

Original Research Article

A cross sectional study on prevalence and pattern of personality disorders in psychiatric inpatients of a tertiary care hospital

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Abstract

Background: Co-occurrence of personality disorders with other psychiatric disorders has also been well documented by many researchers in the past. Diagnosing co occurring personality disorders in psychiatric patients with is of strong clinical significance, considering their association with the duration, recurrence, and outcome of these disorders. They also can have wide range of other adverse health outcomes. However, most of the existing literature regarding the studies related to personality disorders (PDs) in India is confined to community and mental hospitals.

Aim: To study the prevalence and factors affecting personality disorders in a general hospital psychiatry unit.

Materials and methods: The study was a cross sectional study conducted in a psychiatric unit of a tertiary care teaching hospital in south India. ICD-10, Mini International Neuropsychiatric Interview (MINI) and Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders-IV Personality Disorders (SCID-II) were used.

Results:

A total of 116 participants were included in the study. Majority of the participants were between 26 to 45 years of age. The prevalence of personality disorder was 21.55% (95%CI 14.07 to 29.03) among the study population. The most common type of personality disorder was avoidance (7.7%), followed

by anti social (5.17%) and borderline (3.45%) personality disorders. Highest proportion of PD was seen in people with major depressive disorder (35.7%), followed by people with multiple psychiatric illness (31.6%) and Psychotic disorders/mood disorders with psychosis (18.9%).

Conclusion: The proportion of personality disorders was highest in 26 to 35 year age group, was higher in males, compared to females. People who studied up to primary school had higher proportion of PD, compared to other educational categories. The proportion was higher in people belonging to higher socio economic strata, people who are separated and people from nuclear family.

Key words

Personality disorders, Psychiatric inpatients, India.

Introduction

Personality traits are enduring patterns of perceiving, relating to, and thinking about the environment and oneself. The personality disorders (PDs) are unique and complicated, to diagnose and treat [1]. Varied forms of psychopathology deeply intertwined nature of culture and personality and lack of standardized, culture specific assessment tools makes their assessment a difficult endeavor [1, 2]. Very few available large scale surveys conducted have shown comparatively lower rates in Asian populations, attributable to lack of clear understanding of personality disorder in Asian cultural context [1, 3].

Personality disorders (PDs) have been associated with range of adverse health outcomes, including sleep disturbance, obesity, pain conditions, and other chronic health conditions. They are known to be frequently associated with difficulties in social functioning and performance along with variable degrees of emotional distress [4, 5].

Co-occurrence of personality disorders with other psychiatric disorders has also been well documented by many researchers in the past [6-12]. Diagnosing co occurring personality disorders in psychiatric patients with an Axis I disorders is of strong clinical significance, considering their association with the duration, recurrence, and outcome of these disorders [13-15]. Diagnosis of co-occurring Axis II diagnosis, with personality disorders also can have strong clinical implications [11].

However, most of the existing literature regarding the studies related to personality disorders (PDs) is confined to community and mental hospitals. Due to Lack of studies pertaining to general hospital psychiatry in India, in this study we aim to study the prevalence and demography of personality disorders in a general hospital psychiatry unit.

Material and methods

The study was a cross sectional study conducted in a 30 bed psychiatric unit of a tertiary care teaching hospital in south India. Both male and female inpatients admitted in the study setting between March 2014 and January 2015, were recruited for the study. All patients above 18 years admitted to psychiatry wards both male and female during the above mentioned study period with the ability to provide informed consent by the patient or caregiver were included in the study. Patients who did not want to participate in the study were excluded. Out of 119 eligible subjects admitted during the study period, 116 subjects were included in the study, with 3 subjects, not willing to participate. Since all the eligible subjects were included in the study, no sampling was done.

