

Co-morbidity of Personality Disorders and Other Psychiatric Disorders

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SUMMARY

Objective: To estimate the frequency of co-morbid personality disorders in psychiatric patients. **Design:** An institution based observational study. **Place and duration:** This study was conducted at the Academic Department of Psychiatry and Behavioural Sciences, Mayo Hospital, Lahore during September, 1997 and March, 1998. **Patients and methods:** A total sample of 231 psychiatric patients comprised of 106 outpatients, 105 inpatients and 20 patients with mental and behavioural disorders due to psychoactive substance use admitted for detoxification and rehabilitation. Clinical diagnoses of psychiatric disorders and personality disorders were made according to the ICD-10 diagnostic criteria after evaluating symptoms from history, mental state examination and The Present State Examination. The Personality Assessment Schedule was administered to all the patients and their informants for the diagnosis of personality disorders. **Results:** Out of 231 patients, 40 (17.3%) were diagnosed as suffering from ICD-10 personality disorder and 76 (32.9%) had personality disorder according to The Personality Assessment Schedule. Inpatients had slightly higher rate of personality disorders, 36 (34.3%) vs. 30 (28.3%) of outpatients. Out of 20 inpatients with substance use disorders, 5 (25%) had ICD-10 and 10 (50%) PAS personality disorder. The most common personality disorder diagnosis was passive-dependent in 11 (5%) cases closely followed by sociopathic and paranoid in 10 (4.5%) cases each and anankastic in 8 (3.6%) of patients. The dysthymic personality disorder was diagnosed in 6 (2.7%) cases whereas explosive, histrionic and avoidant in 5 (2.3%) cases each, followed by anxious and schizoid in 4 (1.8%) cases each and sensitive-aggressive in 3 (1.3%) of the patients. **Conclusion:** Co-morbid personality disorders are quite common in psychiatric patients as 1 out of every 3 patients is estimated to have a personality disorder. Assessment of pre-morbid personality is expected to promote an individualized approach to the management.

INTRODUCTION

The concept of personality disorder and its relationship with other psychiatric disorders may be traced back to the earliest medical writings. Over the centuries attempts have been made to define and separate these often interlinked entities but psychiatrists have generally been divided over the definition and nosological status of personality disorders.

During the last quarter of 20th century, large strides were made in the form of development of operational criteria and structured interview schedules for the diagnosis of personality disorders. The International Classification of Diseases in its 9th

edition¹ (ICD-9) not only included personality disorder as a diagnosable entity but also defined it comprehensively. “---deeply engraved maladaptive patterns of behaviour generally recognizable by the time of adolescence or earlier and continuing throughout most of adult life, although often becoming less obvious in middle or old age. The personality is abnormal either in the balance of its components, their quality and expression or in its total aspect. Because of this deviation the patient suffers or others have to suffer and there is an adverse effect on the individual or on society”.

Parallel to this, The American Psychiatric Association in its 3rd edition of Diagnostic and Statistical Manual of Mental Disorders² (DSM-III)

made yet another stride by adopting a multi-axial format placing personality disorders on the Axis-II hence separating them from Axis-I mental state psychiatric disorders. But despite all such historic advances, the concept of personality disorder, methods of its assessment, reliability of the diagnosis and prevalence in different populations have generated considerable disagreement.

The reported rates of prevalence of personality disorders have been found to vary depending upon the population sample, criteria of personality disorder and instrument used. In the community based epidemiological studies, the estimated prevalence of personality disorders ranges from 8.5%³ and 10% to 13%⁴. In primary care setting the prevalence of personality disorders have been reported at 10%⁵, 26%⁶ and 33.9%⁷.

The epidemiological studies after 1980, using the multi-axial format of DSM reported an increase in the prevalence of personality disorders in psychiatric patients so that 30-40% of outpatients and 40-50% of inpatients are recognized as having a co-morbid personality disorder⁸. A recently conducted study in Pakistan⁹, using Personality Assessment Schedule (PAS) has shown that as many as 60% of patients attending psychiatric outpatient department have co-morbid personality disorder.

