



Original Article

# Investigating the prevalence of personality disorders among psychiatric inpatients and their non-inpatient family members

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## Abstract

**Introduction:** This study aimed to determine the prevalence of personality disorders among psychiatric inpatients and their non-inpatient family members.

**Materials and Methods:** In this descriptive correlation study, 100 psychiatric patients hospitalized at the Ibn-e-Sina Psychiatric Hospital in Mashhad city-Iran, and 100 of their non-admitted family members were selected through random sampling. The research tool was the Millon Clinical Multiaxial Inventory-III (MCMI-III). The data were analyzed through descriptive statistics, T-test, and Mann-Whitney test.

**Results:** The findings showed that the prevalence of personality disorders among hospitalized patients was 69%, and among their non-hospitalized family members was 63%. The most common disorders among the patients were depressive personality disorder (18%) and obsessive-compulsive disorder (16%), and among the family members of patients, histrionic and obsessive-compulsive disorders (23%). There were significant differences between patients and family members in sadistic, schizotypal, borderline, depressed, dependent, antisocial, negativistic, self-defeating, and paranoid personality disorders ( $P < 0.05$ ). However, in obsessive-compulsive, histrionic, avoidant, schizoid, and narcissistic disorders, there were no significant differences ( $P > 0.05$ ).

**Conclusion:** Based on the findings, the prevalence rates of personality disorders among hospitalized psychiatric patients are high. Also, it is considerable that personality disorders are prevalent among family members of hospitalized psychiatric patients.

**Keywords:** Family, Personality disorder, Psychiatric inpatients

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## Introduction

Personality is certain patterns of thought, emotion, and behavior that determine a person's personal style in interacting with the material and social environment. Sometimes, a part of

developing a person's personality is such that it makes life with oneself or with others difficult. When a person cannot adapt his/her behavior based on significant changes in the environment, he/she is considered to have a personality

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disorder (1). DSM-5 defines personality disorders as a long-term pattern of inner experience and behavior far from the individual's cultural expectations, inflexible and pervasive, begins in adolescence or early adulthood, remains stable over time, and leads to impairment or distress (2,3).

These disorders start from youth or adolescence (2,4) and are usually the result of complex interactions of genetics and the individual's environment (5-7). These disorders are common and chronic and are considered one of the most important health problems in the world (8). Its prevalence in the general population is estimated to be 10-20%, and its symptoms have appeared over several decades (9). People with personality disorders are often labeled as nervous, expectant, or parasitic, and their prognosis is generally considered unfavorable (9).

Personality disorder is the underlying cause of other psychiatric disorders (such as substance use disorder, emotional disorders, impulse control disorders, eating disorders, and anxiety disorders). It interferes with the consequences of many clinical syndromes, and it increases the rate of disability and mortality of these patients (10). About half of all psychiatric patients have a personality disorder, which is often associated with Axis I disorders (11). Research shows that most psychiatric patients have at least one additional disorder (12,13). These disorders make psychiatric treatment difficult and are associated with morbidity and also increase mortality (14,15).

Generally, personality disorders are considered three groups. The first group, named cluster A, has schizotypal, paranoid, and schizoid personality disorders. People who fall into this cluster often appear strange. The second group (cluster B), which owns histrionic, borderline, antisocial, and narcissistic personality disorders, is often emotional, dramatic, or erratic. The last cluster of personality disorders (cluster C) is often characterized by worry or anxiety, including obsessive-compulsive, dependent, and avoidant personality disorders (16).

Considering that limited research has been done on the prevalence of personality disorders in hospitalized patients and among people whose family members have been hospitalized in mental hospitals, as well as the severity of symptoms has negative effects on people's quality of life and naturally requires necessary treatment measures, we decided to investigate

the prevalence of these disorders among psychiatric inpatients and their non-hospitalized family members.

## Materials and Methods

In this descriptive correlation study, 100 psychiatric patients hospitalized at the Ibn-e-Sina Psychiatric Hospital in Mashhad city-Iran, and 100 of their non-admitted family members were selected through random sampling. Inclusion criteria for patients and their family members: age over 18 years, absence of psychotic symptoms in the patients, and education of at least nine literacy classes. The exclusion criteria for patients included unwillingness to continue participating and incomplete questionnaires. The exclusion criteria for family members included unwillingness to continue participating, incomplete questionnaires, and hospitalization due to acute mental disorders.

