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The comparison of prevalence of personality disorders among individuals with substance abuse, regression to abuse and ordinary people

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Abstract

Introduction: Personality disorders are heterogeneous set of disorders that code in axis II of DSM-IV-TR and they are as stable models of internal behavior and experience that conflict with cultural expects significantly. The present study aimed to compare prevalence of personality disorders among individuals with substance abuse, regressed to abuse and ordinary people.

Materials and Methods: Statistic sample of this research includes all of the men of Mianeh city in 2014, sample group consists of 300 persons (100 cases with substance abuse among who referred to treatment centers, 100 people who abuse drug again and 100 ordinary individuals). The cases selected via convenient sampling method. The research instrument was Millon Clinical Multiaxial Inventory-3. Data analyzed through multivariable variance analysis.

Results: There is a significant difference between abusers and ordinary people in personality disorders such as schizoid, depression, antisocial, aggressive (sadism), obsessive (compulsive) and schizotype disorders. Also, there is significant difference between people with regression to abuse substance and ordinary people, in addition between substance abusers and those with regression to abuse substance in all of the personality disorders (P<0.05).

Conclusion: According to the research findings, the main role of personality disorders can relate to tendency to substance abuse and regression to addiction.

Keywords: Personality disorder, Regression, Substance abuse

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Introduction

Substance abuse and addiction is a chronic and recurring disorder characterized by periods of recovery and relapse. Most of the people who quit using substances relapse or relapse, and the most likely time is 90 days after the start of withdrawal (1) in Iran because one of the main routes of carrying and transporting opioids is located on the

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road. For other historical and social reasons, he is considered one of the biggest victims of narcotics in the world. According to some reports, 2 to 6 million people in Iran use narcotics as an addiction or addiction (2).

Fisher et al. studied 108 hospitalized addicts using the 5-factor personality test in a study aimed at investigating personality traits that contribute to addiction and impact relapse after treatment. Analyzing and analyzing the information showed that two personality traits, i.e., high psychopathy and low task science, played an important role. In addition, it has had frequent relapses during diagnosis and treatment (3).

Studies conducted on different samples using different evaluation methods show that more than half of people suffering from substance abuse suffer from at least one personality disorder, and many suffer from more than one personality disorder (4).

A review of the existing literature in this field indicates that antisocial personality disorder and borderline personality disorder are the most common personality disorders combined with substance use disorders, and most researchers have focused on these two disorders. In various studies, between 35 and 65 percent of substance abusers meet the diagnostic criteria of antisocial personality disorder (5). In general, the review of these studies indicates that borderline personality disorder is common among people suffering from substance abuse. Also, substance abuse is common in people diagnosed with borderline personality disorder (6).

Bardeen et al. (7) investigated the relationship between borderline personality disorder, the tendency to use cocaine, and the moderating role of gender. They found a high rate of borderline personality disorder among people with substance use disorders. Furthermore, evidence suggests that cocaine-dependent patients with borderline personality disorder are at greater risk for adverse clinical outcomes than cocaine-dependent individuals without borderline personality disorder. Powell et al. (8) investigated the mediating role of metacognitive mastery in the relationship between alexithymia and cluster C personality disorder in adults with substance use disorders. They found that after controlling the severity of symptoms and substance abuse history, Metacognitive mastery moderated the effect of alexithymia in some individuals with cluster C personality disorder. Furthermore, it showed that participants with higher levels of alexithymia and less metacognitive mastery had more cluster C personality disorder than other personality disorder clusters. Rady et al. (9), in research titled dual diagnosis of personality disorder and substance abuse with a sample size of 683 patients with mental disorders, indicated that 22% of the samples had a dual diagnosis. Also, 12% of the samples were suffering from a personality disorder, and 57.32% of the patients who have personality disorders were given a dual diagnosis with substance use disorder.