The present study was undertaken to assess the frequency of co-morbid personality disorders in different settings of psychiatric patients i.e., outpatients, inpatients and patients admitted to drug detoxification and rehabilitation unit. Assessment of personality for the possibility of co-morbidity of personality disorders and mental state psychiatric disorders is expected to promote adoption of an individualized approach towards understanding and management of psychiatric patients.

MATERIAL AND METHODS

The present study was conducted in The Academic Department of Psychiatry and Behavioural Sciences, Mayo Hospital, Lahore during a period of seven months i.e. from September 1997 to March 1998. The Department consists of an outpatient and a sixty bed inpatient ward containing male and female components, each consisting of

adolescent, adult and psycho-geriatric units. In addition, there is a 14-bed drug detoxification and rehabilitation unit.

All consecutively admitted patients and patients attending outpatient department were included in the study if they were accompanied by reliable informants and provided informed consent. The patients with suspected organic brain syndrome, neurological disorders, epilepsy, dementia and mental retardation were excluded.

A total of 231 psychiatric patients were included and the study sample comprised of 106 outpatients, 105 inpatients and 20 patients with mental and behavioural disorders due to substance use admitted to drug detoxification and rehabilitation unit. For each patient routine history sheet was filled which was followed by administration of The Present State Examination (PSE)¹⁰ to pickup symptoms. Clinical diagnoses of psychiatric disorders and personality disorders were made according to the criteria laid down in The International Classification of Diseases, 10th edition (ICD-10) Clinical Descriptions and Diagnostic Guidelines¹¹ in consultation with the unit in-charge consultant. The clinical diagnoses were based on evidence from pre-morbid personality functioning, history of present and past illnesses, mental state examination and symptoms picked up through the PSE. The Personality Assessment Schedule (PAS) 5th revision was administered to all the patients and their informants for the diagnosis of 13 personality disorders in the PAS with categorization into personality disorder and personality difficulty. Each PAS abnormal personality category was calculated manually. There was only one rater who was not blind to the clinical diagnosis.

RESULTS

The study sample of 231 psychiatric patients comprised of 106 (45.9%) outpatients, 105 (45.4%) inpatients and 20 (8.7%) inpatients with substance use disorders admitted for symptomatic detoxification and rehabilitation. There were 120 (51.9%) males and 111 (48.1%) females. All 20 patients with substance use disorders were males. The demographic characteristics of the patients and informants are presented in Table 1.

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Table 1: Socio-demographic characteristics of patients and their informants.

Characteristics	Mood (affective) disorders		Neurotic, Stress-related and Somatoform disorders		Schizophrenia, delusional and schizoaffective disorders		Substance use disorder	Others*	
	Out-patient	In-patient	Out-patient	In-patient	Out-patient	In-patient	In-patient	Out-patient	In-patient
Number	47	44	29	22	26	34	20	4	5
Age (Years)									
Range	18-74	21-67	16-41	17-38	17-49	20-52	21-45	23-27	17-37
Mean	33.76	34.42	25.66	24.15	27.33	29.74	29.25	24.75	35.6
Sex									
Male	19	20	15	9	13	20	20	4	0
Female	28	24	14	13	13	14	0	0	5
Marital status									
Unmarried	11	10	13	9	12	16	8	0	1
Married	28	29	14	10	11	13	9	3	4
Widow	5	3	1	1	0	2	1	0	0
Divorced/Separated	3	2	1	2	3	3	2	1	0
Social status									
Upper Class	0	0	0	0	1	0	0	0	0
Middle Class	9	8	6	5	8	9	3	1	1
Lower Middle Class	14	13	14	10	9	12	10	3	2
Lower Class	24	23	9	7	8	13	7	0	2
Education (Years)									
0-5	12	13	5	5	4	5	3	0	2
6-9	15	14	8	7	7	8	7	1	1
10-12	11	10	9	6	9	13	8	2	2
13 and above	9	7	7	4	6	8	2	1	0
Informants									
Parents	10	9	7	5	8	11	4	0	1
Brother / Sister	7	8	6	7	6	9	8	0	1
Spouse	17	16	9	6	6	10	3	1	3
Son / Daughter	5	3	1	0	0	1	0	0	0
Friend	3	1	2	2	3	1	4	3	0
Others	5	7	4	2	3	2	1	0	0
Duration of Information (Years)									
Range	4-37	5-34	5-29	3-31	5-25	6-28	4-30	2-13	7-17
Mean	15.60	16.75	11.30	11.50	12.09	16.45	13.15	5.75	9.00

* The "others" include 4 outpatients with sexual dysfunction and 5 inpatients, including 4 with puerperal psychosis and 1 with anorexia nervosa.