### Research instrument

*A) Millon Clinical Multiaxial Inventory-III (MCMI-III):* It is a self-assessment scale with 175 yes and no items that include 24 scales; the scales are categorized into three groups: A) clinical personality scales, B) pathological personality patterns, and C) clinical symptoms. It measures 14 clinical personality patterns and 10 clinical symptoms. This inventory is used for adults 18 and older referred to mental health centers for treatment or psychological evaluation. MCMI-III was presented in August 1994 at the meeting of the American Psychological Association. This test is the revised version of MCMI-II. MCMI-III, like the previous two versions, measures personality disorders and axis one disorders. In scoring, a base rate cut-off point of 85 or higher is considered a personality disorder or persistent, significant clinical concern. Also, a base rate of 75-84 represents a significant personality trait or concern about mental health. Millon (1994) alluded to the test validity as 0.78. Sharifi et al. standardized this questionnaire in Iran, and its reliability has been enumerated through Cronbach's alpha in different scales between 0.58 and 0.83 (17,18).

All participants participated in the research after completing the written consent form and ensuring compliance with ethical issues (confidentiality of results).

Descriptive statistical tests, inferential tests (T-test, Man-Whitney test, and Kolmogorov-

Smirnov test) and SPSS 16 statistical software were used to analyze the data.

**Results**

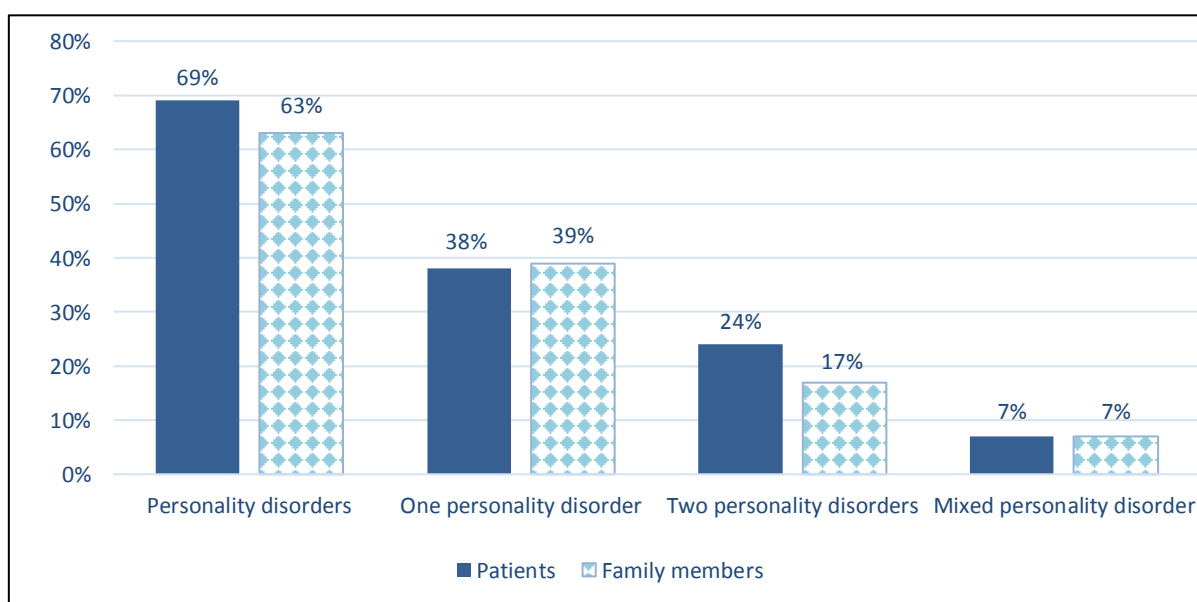
Table 1 presents the demographic variables of psychiatric inpatients and their family members. Out of 100 patients participating in the research, 69 people have personality disorder, 38 patients have one personality disorder, 24 patients have

two personality disorders, and seven people have mixed personality disorder.

Also, out of 100 family members of the patient participating in the research, 63 people have a personality disorder, 39 people of all family members have one personality disorder, 17 people of all family members have two personality disorders, and seven have mixed personality disorder (Chart 1).