In Lechliter's research (10), which investigated insecure attachment styles, personality cluster B disorders, and gender as risk factors for substance abuse, the results showed that insecure attachment styles and personality cluster B disorders, especially Borderline personality, are considered a risk factor for substance abuse. In contrast, the gender factor was not significant.

Gratz et al. (11), in research titled determining the coexistence of borderline personality disorder and substance abuse, showed this coexistence between borderline personality disorder and substance abuse. In their research, Cohen and colleagues (12) investigated personality disorders in adolescence and the subsequent development of substance use disorders in the general population with a sample of 749 people. The results showed that personality disorders, especially borderline personality disorder, predict adolescent substance use disorders.

Begdeli et al. (13) investigated the subspecies of antisocial personality disorder, its relationship with anxiety, and its coexistence with substance abuse using a sample size of 90 people using the convenient sampling method and the Millon 3 questionnaire. They indicated that antisocial personality disorder is related to anxiety and co-occurs with substance abuse, and there are two subtypes of antisocial personality disorder, one with and one without anxiety.

Parsania et al. (14) investigated the personality disorders in people with substance abuse disorder, referring to addiction treatment centers with a sample size of 200 people. They concluded that 75.2% of addicted patients had an antisocial

personality disorder, 56.4% had schizophrenia, 70.3% had a paranoid personality disorder, and 45.5% had hypomania. There is a statistically significant relationship between gender and employment status, simultaneous use of several substances, and duration of substance use with antisocial, paranoid, and schizophrenia personality disorders. Bakhshipour Rudsari (15) showed a significant difference between the two groups of self-reported addicts and the normal group in most of the damage indicators, and the addicts achieved higher scores in these indicators. Shakeri and Sadeghi (16) evaluated the prevalence of personality disorders in patients admitted to a medical training center in Kermanshah, with a sample size of 203 people. They found that 67.50% of the patients studied had personality disorders. Despite the above findings, researchers believe that cultural differences, differences in the construction of family and family interactions, values and social behaviors, and the nature of social learning are effective in addiction. The abundance that we see between the Iranian personality and the people of Western societies leads to a limited generalization of western findings about Iranian addicts. So, there is an urgent need for accurate knowledge of personality traits and characteristics. It makes Iranian addicts feel. According to what was said, the present research aims to answer This is the fundamental question of whether abusive groups return to addiction and ordinary people are different from each other in terms of personality disorders have?

Materials and Methods

The sample size consisted of 300 men from the city of Mianeh in 2014, including 100 substance abusers selected from the addiction treatment centers of Mianeh, 100 who returned to substances, and 100 ordinary people. The sampling method is non-random and convenient so that in order to collect information, by obtaining permission from the welfare organization and by visiting different addiction centers in person and with the cooperation of the officials of the centers, the addicts referring to the centers were selected using the available sampling method. First, a short interview was conducted to gain the subjects' trust and cooperation, and they were assured that their information would remain completely confidential. Then, after selecting the sample group, by explaining how to conduct the test and the questionnaire, emphasizing the execution without entering the name of the subject, and creating a unique code for each of the subjects, after the groups of the subjects were determined, the questionnaire was given to the sample people. At the same time, the entry criteria, such as the average age of over 18 years, on the other hand, the students were all male and had at least primary education.

Research instrument

A) Milon's Clinical Multiaxial Questionnaire 3 (MCM-III): Theodor Milon, professor of clinical psychology and personality prepared it in 1981 and published in 1987. This questionnaire contains 175 short self-descriptive sentences with yes and no answers, which is marked by the examinee on the separate sheet of the answer sheet. The time required to complete it is about 30 minutes. The subject must be at least 18 years old to use the test. This test is often performed individually and can be performed in a group of people with a mental health condition in a clinic or hospital. Milon 3 includes 24 scales. The scales are classified into three groups, A- clinical personality scales, B- pathological patterns of personality, and C- clinical symptoms. It also includes a modifying factor (X), a validity scale (V), and two response tendency scales based on Millon's theory, which are described below: Disclosure scale (X): This criterion is used to evaluate The level of the patient's inclination has been planned carefully and self-disclosure. The emphasis of this standard is on disclosure and honesty. On the one hand, a person tends to be careless and straight, to be honest, and speak freely; on the other hand, he shows double-sidedness or is mysterious. Validity index (V): when there is evident confusion and oppositional behavior in the subject, he may not give a specific answer to the questions. Random answers will occur if the subject does not concentrate on the text of the questions. Four unreasonable but simultaneously believable questions are included in Milon's random response scale to identify such patients. Sociability Scale (Y): This scale measures the factors that the patient makes the most effort to show his mental health, social piety, and deny his unattractive or problematic

