

The relationship between substance dependency, antisocial personality disorder and adult antisocial behaviors

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ABSTRACT

Purpose: To examine the relationship between substance dependency and personality disorders.

Materials and Methods: Ninety eight patients with substance dependency who had referred to a psychiatry and substance rehabilitation center in Tehran took part in this study. Data were collected using questionnaire and a semi-structured interview. Participants were examined for conduct and antisocial personality disorders. Non-parametric tests were used for data analysis.

Results: Eighty eight percentage of the participants showed adult antisocial behaviors. Forty two percentage of the patients with substance dependency were diagnosed with antisocial personality disorder, while 47.9% (n = 47) suffered from conduct disorder. Only 22 participants had such problems before beginning substance abuse. Abuse frequency, financial status, previous attempts to quit drugs, educational level and family background did not significantly affect the status of antisocial personality disorder and conduct disorder. However, smoking and using alcohol were found to be playing a role in suffering from such disorders.

Conclusion: The results of the present study demonstrate a direct relationship between substance abuse and personality disorders. This indicates the need for more preventive measures to control substance abuse especially among teenagers in order to have fewer individuals with personality disorders in the society.

Keywords: substance dependency; antisocial personality disorder; conduct disorder; drug abuse; antisocial behaviors.

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INTRODUCTION

Substance dependency may be the cause of many physical, mental and behavioral disorders. It can also push individuals towards criminality and result in antisocial behaviors.¹ There are many social, cultural, psychological, and even biological factors which can result in substance abuse.^{1,2} In fact, it is the interaction among these variables that end up in an individual's substance dependency. For example, family has been found to play a significant role in one's tendency toward abusing drugs.¹⁻³

The Psychiatric characteristics such as aggression, intolerance, inflexibility and low self-confidence are among the factors making substance dependency more probable in an individual.^{1,2,4} Medical problems such as chronic pain, stress disorders and depression are the other factors.⁴⁻⁶

Personality is defined as a series of behavioral characteristics which build up one's normal daily life and can be said to be consistent and predictable. When these characteristics become inflexible or maladaptive, it results in observable disorders in one's social,

professional, and interpersonal functioning. These disorders can affect different personality dimensions including a person's cognition, conduct, behavior, and interpersonal relations.^{1,7-9}

Antisocial personality disorder and conduct disorder are two of the common personality disorders among teenagers and adults which are believed to have a direct association with substance dependency.^{1,8,9}

Antisocial personality disorder is one's inability to conform to and cope with the social norms to the extent that it affects most of his or her behaviors during adolescence and adulthood. It is characterized with antisocial behaviors and violation of law, though this disorder is not equal to criminality.^{1, 10-11} Patients with antisocial personality disorder do not respect the law, try to deceive others by lying, do not feel responsible at work, are aggressive and agitated, are careless about their own and others' health, and do not feel shame for their behaviors.¹

Conduct disorder refers to a collection of continuing violent behaviors, aggression, and violation of law. In children, it is usually accompanied with other psychiatric disorders such as attention deficiency hyperactivity disorder, depression, and learning disorders.¹² Being aggressive or harming others and even animals, vandalism, theft, or serious violation of law at least once in one's past 6 months of life can be indicators of having this type of disorder.¹

Previous studies have shown that such disorders can be in direct relationship with substance dependency. In a study on 493 patients with substance abuse and 254 healthy individuals, Prasant and colleagues, found a significant difference between the two groups in suffering from mental disorders.¹³ In another study on 9,279 participants (282 of whom had substance abuse), Sullivan and colleagues observed that mental disorders were significantly more in the group with substance dependency.¹⁴ Also, Kashdan and colleagues found that substance abuse had a significant association with sex and personality in teenagers.¹⁵ Smoking and using alcohol were observed to play a more significant role in pushing men towards drugs than in women.