**Table 1.** The demographic variables of the participants

Variable		Patients		Family members	
		Frequency	Percent	Frequency	Percent
Gender	Male	77	77%	23	23%
	Female	56	56%	44	44%
Age (Year)	18-35	57	57%	55	55%
	36-50	29	29%	30	30%
	51-65	12	12%	13	13%
	66 and above	2	2%	2	2%
	At least 9 classes	43	43%	33	33%
Education level	Diploma	38	38%	37	37%
	Associate degree	8	8%	8	8%
	Bachelor's degree	10	10%	18	18%
	Master's degree	1	1%	4	4%
	Child	-	-	25	25%
Relationship with the patient	Father	-	-	13	13%
	Mother	-	-	9	9%
	Brother	-	-	31	31%
	Sister	-	-	22	22%



**Chart 1.** Chart of personality disorder in hospitalized patients and their family members

Twenty-three patients were in cluster C personality disorders, 23 patients were in cluster B, and only three patients were in cluster A. The most personality disorders among hospitalized patients were reported as follows:

depressive personality disorder (n= 18), obsessive-compulsive personality disorder (n= 16), histrionic personality disorder (n= 15), and negativistic personality disorder (n=12) (Chart 2).

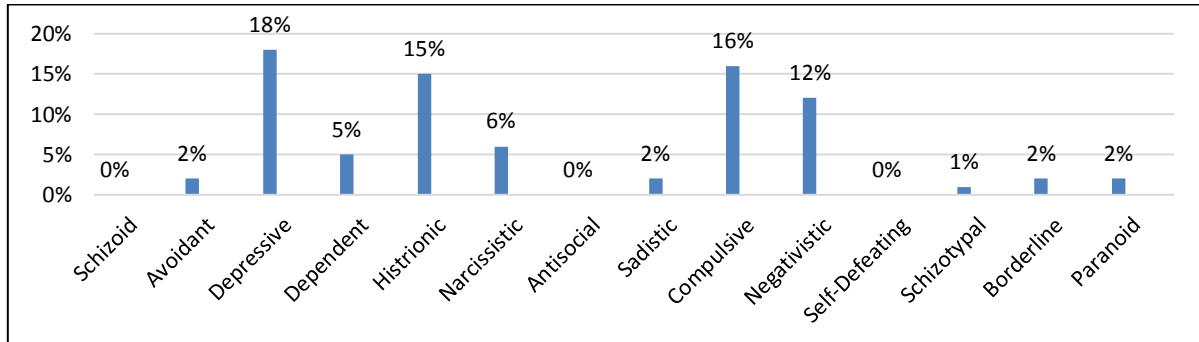


Chart 2. Personality disorders in hospitalized patients

Histrionic personality disorder (n=23) and obsessive-compulsive personality disorder (n=23) were the most reported personality disorders in the family of patients.

Depressive personality disorder ranked third (n=12) people, and negativistic personality disorder ranked fourth (n= 7) (Chart 3).

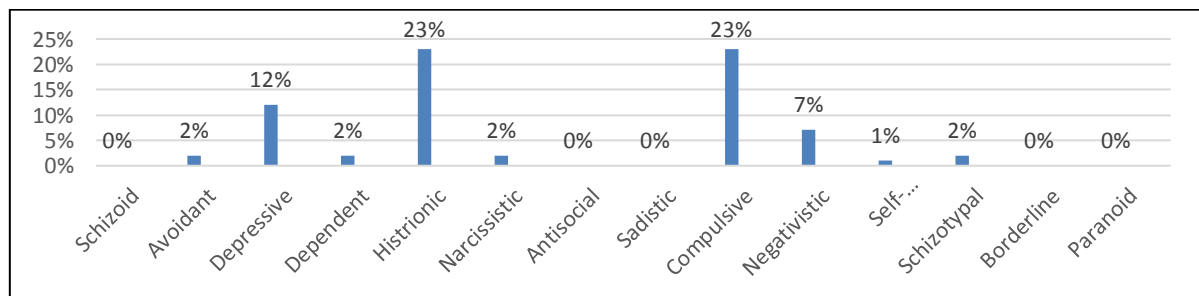


Chart 3. Chart of personality disorders in patients' families

Based on inferential tests, there were significant differences in the prevalence of sadistic, schizotypal, borderline, depressive, dependent, antisocial, negativistic, self-defeating, and paranoid personality disorders

between patients and family members ( $P < 0.05$ ). While, there were no significant differences in the prevalence of obsessive-compulsive, histrionic, avoidant, schizoid, and narcissistic disorders ( $P > 0.05$ ) (Table 2).