features. Negative effect scale (Z): This scale is made from the combination of factors in which the patient considers himself small, shows his anxiety and worry with importance, and abuses his emotional weaknesses.

Scoring method: Millon arbitrarily set a base rate cutoff point of 85 or higher as the definite presence of the desired characteristic, scores of 75 or higher indicate the presence of a characteristic of a disorder, and scores below 75 indicate that some characteristics are present. Milon (1994) mentioned the validity of the test as 0.78. This questionnaire has been standardized in Iran, and its reliability was calculated through the internal consistency of the questions, which is different scales were at least between 0.79 and 0.97 and its retest reliability was 0.64 to 0.89 (18). In the study of Chegyny et al., the reliability of the test was calculated through the internal consistency method, and the alpha coefficient of the scales was obtained in the range of 0.85 to 0.97. Chegyny et al. found the positive predictive power of the scales in the range of 0.58 (demonstrative personality disorder) to 0.83 (delusional disorder) and the negative predictive power of the scales from 0.93 (negative personality disorder) to 0.99 (delirious personality disorder) anxiety) has reported that it is significant (18).

Results

The data relating to this study are given in Tables 1 to 3.

Table 1. Descriptive indices and results of Levene's test

Variable	Group	Mean	SD	Levene test	P
Schizoid disorder	Regression	55.350	14.253	2.367	0.095
	Addict	41.700	13.594		
	Ordinary	35.520	12.611		
Evitable personality disorder	Regression	31.110	9.387	0.009	0.924
	Addict	20.580	6.296		
	Ordinary	20.250	7.127		
Depression personality disorder	Regression	30.000	7.651	2.968	0.053
	Addict	22.560	4.445		
	Ordinary	19.230	5.801		
Dependence personality disorder	Regression	28.710	8.455	1.410	0.236
	Addict	18.660	6.641		
	Ordinary	18.780	6.319		
Dramatic personality disorder	Regression	43.710	10.704	0.183	0.669
	Addict	37.320	6.773		
	Ordinary	35.640	7.151		
Selfish personality disorder	Regression	17.700	6.276	1.026	0.312
	Addict	13.620	4.294		
	Ordinary	14.400	6.324		
Antisocial personality disorder	Regression	36.390	8.086	1.763	0.173
	Addict	24.900	6.473		
	Ordinary	21.450	7.536		
Aggressive (sadism personality disorder)	Regression	27.450	7.463	0.242	0.261
	Addict	20.520	6.832		
	Ordinary	16.950	6.513		
Persnickety (fatalistic) personality disorder	Regression	30.150	8.403	0.967	0.368
	Addict	24.960	5.306		
	Ordinary	22.560	6.215		
Negativism personality disorder	Regression	27.690	8.310	0.058	0.810
	Addict	17.820	7.246		
	Ordinary	17.280	5.783		
Self-harming personality disorder	Regression	22.800	6.134	0.735	0.480
	Addict	15.000	5.688		
	Ordinary	14.370	5.192		
Schizotypal personality disorder	Regression	26.190	10.555	0.018	0.892
	Addict	20.160	7.976		
	Ordinary	15.780	6.896		
Paranoid personality disorder	Regression	36.900	10.958	2.562	0.111
	Addict	25.080	9.830		
	Ordinary	22.980	8.193		
Borderline personality disorder	Regression	48.900	17.389	0.621	0.576
	Addict	35.980	10.604		
	Ordinary	30.810	10.522		

According to the above table and the non-significance of Levene's test, the variance of the variables is homogeneous among the three groups. Therefore, the multivariate analysis of the variance test was used with the assumption of the equality of variances.