However, Grilo and colleagues found a significant association between substance abuse and only borderline personality disorder, not the other personality disorders.¹⁶ Myer and colleagues also reported that quitting drugs in individuals with conduct disorder can result in an increase in the likelihood of suffering from antisocial personality disorder in them.¹⁷

Following the same line of research regarding the effect

of substance dependency on personality disorders, the present study was an attempt to examine the association between substance dependency and conduct and antisocial personality disorders in patients referring to a psychiatry and substance rehabilitation ambulatory clinic in Tehran

MATERIALS AND METHODS

Ninety eight patients with substance dependency referring to a psychiatry and substance rehabilitation ambulatory clinic in Tehran were enrolled in the present study. They were selected using non-probability consecutive sampling.

Carried out in 2011, this was a descriptive cross-sectional study on the personality disorders in patients with substance dependency. In order to collect data, a questionnaire was developed by the team of the researchers checking on a number of variables including patients' age, gender, education, marital status, job, financial status, smoking background, the type of substance being used and family substance abuse background. Patients with substance dependency were then examined for the diagnosis of conduct and antisocial personality disorders by tests and a semi-structured interview.

The participants were ensured that all the collected data would be kept completely confidential and would be used only for research purposes without disclosing any participants' identity. In addition, written consent forms were collected from all the participants. The relationship between patients' demographical variables and the presence of personality disorders was checked using descriptive statistics as well as the non-parametric tests of Chi-squared and Fisher's exact test.

RESULTS

The majority of the participants were men ($n = 93$) with a low educational level (high school degree or less). The participants' age range was 27 to 51 years old with a mean of 42.34 ± 4.72 . Forty one participants (42%) were married. 42 of them reported one of their family members, often their father and then brother, to have the background of substance abuse. 86 of them had at least once attempted to quit drugs, and at the time of the study, the participants had an average use of 2 or 3 times a day (Table).

Eighty eight percentage ($n = 86$) of the participants had antisocial behaviors. Forty two percentage of the patients with substance dependency were diagnosed with antisocial personality disorder, while 47.9% of them ($n = 47$) had suffered from conduct disorder. From among those with conduct disorder, 17 (36.2%) were categorized

Table. Information on participants' background.

	Frequency	Percentage (%)
Education		
Illiterate	2	2.04
Primary school	24	24.5
Junior high school	31	31.6
Diploma	36	36.7
Above diploma	5	5.1
Job		
Student	2	2.04
Soldier	7	7.1
Civil servant	17	17.3
Self-employed	39	39.8
Unemployed	33	33.67
Type of abused substance		
Alcohol	32	32.6
Opium	63	64.2
Opium extract	49	0.50
Heroin	34	37.7
Marijuana	27	27.5
Crack	43	43.9
Crystal	7	7.1
Method of consumption		
Smoked	72	73.4
Swallowed	42	42.8
Injected	18	18.4
Snorted	19	19.4

to be low, 19 (40.4%) moderate, and 11 (23.4%) severe in intensity. In addition, 46% of the participants had antisocial behavior disorder without having conduct disorder. From among the 86 participants with antisocial behaviors, only 22 of them (25.6%) had such problems before they begin substance abuse.

The Chi-squared test showed no statistically significant association between patients' educational level and antisocial personality disorder ($P = .11$) and conduct disorder ($P = .21$). Neither gender nor marital status were found to play a significant role in case of antisocial personality disorder, though marital status did show a significant association with conduct disorder ($P = .04$), with married individuals being less likely to show antisocial behaviors.

Using Fisher's exact test, it was observed that the relative frequency of patients with antisocial personality disorder was significantly different in the case of patients who were smoking ($P = .02$) but not for those who used to be smoking ($P = .27$) or non-smokers ($P = .55$). In the case of patients with conduct disorder, this significant difference was observed in the case of smokers ($P = .01$) and non-smokers ($P = .02$) but not for ex-smokers ($P = .49$).

