1 (3.3)	0	1 (3.3)	3 (10)	0	30
Home status	Owner	26 (28.3)	4 (4.3)	13 (14.1)	9 (9.8)	24 (26.1)	15 (16.3)	12 (13)	12 (13)	13 (14.1)	18 (9.6)	8 (8.7)	92
	Tenant	33 (33.6)	6 (5.6)	17 (15.7)	9 (8.3)	25 (23.1)	19 (17.6)	13 (12)	15 (14)	14 (13)	23 (21.3)	5 (4.6)	108
Occupation	Unemployed	9 (41)	0	3 (13.6)	4 (18.2)	4 (18.2)	4 (18.2)	6 (27.3)	2 (9.1)	3 (13.6)	6 (27.3)	1 (4.5)	22
	employee	9 (43)	0	2 (9.5)	5 (23.8)	5 (23.8)	3 (14.3)	1 (4.8)	1 (4.8)	0	1 (4.8)	0	21
	Self-employed	34 (27.6)	9 (7.3)	22 (18)	5 (4.1)	31 (25.2)	18 (14.6)	15 (12.2)	21 (17.1)	22 (18)	28 (22.8)	9 (7.3)	123

Individuals with different marital, education and home status have scored higher on L and depression scales. As regards occupation, psychopathic deviation and schizophrenia scales are mainly related to unemployed addicts. The employed had a greater percentage in terms of depression and hypochondrias scales, and self-employed individuals suffered from depression more than other scales.

Table 4 suggests that, among cigarette smokers, L and depression scales had the highest frequency. Among hashish addicts F and depression scales were the most frequent, while L and schizophrenia scales were mainly related to methamphetamine abusers. F, depression, and schizophrenia scales were the most frequent ones among alcoholics.

Table 4: Frequency distribution of personality traits as divided by drug type

Drug type	L n (%)	K n (%)	S n (%)	Hs n (%)	D n (%)	Hy n (%)	Pd n (%)	Pa n (%)	Pt n (%)	Sc n (%)	Total N
Cigarette	55 (40)	9 (5.1)	25 (14)	17 (9.6)	48 (27)	32 (18)	23 (13)	10 (5.6)	25 (14)	37 (20.8)	178
Hashish	7 (17.1)	3 (7.3)	8 (19.5)	7 (17.1)	16 (39)	14 (34.1)	12 (30)	4 (9.8)	10 (24.4)	14 (34.1)	41
Methamphetamine	10 (25.6)	3 (7.7)	9 (23.1)	6 (15.4)	13 (33.3)	8 (20.5)	10 (25.6)	5 (12.8)	8 (20.5)	14 (35.9)	39
Alcohol	11 (19.3)	2 (3.5)	13 (22.8)	10 (17.5)	19 (33.3)	11 (19.3)	12 (21.1)	6 (10.5)	12 (21.1)	19 (33.3)	57

Chi-square, Fisher's, ANNOVA, and Kruskal-Wallis tests were then used to investigate the relationships between personality traits and factors such as gender, marital status, occupation, education, home status, drug abuse, drug injection, type of drug abuse, history of excessive drug abuse, history of aggression, delirium, and hallucination, history of hospitalization in psychiatric centers, history of psychiatric medications, history of withdrawal and treatment, major problematic narcotics (opium, heroin, crack, norgesic, methamphetamine, hashish, alcohol, cocaine, sedatives and hypnotics, and other drug combinations), income, beginning age of drug abuse, beginning age of addiction, duration of drug abuse, the longest withdrawal time, and number of imprisonment times. These are presented bellow as divided by the results relevant to each personality trait:

- According to chi-square and Fisher's exact tests;
 - *D scale* was significantly related to the use of cigarette and cocaine use ($P < 0.05$).

- *L, F, Sc, Hy, Ma, Pd and Pa scales* was significantly related to the use of alcohol ($P < 0.05$).
- *L, Sc, D, Ps, Ma, Hy, Pd and Hs scales* was significantly related to the use of hashish ($P < 0.05$).
- *Sc, Ps, Ma, Pd and Hs scales* was significantly related to the methamphetamine abuse ($P < 0.05$).
- *L, Sc, D, Ps and Pd scales* was significantly related to the heroin use ($P < 0.05$).
- *L and Ma scales* was significantly related to the crack use ($P < 0.05$).
- *Sc scale* was significantly related to the norgesic use ($P < 0.05$).
- *Sc, Pd and Pa scales* was significantly related to the opium use ($P < 0.05$).
- *Ps and Hy scales* was significantly related to the sedatives and hypnotics medications ($P < 0.05$).
- *L, F, Sc, Ps, Pd and Ps scales* was significantly related to the psychiatric medications ($P < 0.05$).

- *Sc, Ps, Pd and Pa scales* was significantly related to the history of drug injection ($P<0.05$).
- *L, K, Sc and Pd scales* was significantly related to the history of addiction withdrawal and treatment ($P<0.05$).
- *F, Sc, D, Ps Pd and Pa scales* was significantly related to the history of aggression, delirium and hallucination ($P<0.05$).
- *F and Pd scales* was significantly related to the history of hospitalization in psychiatric centers ($P<0.05$).
- *F and D scales* was significantly related to marital status ($P<0.05$).
- *Hy scale* was significantly related to occupation ($P<0.05$).
- *Pa scale* was significantly related to education, and major ($P<0.05$).
- According to Kruskal-Wallis test;
 - *L, Sc, D, Pd and Hs Scales* was significantly related to age ($P<0.05$).
 - *L, Sc, Ps and Pd Scales* was significantly related to beginning age of addiction ($P<0.05$).
 - *L Scale* was significantly related to duration of cigarette use ($P<0.05$).
 - *L and F Scales* was significantly related to duration of methamphetamine abuse ($P<0.05$).
 - *L, Sc, Ps, Pd and Pa Scales* was significantly related to number of imprisonment periods ($P<0.05$).
 - *Sc, D, Ps, Pd and Hs Scales* was significantly related to the duration of hashish use ($P<0.05$).