Table 2. Comparison of personality disorders in patients and family members

Personality disorders	Patients		Family members		P
	Mean	Standard deviation	Mean	Standard deviation	
Schizoid	48.7	17.5	43.7	19.7	0.068**
Avoidant	49.2	19.7	44.6	20.9	0.113*
Depressive	62.1	24	52	27	0.005**
Dependent	43.7	25.4	33.5	23.7	0.004**
Histrionic	56.9	25.8	60.3	30.4	0.393*
Narcissistic	55	60.7	47.8	20.6	0.927**
Antisocial	43.1	17.1	35.8	19.6	0.013**
Sadistic	45.2	18.7	39	19.7	0.023*
Compulsive	57.2	29.2	58.2	27.6	0.821*
Negativistic	61.1	23.5	52.2	27.8	0.018**
Self-defeating	48.8	20	40.2	22.3	0.010**
Schizotypal	49.5	16.9	39.8	17.9	0.000*
Borderline	48.6	19.2	39.9	20.2	0.002*
Paranoid	53.5	19.3	45	19	0.001**

\*T-test, \*\*Mann-Whitney

## Discussion

In the present study, 69% of hospitalized psychiatric patients and 63% of their non-hospitalized family members had personality disorders. According to the results, two points are noteworthy in this study. First, considering that according to general statistics, about half of all psychiatric patients have personality disorders (11), this amount of personality disorders is considerable in this study. Also, previous studies suggest the high prevalence rate of personality disorders in psychiatric inpatients (19,20).

However, this prevalence rate is in line with Shakeri and Sadeghi's study. They investigated the prevalence of personality disorders among patients admitted to a research training center in Kermanshah city-Iran and reported it to be 67.5% (21). This result shows that healthcare providers need more careful attention at the community level. Secondly, the results confirm that heredity plays a key role in the occurrence of personality disorders (22). Even though the patients' families generally live like other people in society and are not admitted to the hospital, at the same time, they have a high rate of disorders, significantly different from the statistics of personality disorders in the general society obtained in previous studies. Based on the findings of a meta-analysis study, which assessed 46 studies conducted from 1980 to 2018, the total prevalence of personality disorders worldwide was estimated at 7.8% (23). At the same time, the prevalence of personality disorders in family members of psychiatric patients was higher in some studies. For example, Links, Steiner, and Huxley found that the occurrence rate of borderline personality disorder in family members of patients with borderline personality disorder was 15.3% (24). Perhaps, in addition to heredity, this increase in disorders is due to chronic stress caused by the care of patients as well as having a common living environment. Therefore, supportive and psychological measures are necessary for these families. Thirdly, anxiety disorders, both among patients and among their families, have a higher percentage than other disorders. The presence

of personality disorders and anxiety disorders not only reduce the possibility of enjoying life, but these feelings prevent a person from acting with all capacities (25).

In the diagnostic class of cluster A, which has the lowest amounts of disorders, the rate of paranoid personality disorder was 2%, schizoid was 0%, and schizotypal with 1% was the lowest prevalence. These results are not in line with the results of the study by Shakeri and Sadeghi, who reported paranoid disorder in 48.3% and schizoid in 25.8% (21). One of the reasons for this difference could be the exclusion of psychotic patients from the research. One of the limitations of this research, which can be mentioned mostly in the group of inpatients, is the imbalance of the number of inpatients in terms of gender because male inpatients account for a larger share than female patients in Ibn-e-Sina Hospital. Patients need more patience to complete the questionnaires due to the large number of questionnaire questions, which was another limitation of the study. Also, completing other questionnaires that patients must complete during hospitalization was the next limitation.

## Conclusion

Our research findings implied that the rate of personality disorders among hospitalized psychiatric patients is 69% and among their family members is 63%. It is considerable that personality disorders are prevalent among family members of hospitalized psychiatric patients. Anxiety disorders are among the most common in both hospitalized patients and their family members. Considering that cluster C personality disorders cause loss of performance, helplessness, and decreased efficiency in society, the need for support and care measures for patients is felt more than ever.

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