Table 2. Intergroup effect of multivariate analysis of variance to compare personality disorders in three groups

Variable	Square set	Degree of freedom	Square set	F	P	Ita square
Schizoid disorder	20591.460	2	10295.370	56.465	0.000	0.275
Evitable personality disorder	7630.980	2	3815.490	64.106	0.000	0.302
Depression personality disorder	6081.180	2	3040.590	68.205	0.000	0.315
Dependence personality disorder	6656.060	2	3327.030	64.172	0.000	0.302
Dramatic personality disorder	3625.980	2	1812.990	25.703	0.000	0.148
Selfish personality disorder	938.160	2	469.080	14.388	0.000	0.088
Antisocial personality disorder	12237.540	2	6118.770	111.863	0.000	0.430
Aggressive (sadism personality disorder)	5700.660	2	2850.330	59.049	0.000	0.285
Persnickety (fatalistic) personality disorder	3010.140	2	1505.070	32.860	0.000	0.181
Negativism personality disorder	6869.220	2	3434.610	66.453	0.000	0.309
Self-harming personality disorder	4410.060	2	2205.030	68.223	0.000	0.315
Schizotypal personality disorder	5463.380	2	2731.890	36.810	0.000	0.199
Paranoid personality disorder	11262.960	2	5631.480	59.516	0.000	0.286
Borderline personality disorder	15732.647	2	7866.325	57.092	0.000	0.278

As seen in the table above, all personality disorders differ in three groups. Considering that the significance of the difference between groups using multivariate analysis of variance does not show which group has a difference, therefore, following this, Bonferroni's post hoc analysis (two-by-two comparison of group means) was carried out the results of which are presented in Table 3.

Table 3. Comparing personality disorder in three groups

Variable	Group	Mean differences	P
Schizoid disorder	Regression and addiction	13.650	0.000
	Regression and ordinary	19.830	0.000
	Addiction and ordinary	6.180	0.004
Evitable personality disorder	Regression and addiction	10.530	0.000
	Regression and ordinary	10.860	0.000
	Addiction and ordinary	0.330	1.000
Depression personality disorder	Regression and addiction	7.440	0.000
	Regression and ordinary	10.770	0.000
	Addiction and ordinary	3.330	0.001
Dependence personality disorder	Regression and addiction	10.050	0.000
	Regression and ordinary	9.930	0.000
	Addiction and ordinary	0.120	1.000
Dramatic personality disorder	Regression and addiction	6.390	0.000
	Regression and ordinary	8.070	0.000
	Addiction and ordinary	1.680	0.475
Selfish personality disorder	Regression and addiction	3.300	0.000
	Regression and ordinary	4.080	0.000
	Addiction and ordinary	0.780	1.000
Antisocial personality disorder	Regression and addiction	11.490	0.000
	Regression and ordinary	14.940	0.000
	Addiction and ordinary	3.450	0.003
Aggressive (sadism personality disorder)	Regression and addiction	6.930	0.000
	Regression and ordinary	10.500	0.000
	Addiction and ordinary	3.570	0.001
Persnickety (fatalistic) personality disorder	Regression and addiction	5.190	0.000
	Regression and ordinary	7.590	0.000
	Addiction and ordinary	2.400	0.038
Negativism personality disorder	Regression and addiction	9.870	0.000
	Regression and ordinary	10.410	0.000
	Addiction and ordinary	0.540	1.000
Self-harming personality disorder	Regression and addiction	7.800	0.000
	Regression and ordinary	8.430	0.000
	Addiction and ordinary	0.630	1.000
Schizotypal personality disorder	Regression and addiction	6.030	0.000
	Regression and ordinary	10.410	0.000
	Addiction and ordinary	4.380	0.001
Paranoid personality disorder	Regression and addiction	11.820	0.000
	Regression and ordinary	13.920	0.000
	Addiction and ordinary	2.100	0.384
Borderline personality disorder	Regression and addiction	12.110	0.000
	Regression and ordinary	17.280	0.000
	Addiction and ordinary	5.170	0.006