Diagnosis of psychiatric illness was made according to the ICD-10 criteria [16] by at least 2 qualified psychiatrists. Mini International Neuropsychiatric Interview (MINI) [17] was used to confirm the diagnosis. Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders-IV Personality Disorders (SCID-II) [18] was used to determine the

presence of any personality disorder. The relevant socio-demographic details of the patient were also collected using structured proforma. The prevalence of personality disorder was considered as primary outcome. Descriptive analysis of all socio demographic variables and the clinical parameters was done by frequencies and percentages for categorical variables, mean and standard deviation for quantitative variables. Association between various socio demographic variables, type of psychiatric disorder and the primary outcome was assessed by cross tabulation and comparing the proportions. Chi square test was used for assessing statistical significance. IBM SPSS version 21 was used for statistical analysis.

Results

A total of 116 participants were included in the study. Majority of the participants were between 26 to 45 years of age. The proportion of males was 67% in the study population. Assessment of Educational qualification showed the participants were almost uniformly distributed across education categories ranging from 28% if illiterates to 22% of the people who have studied beyond high school. Majority of the subjects belonged to lower middle and lower socioeconomic status. The type of family was nuclear family in 84% of the subjects, and 80% of the subjects were married. (**Table - 1**)

Table - 1: Sociodemographic profile of study population (N=116).

PARAMETER	N	%
Age Group (Years)		
25 years and below	21	18%
26 to 35	35	30%
36 to 45	36	31%
46 to 55	16	14%
Above 55 years	8	7%
Gender		
Male	78	67%
Female	38	33%
Education		
Illiterate	33	28%
Primary School	32	28%
Middle School	25	22%
High school and Above	26	22%
Socioeconomic Class		
Upper Middle	3	3%
Lower Middle	56	48%
Lower	57	49%
Marital Status		
Married	80	69%
Unmarried	30	26%
Separated	6	5%
Type of family		
Nuclear	98	84%
Joint	18	16%

Psychotic disorders/mood disorders with psychosis (31.9%), Alcohol dependence or abuse (25.9%) and Major depressive disorder (12.15) were the most common psychiatric disorders diagnosed in the study population. Multiple psychiatric disorders were observed in 16.4% of study population. (Table - 2) The prevalence of personality disorder was 21.55% (95%CI 14.07 to 29.03) among the study population. The most

common type of personality disorder was avoidance (7.7%), followed by anti social (5.17%) and borderline (3.45%) personality disorders. Schizoid, paranoid and histrionic personality disorders were observed in 2.59%, 1.72% and 0.86% of the study population respectively. Other type of personality disorders were not observed among the study participants. (Table - 3)

Table – 2: Prevalence of Psychiatry disorder among study population (N=116).

MINI	Frequency	Percent
Psychotic disorders/mood disorders with psychosis	37	31.9
Alcohol dependence or abuse	30	25.9
Multiple psychiatric illness	19	16.4
Major depressive disorder	14	12.1
Manic or hypo manic episode/Bipolar	13	11.2
Generalized anxiety disorder	2	1.7
Non alcohol substance dependence or abuse	1	0.9
Total	116	100.0

Table – 3: Prevalence and type of personality disorder among study population (N=116).

Personality disorder	Frequency	Proportion	95 % CI of proportion	
			Lower	Upper
Not present	91	78.45	-	-
Present	25	21.55	14.07	29.03
• Avoidant	9	7.7	2.89	12.63
• Antisocial	6	5.17	1.14	9.20
• Borderline	4	3.45	0.13	6.77
• Schizoid	3	2.59	-0.3	5.48
• Paranoid	2	1.72	-0.65	4.09
• Histrionic	1	0.86	-0.82	2.54

The proportion of personality disorders was highest in 26 to 35 year age group, was higher in males, compared to females. People who studied up to primary school had higher proportion of PD, compared to other educational categories. The proportion was higher in people belonging to higher socio economic strata, people who are separated and people from nuclear family. But none of these associations had shown statistical significance in the study. (Table - 4) Highest proportion of PD was seen in people with major depressive disorder (35.7%), followed by people

with multiple psychiatric illness (31.6%) and Psychotic disorders/ mood disorders with psychosis (18.9%). (Table - 5)

Discussion

Considering the wide range of adverse health outcomes resulting from Personality disorders (PDs) [4, 5] and reported co occurrence with other psychiatric disorders, [6-12], the current study has attempted to document the prevalence and pattern of PDs among inpatients of a tertiary care teaching hospital.