Frequency of mental state psychiatric disorders and personality disorders

Out of 231 patients, 91 (39.4%) were diagnosed having mood (affective) disorders, 51

(22.1%) neurotic stress-related and somatoform disorders, 60 (26.0%) schizophrenia, delusional and schizoaffective disorders and 20 (8.7%) having substance use disorders. Personality disorders was

diagnosed in 40 (17.3%) according to the ICD-10 criteria and in 76 (32.9%) according to the PAS criteria. Another 16 (7.0%) had personality difficulty (Table 2).

One patient was suffering from anorexia nervosa and 4 had sexual dysfunction and puerperal psychosis in each case. Because of the insignificant number, these 9 patients were excluded from the analysis of the prevalence of individual personality disorder diagnosis.

Comparative frequency of personality disorders

Outpatients

Out of 106 outpatients, 16 (15.1%) had ICD-10 personality disorder and 30 (28.3%) were diagnosed having personality disorder according to the PAS criteria (Table 3).

Inpatients

Out of 105 inpatients ICD-10 personality disorder was diagnosed in 19 (18.1%) patients whereas 36 (34.3%) were diagnosed having personality disorder according to PAS criteria (Table 4).

Inpatients with substance use disorders

Out of 20 patients with substance use disorders 5 (25.0%) had ICD-10 personality disorder and 10 (50.0%) had PAS personality disorder (Table 5). Multiple substance use was considerably strongly associated with personality disorder (77.8%) as opposed to single substance use disorder (27.3%).

Frequency of individual personality disorders

The most common PAS personality disorder diagnosis was passive-dependant in 11 (5.0%) patients closely followed by sociopathic and paranoid in 10 (4.5%) cases each and anankastic in 8 (3.6%) patients (Table 6). Dysthymic personality disorder was diagnosed in 6 (2.7%) patients whereas explosive, histrionic and avoidant in 5 (2.2%) cases each. Anxious and schizoid personality disorders were diagnosed in 4 (1.8%) each and sensitive-aggressive in 3 (1.3%) patients. No patient was diagnosed with asthenic and hypochondriacal personality disorders.

According to the PAS major personality

disorder categorization, sociopathic and anankastic categories were diagnosed in 18 (8.11%) cases each, passive-dependant in 16 (7.2%) and schizoid in 19 (8.6%) of patients.

DISCUSSION

Assessment of personality for the diagnosis of personality disorder is a difficult task and it varies from setting to setting and methodology used. In clinical practice clinicians commonly rely on the observation of patient's behaviour during the interview and descriptions of the patient's interaction with significant others¹² and usually make diagnosis of a single personality disorder¹³, while the use of currently popular standardized interview schedules typically results in the diagnoses of somewhere between three and six personality disorders^{14, 15, 16}. In general the clinicians' conceptions of personality disorders and their descriptions of actual patients have been found to overlap with the DSM-IV descriptions¹⁷. Regarding the issues of reliability and validity of personality disorder diagnosis and high level of comorbidity, Axis-II has been the subject of considerable controversy¹⁸ and this led many to argue for a dimensional rather than a categorical approach to personality disorder¹⁹ or prioritization of personality disorder diagnosis so that some take precedence over others²⁰.

Assessment of personality in the presence of mental state psychiatric disorder has been criticized for the probable contamination of personality traits by the symptoms of mental state disorder. It is commonly believed that current mental state, especially depressed mood influences the accurate measurement of personality traits but there is evidence to suggest that depressed mood may not be as confounding as originally believed^{21, 22}. Assessment of personality based on the information from the patient, the informant and observation by the rater significantly reduce the chances of this contamination and enhance the reliability of diagnosis²³.