Discussion

The results of this research indicated that addiction was highly prevalent among men, married individuals, and individuals with education below high school diploma; this is in line with findings made by previous studies (12, 13, 22). In the present study, hashish abuse had the third rank, and, in Motozaker's study conducted in

the drug rehabilitation ward of a hospital, heroin abuse had the first rank (23).

In the present research, 23.6% of the participants had a history of drug injection; this was 14.8% in the study by Sahebolzamani et al. (3). Findings revealed that the average age of drug abuse was 21 and the average age of addiction was 24. Thirty six percent of addicts began using drugs when they were under 20 (7). In the study conducted in drug rehabilitation centers, the beginning age of drug abuse was obtained at 21 years old (24). Previous studies found that 38% of visitors to California mental health center reported the use of at least one or more drugs; 21% also reported use of at least three (or more) types of illegal drugs (25).

In the present research, among individuals with abnormal or high risk psychological profiles, depression and hypomania were respectively the most and the least prevalent clinical scales. Also, depression had a significant role in Killen's study (26). In their investigation of addicts in drug rehabilitation centers, Shargh et al. concluded that the feelings of loneliness and isolation were among the causes of return to addiction (27). With respect to the existence of psychiatric disorders in addicts, the findings are consistent with previous studies (28-30). The rate of depression was 24.4% in the present study and 26.4% in Miller's (28).

In a research on addicts, 44% of addicts suffered from psychopathic deviation disorder and 24% had depression (31). Psychopathic personality disorder had the highest percentage among drug injectors (32). Fifty percent of addicts suffered from mental and social problems (33). Having addicted friends who have made no effort to treat it, serves as a motive for addiction, and raises its severity (34). Therefore, drug rehabilitation centers are helpful and can introduce motivated individuals to one another and provide appropriate social support for addicts.

Among individuals with abnormal or high risk psychological profiles, L scale and K scales of validity had the highest and lowest percentage, respectively. Participants scored low on these scales (3), which was interpreted as absence of psychological defense mechanism in the individuals. Among validity scales, L was mostly related to

men and F to women. Among clinical scales, the depression scale was highly related to men, and women's proportion was higher in the schizophrenia scale. Individuals with different marital, education, and housing status scored higher on L and depression scales, which is in line with another study (3). Findings of another study also support these results on depression (11).

As regards occupation, psychopathic deviation and schizophrenia scales were mainly related to unemployed addicts. Employees had a greater percentage in terms of depression and hypochondriasis scales, and self-employed individuals suffered from depression more than other scales. In their study conducted in drug rehabilitation centers, investigated the factors contributing to return to addiction, concluding that unemployment was an important factor in the return to drug abuse (35). Among cigarette smokers, L and depression scales had the highest frequency. Among hashish addicts, F and depression scales were the most frequent, while L and schizophrenia scales were mainly related to methamphetamine users. F, depression, and schizophrenia scales were the most frequent among alcoholics. Various studies about simultaneous outbreak of drug abuse and psychological disorders indicate that the amount of alcohol and drug abuse is significantly higher among individuals who seek help from mental health centers than ordinary people (36). Compared to ordinary people, the risk of addiction to alcohol and drugs is 21 times as high in individuals with psychopathic personality disorders, 6 times as high in people with hypomania, 4 times as high in schizophrenics and twice as high in individuals with panic disorders (37, 38). Drake found that 37% of alcohol abusers and 53% of drug abusers suffered at least from one serious mental illness (39).

In this research, L scale was significantly related to the use of hashish, alcohol, major problematic narcotics including heroin and crack, psychiatric medications, history of withdrawal and treatment, age, beginning age of addiction, duration of use of cigarettes and methamphetamine, and number of imprisonment periods. K scale was significantly related to history of withdrawal and treatment. However, L scale was significantly related to hous-

ing status and education and K scale was significantly related to housing, education and marital status (3).

Depression scale in the present study was significantly related to marital status; use of cigarettes and hashish; major problematic narcotics including heroin and cocaine; history of aggression, delirium and hallucination; and age and duration of hashish use. Hypomania scale, on the other hand, according to Fisher's exact test, was significantly related only to major problematic narcotics including crack, methamphetamine, hashish, and alcohol.

This study suggested that personality disorders were prevalent among drug addicts; therefore those therapies which lack pre-assessment of addiction-predisposing factors and are not defined according to personal characteristics of patients lose the chance of offering complete treatment. It is then necessary to include psychological therapies in treatment programs for addicts in order to identify the gaps in their personalities and define the treatment period according to each person's mental needs. The paper also showed that different drugs had different effects on personality disorders and could highlight or marginalize a particular scale. Type of drug must therefore be taken into consideration in treatment programs. Findings also revealed that demographic backgrounds affect personality disorders in addicts –which can be investigated more widely for sociological planning and prevention of social abnormalities. Therefore, for treatment of drug addicts it is essential to therapists to consider a triangle of demographic characteristics, type of drug, and personality disorders in their analysis of patients.

Conclusion

Considering the fact that depression was the most common personality disorder among the addicts participating in this study, it is recommended that this disorder be given priority in investigations in the treatment programs of these patients. In addition, the scales of disorder, schizophrenia, mental infirmity, mental deviation, and paranoia had a

significant relationship to aggression, delirium and hallucination, which must be taken into consideration in the treatment of such patients.

Ethical Considerations

Ethical issues (Including plagiarism, Informed Consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors

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