Table - 4: Association between sociodemographic factors and personality disorder in study population (N=116).

Socio demographic Factors	PD		Chi square	P-value
	Yes	No		
I. Age groups (Years)				
25 years and below	4 (19.0%)	17 (81.0%)	2.078	0.271
26 to 35	10 (28.6%)	25 (71.4%)		
36 to 45	6 (16.7%)	30 (83.3%)		
46 to 55	3 (18.8%)	13 (81.3%)		
Above 55 years	1 (12.5%)	7 (87.5%)		
II. Gender				
Male	17 (21.8%)	61 (78.2%)	0.177	0.674
Female	7 (18.4%)	31 (81.6%)		
III. Education				
Illiterate	4 (12.1%)	29 (87.9%)	8.660	0.070
Primary School	12 (37.5%)	20 (62.5%)		
Middle School	3 (12.0%)	22 (88.0%)		
High school	5 (20.8%)	19 (79.2%)		
Diploma and graduates	0 (0.0%)	2 (100.0%)		
IV. Socio economic status				
Upper Middle	1 (33.3%)	2 (66.7%)	0.378	0.828
Lower Middle	12 (21.4%)	44 (78.6%)		
Lower	11 (19.3%)	46 (80.7%)		
V. Marital status				
Married	16 (20.0%)	64 (80.0%)	0.616	0.735
Unmarried	6 (20.0%)	24 (80.0%)		
Separated	2 (33.3%)	4 (66.7%)		
VI. Type of family				
Joint	19 (19.4%)	79 (80.6%)	0.652	0.419
Nuclear	5 (27.8%)	13 (72.2%)		

Table - 5: Association between psychiatric morbidity and personality disorder among study population (N=116).

Psychiatric illness (MINI)	Personality Disorder		Chi square	P value
	Present	Absent		
Psychotic disorders/mood disorders with psychosis	7 (18.9)	31 (81.1)	7.319	0.219
Alcohol dependence or abuse	5 (16.7)	25 (83.3)		
Multiple psychiatric illness	6 (31.6)	13 (68.4)		
Major depressive disorder	5 (35.7)	9 (64.3)		
Manic or hypo manic episode/Bipolar	0 (0)	13 (100)		
Generalized anxiety disorder and Non alcohol substance dependence or abuse	1 (33.3)	2 (67.7)		

The prevalence of personality disorder was 21.55% (95%CI 14.07 to 29.03) among the study population was comparatively very low, when compared with the reported prevalence of PDs among psychiatric patients from various other countries by Beckwith H., et al., who has reported estimates ranging from in 40% and 92% in Europe, between 45% and 51% in the USA [19]. But the prevalence was very high, as compared to the reported prevalence of 1.07% from India [6]. The fact that the above study was carried out in psychiatric outpatients, may have been responsible for the difference. The prevalence is also very higher as compared to the prevalence of Personality Disorders reported in the general population, which are ranged from 6.1% to 10% by [3]. This emphasizes that the likelihood of co existing personality disorder is very high in psychiatric in patients, compared to general population and psychiatric outpatients and warrants regular screening in this high risk population. The most common type of personality disorder was avoidance (7.7%), followed by anti social (5.17%) and borderline (3.45%) personality disorders. The most common personality disorders in study by Gupta S, et al. [6].

In the current study, the proportion of personality disorders was higher in young people, males, in people with poor education, belonging to higher socio economic strata, who are separated and people from nuclear family. A study by Huang Y, et al. also has reported significantly high personality disorders among males, the previously married, unemployed, the young and the poorly educated [3]. Gupta S, et al. also had reported high proportion of men, employed and students, unmarried people with personality disorders among psychiatric patients [6].

Conclusion

- The prevalence of personality disorders is very high among psychiatric inpatients
- The most common type of personality disorders were avoidance, anti social and borderline personality disorders.

- Male gender, poor education, higher socioeconomic status and separation from spouse are the factors associated with high prevalence
- Depression, multiple psychiatric illnesses and Psychotic disorders/mood disorders with psychosis are associated with high prevalence of personality disorders.

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