The Personality Assessment Schedule (PAS) by Tyrer and Alexander (1979) revised by Tyrer, Alexander and Ferguson (1987) incorporated these ideas to yield dimensional ratings of 24 personality

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Table 2: Treatment setup and frequency of co-morbid personality disorders.

Treatment setup	No.	Personality disorders				Personality difficulty	
		ICD-10		PAS		PAS	
		No.	%	No.	%	No.	%
Outpatients	106	16	15.1	30	28.3	2	1.9
Inpatients	105	19	18.1	36	34.3	11	10.5
Inpatients with substance use disorders	20	5	25.0	10	50.0	3	15.0
Total	231	40	17.3	76	32.9	16	7.0

Table 3: Frequency of psychiatric disorders and personality disorders in 106 outpatients

Psychiatric disorders ICD-10	No.	Male	Female	Personality disorders					
				ICD-10			PAS		
				No.	Male	Female	No.	Male	Female
Mood (affective) disorder	47	19	28	5	3	2	7	4	3
F.32 Depressive episode	12	5	7	1	1	0	1	1	0
F.33 Recurrent depressive disorder	17	6	11	0	0	0	1	1	0
F.30 Manic episode	1	1	0	0	0	0	0	0	0
F.31 Bipolar affective disorder	13	6	7	2	1	1	2	1	1
Dysthymia	4	1	3	2	1	1	3	1	2
Neurotic, stress-related and somatoform disorders	29	15	14	5	2	3	10	5	5
F.40 Phobic anxiety disorder	3	2	1	1	0	1	1	0	1
F.41.0 Panic disorder	2	1	1	0	0	0	0	0	0
F.41.1 Generalised anxiety disorder	2	2	0	1	1	0	1	1	0
F.42 Obsessive-compulsive disorder	8	3	5	1	1	0	2	1	1
F.43 Acute stress disorder	3	1	2	0	0	0	0	0	0
F.43.1 Post-traumatic stress disorder	1	1	0	0	0	0	0	0	0
F.43.2 Adjustment disorder	2	2	0	0	0	0	0	0	0
F.44 Dissociative disorder	5	1	4	1	0	1	3	1	2
F.45 Somatization disorder	1	0	1	1	0	1	1	0	1
Hypochondriacal disorder	2	2	0	0	0	0	1	1	0
F 52 Sexual Dysfunction	4	4	0	2	2	0	3	3	0
Schizophrenia, delusional disorders and schizoaffective disorders	26	13	13	4	2	2	10	7	3
F 20 Schizophrenia	19	9	10	1	0	1	5	4	1
F 22 Persistent delusional disorder	4	3	1	2	2	0	3	2	1
F 25 Schizoaffective disorder	3	1	2	1	0	1	2	1	1
Total	106	51	55	16	9	7	30	19	11

variables for the diagnosis of 13 personality disorder categories. It employs a hierarchical approach in which personality category that has the highest score for social impairment is named as the personality disorder. The PAS recognises sociopathic, passive-dependant, anankastic and

schizoid personality disorders as major categories. It has demonstrated fairly good inter-class to excellent intra-class co relational coefficient²⁴.

The exact prevalence of personality disorders and the magnitude of their contribution to the problems associated with mental illness are

Table 4: Frequency of psychiatric disorders and personality disorders in 105 inpatients.