The frequency of use (p ASPD = .35, p CD = .43), the

patients' monthly income (p ASPD = .97, p CD = .62), previous attempts to quit drugs (p ASPD = .54, p CD = .10), and family background of substance abuse (p ASPD = .42, p CD = .47) were not found to be associated to the status of antisocial personality disorder and conduct disorder.

Regarding the type of substance being used, it was observed that in the case of antisocial personality disorder, only alcohol could make a significant difference, but for conduct disorder, only opium could not show a significant association. Finally, unemployed individuals were observed to be significantly more likely to suffer from personality disorders than employed patients.

DISCUSSION

Of the participants 88% ($n = 86$) showed antisocial behaviors. The high number of cases could be because of different reasons including the low number of participants, the weaker social and economic status of the place from which data were collected, and that the participants were selected from among the patients referring to a psychiatric clinic.

Antisocial personality disorder had started before substance abuse in only 22.5% of the patients, which implies the significant role of substance abuse in different types of antisocial personality disorders, which is in agreement with Prasant and colleagues' study.¹³ Education was not found to be associated to personality disorders. However, this could be because the majority of participants had not a high level of education. It is more plausible to hypothesize that higher education can mean a better socio-cultural situation for an individual. This can help him or her to adjust the symptoms of antisocial personality disorders. Becoming more involved in interaction with others in a society can result in taking more responsibility in that society. Thus, it becomes less likely that a person shows antisocial behaviors because the society and the people he/she is interacting with will modify and shape the person's personality.¹

Though the symptoms of conduct and antisocial personality disorders usually begin after the age of 15 years old and beginning substance abuse, these disorders were seen less in married participants than single ones. This could be because of the type of change that happens in one's interaction pattern after marriage. Marriage entails an expansion of social interactions and relationships in one's life as he/she needs to be in contact with another person directly and his or her family more indirectly. In addition, marriage brings about more responsibility. After marriage an individual needs to take care of another

person both emotionally and economically. This will redefine the behavior one is expected to demonstrate in the family and the society. Therefore, it was not unexpected to observe fewer symptoms of such disorders in married participants than the single ones.

Smoking was also found to be significantly associated to both disorders, which confirms the findings of a study by Kashdan and colleagues.¹⁵ Those who smoked early in age were also observed to be more likely to suffer from personality disorders in later stages of life. This could signify another negative effect of smoking cigarette at young ages, which needs authorities' attention. Because of individuals' easy access to cigarettes, smoking is usually among the first substances people get use to. Smoking helps break the taboos in this regard and makes people be less ashamed of proceeding to other more dangerous substances. That is why substance dependency is usually observed to be more prevalent in individuals with smoking backgrounds.

Though the relationship between family substance abuse background and personality disorders was not found to be significant, the number of patients with personality disorders was higher in the group with such a record. This is in agreement with Prasant and colleagues.¹³ In their study individuals with substance dependency whose brother and father were using drugs or alcohol were more likely to have mental disorders.

The present study faced a number of limitations. The major one was the low number of participants. A higher number of participants could give a better view of the patterns regarding the relationship between substance abuse and personality disorders. In addition, data were collected from a psychiatry and substance rehabilitation ambulatory clinic. As a result, all the participants suffered from substance dependency. In case another group of healthy individuals was also included in the study as the control group, the interpretation of the results could be done with a higher certainty and precision.

CONCLUSION

Totally, substance abuse was observed to be in direct association with personality disorders. This suggests that more preventive measures are needed for controlling substance abuse and having fewer individuals with personality disorders in the society as a result. Moreover, as mentioned before, quitting drugs can be dangerous for individuals with conduct disorder. Therefore, if quitting is an option in the treatment process, a lot of caution needs to be exerted. Rehabilitation centers need to evaluate whether the patients suffer from such disorders and then

base the treatment on the diagnosis. In addition, factors such as age, drug dependency background in the family and many other factors need to be taken into account when deciding on the right treatment for these patients.

CONFLICT OF INTEREST

None declared.

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