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# The incidence of personality disorders among substance dependents and non-addicted psychiatric clients

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## Abstract

Resistance against treatment, severity of symptoms and relapse to substance addiction can be resulted from low attention and sometimes inattention to existence of personality disorders in substance dependent individuals in rehabilitation clinics. In order to study and compare the incidence of personality disorders in substance dependents and non-addicted psychiatric clients, Millon Clinical Multi-axial Inventory (MCMI) II was administered on 75 substance dependent males and 75 non-addicted psychiatric male clients. Age, gender, education level were controlled in both group of Clients.

Findings show that the rate of personality disorder prevalence in substance dependent individuals was 45.3% in compare with 25.3% for the non-addicted clients. Results of t-tests analyses indicate that the prevalence rate of personality disorders (specifically, borderline and anti-social personality disorders) in substance dependent individuals is significantly higher than this ratio in non-addicted psychiatric clients. Meanwhile, there was no significant difference between the two groups in narcissistic personality disorder. In conclusion, this study highlighted the importance of paying attention to personality disorders and their related treatments along with other approaches in treatment process of substance dependent individuals. Other implications are discussed.

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*Keywords*, Personality disorders, anti-social personality disorders, borderline pd personality disorders, substance abuse.

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## 1. Introduction

Personality disorders have been identified as one of the most important predictors of treatment outcome in patients having substance use disorders (Rounsaville, Kosten, Weissman and Kleber, 1986; Carroll, Power, Bryant and Rounsaville, 1993; Compton, Cottler, Jacobs, Ben-Abdallah and Spitznagel, 2003; Haro, Mateu, Martínez-Raga, Valderrama, Castellano and Cervera, 2004). Especially, the cluster B personality disorders are the most prevalent (Antisocial, Borderline, and less often Narcissistic and Histrionic); meanwhile, both cluster C (Avoidant and Dependent and less often Obsessive–Compulsive) and cluster A (Paranoid and less often Schizoid and Schizotypal) disorders are also common in substance abusers (Ball, 2004). In this regard, specific personality disorders such as the antisocial personality disorders have consistently been reported as the most prevalent co-morbid psychiatric diagnoses in alcohol or drug dependent individuals (Verheul, 2001).

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Although there have been many studies conducted on the relationship between PDs and SUD, in order to check severity of PDs in substance user, this study aimed to investigate the incidence of personality disorders in substance dependents and non-addicted psychiatric clients. Meanwhile, it is crucial to get a better understanding of the complex relationship of personality disorders and substance use disorders for a better planning of more efficacious treatment and prevention strategies (Haro, Mateu, Martínez-Raga, Valderrama, Castellano and Cervera, 2004).

Therefore the following hypotheses is addressed, 1) there is no significant difference in prevalence of personality disorders between substance dependents and non-addicted psychiatric clients. 2) there is no significant difference in prevalence of Antisocial PD between substance dependents and non-addicted psychiatric clients. 3) there is no significant difference in prevalence of Borderline PD between substance dependents and non-addicted psychiatric clients. 4) there is no significant difference in prevalence of Narcissistic PD between substance dependents and non-addicted psychiatric clients.

## 2. Respondents

Data were collected from a sample of 75 patients with a diagnosis of substance abuse or dependence, who referred to detoxification and rehabilitation center in Kermanshah, Iran; in addition to 75 psychiatric clients who were admitted based on DSM.IV criteria in Axis I. respondents were all male between 18 to 45 years old and they have at least eight years of education.

## 3. Instrument

The Millon Clinical Multiaxial Inventory (1987) is the revision of the first edition of the MCMI and was developed to complement the DSM-III-R (American Psychiatric Association, 1987). MCMI consists of 175 true-false items anchored on Millon's theory of personality and psychopathology. The inventory provides ratings of 10 basic personality patterns and three more severe pathological personality styles. It also has nine scales assessing clinical symptoms, and three scales are validity indices. The applied inventory (MCMI-II) provides both continuous scores for each of the PDs as well as base-rate scores (BR scores), which are designed to measure the presence or absence of a particular PD. Base-rate scores of 85 or higher are used as indices for the presence of a personality disorder. As Marlowe, Festinger, Kirby, Rubinstein and Platt (1998) have established, the congruence of the MCMI-II and the MCMI-III, validated for the DSM-IV (American Psychiatric Association, 1994) is acceptable. In this study the reliability coefficients were satisfactory and the reliability for the narcissistic and the antisocial PDs are among the highest.