Psychiatric disorders ICD-10	No.	Male	Female	Personality disorders					
				ICD-10			PAS		
				No.	Male	Female	No.	Male	Female
Mood (affective) disorders	44	20	24	6	4	2	15	8	7
F 31-Bipolar affective disorders	21	10	11	2	2	0	5	4	1
F 30-Manic episodes	8	5	3	0	0	0	2	1	1
F 32-Depressive episodes	7	2	5	2	1	1	4	2	2
F 33-Recurrent depressive disorder	6	3	3	1	1	0	2	1	1
F 34.1-Dythymia	2	0	2	1	0	1	2	0	2
F 53.1-Severe mental & behavioural disorder associated with puerperium	4	0	4	0	0	0	1	0	1
F 50-Anorexia nervosa	1	0	1	1	0	1	1	0	1
Neurotic, stress-related and somatoform disorders	22	9	13	5	2	3	9	3	6
F 41.0-Panic disorder	2	1	1	0	0	0	1	0	1
F 41.1-Generalized anxiety disorder	1	1	0	1	1	0	1	1	0
F 42-Obsessive compulsive disorder	7	4	3	1	0	1	3	1	2
F 44-Dissociative disorder	12	3	9	3	1	2	4	1	3
Schizophrenia, delusional disorders & schizoaffective disorders	34	20	14	7	4	3	10	5	5
F 20-Schizophrenia	25	14	11	2	1	1	4	2	2
F 22-Persistent delusional disorder	5	4	1	4	3	1	3	2	1
F 25-Schizoaffective disorder	4	2	2	1	0	1	3	1	2
Total	105	49	56	19	10	9	36	16	20

Table 5: Frequency of personality disorders in 20 inpatients with psychoactive substance use disorders.

Substance use disorders	No.	Personality disorders			
		ICD-10		PAS	
		No.	%	No.	%
F11.3 Opioids (Heroin) alone	11	2	18.2	3	27.3
F19.30 Multiple substances	9	3	33.3	7	77.8
• Predominantly heroin	9				
• Cannabis	7				
• Benzodiazepines	6				
• Alcohol	4				
• Injectable opioids	4				
• Opium	3				
Total	20	5	25.0	10	50.0

Table 6: Frequency of individual personality disorders in 222 psychiatric patients.

PAS category	Normal	Personality disorder		Personality difficulty	
		No.	%	No.	%
Sociopathic		10	4.5	1	0.4
Explosive		5	2.2	1	0.4
Sensitive-aggressive		3	1.3	4	1.8
Passive-dependant		11	5.0	1	0.4
Histrionic		5	2.2	1	0.4
Asthenic		0	0.0	1	0.4
Anankastic		8	3.6	0	0.0
Anxious		4	1.8	1	0.4
Hypochondriacal		0	0.0	0	0.0
Dysthymic		6	2.7	2	0.9
Schizoid		4	1.8	1	0.4
Paranoid		10	4.5	1	0.4
Avoidant		5	2.2	2	0.9
Total	135 (60.8%)	71	32.0	16	7.2

unknown. The World Health Organization however recognizes personality disorders a source of considerable distress and impairment in functioning and there is a high degree of morbidity including self-destructive behaviour, suicide and high utilization of medical resources. Co-morbidity of personality disorders and other psychiatric disorders is increasingly recognized as a major factor in suicide^{16, 25} and deliberate self-harm²⁶. In a recent study, co-morbid personality disorder was present in 44% of the psychiatric patients who attempted suicide²⁷.

Diagnosing a co-morbid personality disorder in psychiatric patients with an axis I disorder is clinically important because of their association with the duration, recurrence and outcome of axis I disorders¹⁷. But despite all this, very few if at all present to mental health professionals as is evident from this study that none of the total of 231 patients was diagnosed with personality disorder alone without the diagnosis of mental state psychiatric disorder.

The diagnoses of personality disorder and mental state psychiatric disorder are not mutually exclusive and both can be diagnosed simultaneously. The value of making multiple diagnoses is evident from frequent observation of

coexistence of both and such an approach is expected to help in individualization of treatment strategies. The main findings of this study, which are generally consistent with the literature, may be a step forward towards the achievement of this goal. This study however, has obvious limitations:

- 1- It included no comparative group of healthy individuals.
- 2- The study sample may not be a true representative of all psychiatric patients due to the fact that the location of the study is considered to be a highly established psychiatric facility and there is a real chance that relatively more complicated and seriously ill patients might have been included in the study.
- 3- Although, there is considerable overlap between DSM-III, ICD-10 and PAS personality disorder categories but prevalence rates found with the PAS may not strictly be applicable to others.

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