As seen in Table 3, there is a significant difference between the mean difference between the two groups of those returning to addiction and substance abusers in all personality disorders. Moreover, according to the average of the groups, these differences are for the benefit of those who return to addiction. In other words, those returning to addiction have higher levels of schizoid, avoidant, depressed, dependent, dramatic, narcissistic, antisocial, aggressive (other-harming), obsessive (compulsive), harmful, and self-defeating (self-harming) personality disorders than substance abusers. In addition,), they are schizotypal, paranoid, and borderline. Also, regarding all personality disorders, there is a significant difference between the mean difference between the two groups of regression and ordinary people. Moreover, according to the average of the groups, these differences are for the benefit of those who return to addiction. In other words, those returning to addiction have higher levels of schizoid, avoidant, depressed, dependent, dramatic, narcissistic, antisocial, aggressive (other-harming), obsessive (compulsive), harmful, and self-defeating (self-harming) personality disorders than ordinary people. In addition, they are schizotypal, paranoid, and borderline. In the case of schizoid, depressed, antisocial, aggressive, obsessive, schizotypal, and borderline personality disorders, there is a significant difference between the mean difference between the two groups of substance abusers and ordinary people. Furthermore, according to the average of the groups, these differences are for the benefit of substance abusers. In other words, substance abusers have higher schizoid, depressive, antisocial, aggressive, obsessive, schizotypal, and borderline personality disorders than ordinary people.

Discussion

Substances do not cause the psychological-personality characteristics of substance addicts, but they had psychological and personality problems before the addiction, which appeared and intensified more destructively after the addiction. In all the writings related to addiction, personality traits have been mentioned as a factor for being drawn toward addiction. In other words, many addicts have personality disorders. The multivariate analysis of the variance test showed a significant difference between the two groups of those returning to addiction and substance abusers regarding all personality disorders, and these differences favor those returning to addiction according to the average of the groups. In other words, those returning to addiction have higher levels of schizoid, avoidant, depressed, dependent, dramatic, narcissistic, antisocial, aggressive (other-harming), obsessive (compulsive), harmful, and self-defeating (self-harming) personality disorders than substance abusers. In addition, they are schizotypal, paranoid, and borderline.

In other words, substance abusers have higher schizoid, depressive, antisocial, aggressive, obsessive, schizotypal, and borderline personality disorders than ordinary people.

The result of this research supports the research of Barden et al. (7), Powell et al. (8), Rady et al. (9), Lechliter (10), Gratz, et al. (11), Parsania et al. (14), Bakhshipour Rudsari (15), Shakeri and Sadeghi (16).

In most studies, the coexistence of personality disorders and substance use disorders has been reported, and a correlation of 0.44 to 0.89 has been declared for alcohol and substance abuse. Furthermore, the coexistence of substance use disorders and personality disorders leads to the aggravation of psychiatric symptoms and an increase in the risk of suicide (3).

Rady et al. (9) evaluated the dual diagnosis of personality disorder and substance abuse with a sample size of 683 patients with mental disorders. They found that 22% of the samples had dual diagnoses. Also, 12% of the samples had a personality disorder, and 57.32% of the patients with personality disorder were given dual diagnoses with substance use disorder.

Conclusion

The results showed that the highest frequency in the group of substance abusers was related to antisocial personality disorder with 16 observations; in the returning to addiction group, it was related to dependent personality disorder with 24%, and in ordinary people, it was related to narcissistic personality disorder with a frequency of 8%. The findings of this research show the important role of personality disorders,

which can be related to the tendency to abuse substances and return to addiction.

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