## 4. Findings

Outcomes of (MCMI) II on 75 substance dependent males and 75 non-addicted psychiatric male clients were entered in independent T test analysis to compare personality disorders in the two groups. Age, gender, education level were controlled in both group of Clients. The first hypothesis suggests that there is no significant difference in prevalence of personality disorders between substance dependents and non-addicted psychiatric clients. Results of T test for independent groups are given in table 1.

Table 1. t-test for Equality of personality disorder Means in two groups

Personality disorders	t	df	Mean Difference	Std. Error Difference	Confidence Difference 95%	Interval of the 99%
Equal variance assumed	2.735	148	10.106	3.69	1.64	1.96

As indicated in table 1, comparing group means, our main hypothesis that the drug dependent individuals would show higher rate of personality disorders than non-addicted psychiatric clients was presently confirmed. Further investigations show that among personality disorders, prevalence of Anti-social and Borderline personality disorders is different in substance dependents and non-addicted psychiatric clients. Moreover, comparing means, it was found

that the prevalence in substance dependent males is higher than non-addicted psychiatric clients. Results of two T-test analyses are presented in table 2 and table 3. However, there was no significant difference in prevalence of Narcissistic PD between substance dependents and non-addicted psychiatric clients.

Table 2. t-test for Equality of Anti-social personality disorder Means in two groups

Anti-social PD	t	df	Mean Difference	Std. Error Difference	Confidence Interval of the Difference	95%	99%
Equal variance assumed	2.77	148	11.38	4.1	1.64		1.96

Table 3. t-test for Equality of Borderline personality disorder Means in two groups

Borderline PD	t	df	Mean Difference	Std. Error Difference	Confidence Interval of the Difference	95%	99%
Equal variance assumed	2.376	148	9.5	4	1.64		1.96

## 5. Discussion

In order to study and compare the incidence of personality disorders in substance dependents and non-addicted psychiatric clients, Millon Clinical Multi-axial Inventory (MCMI) II was administered on 75 substance dependent males and 75 non-addicted psychiatric male clients. Findings show that the prevalence rate of personality disorders (specifically, borderline and anti-social personality disorders) in substance dependent individuals is significantly higher than this ratio in non-addicted psychiatric clients.

Substance abuse and its co-occurrence with personality disorders is associated with higher substance abuse and psychiatric symptom severity (Brooner, King, Kidorf, Schmidt, & Bigelow, 1997; Rounsaville, Kranzler, H. R., Ball, S., Tennen, H., Poling, J., & TriZeman, 1998) and increased risk for suicide, hospitalization, repeated treatment admissions, over-utilization of medical care, employment and legal problems, victimization or perpetration of abuse, and HIV infection (Target, 1998). Personality disorder presence appears to render substance abusers more susceptible to relapse in the presence of craving, negative physical and emotional states, and interpersonal conflict (Kruegelbach, McCormick, Schulz, & Grueneich, 1993; Smyth & Washousky, 1995) and worse outcome when provided routine or less intensive addiction treatment (Griggs & Tyrer, 1981; Nace & Davis, 1993; Thomas, Melchert, & Banken, 1999). However, antisocial and borderline personality disordered patients appear to benefit at least as much as other patients when provided addiction treatment enhanced with psychiatric care, psychosocial services, potent behavioral incentive contingencies, or cognitive-behavioral therapies (Brooner, Kidorf, King, & Stoller, 1998; Cacciola, Rutherford, Alterman, McKay, & Snider, 1996; Kadden, Cooney, Getter, & Litt, 1989). This study highlighted the importance of paying attention to personality disorders and their related treatments along with other approaches in treatment process of substance dependent individuals.

This study has several limitations; first, there might be an unmeasured third variable that is related to both PDs and SUDs. As we know, age is associated with both PDs and SUDs, and higher rates of comorbidity may be found in younger samples than in the general population. Although, age was controlled in this study; other variables can influence the results, such as childhood trauma (especially physical and sexual abuse) which has been associated with both adult SUDs (Brown & Anderson, 1991) and PDs (Sabo, 1997). Another crucial class of comorbidity explanations to consider is that SUDs cause or lead to PD (or vice versa). In other words, one condition may be the consequence of the other. On the other hand, individuals with BPD might turn to psychoactive substances in order to “self-medicate” affective disturbance or to cope with feelings of emptiness or abandonment (e.g., Dulit, Fyer, Haas, Sullivan, and Frances, 1990); in this case, PDs might influence the development of SUD. Second, the current study

rely on a self-report questionnaire to assess personality functioning. Self-report measures of PDs over-report the presence and severity of PDs. Finally, this study is cross-sectional and is conducted on patients who are either currently in or recently ending an active phase of their SUD. Therefore, generalization of findings should be made cautiously.

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