Prevalence of Personality Traits in Patients with Generalized Anxiety Disorder

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Abstract

Background & Aim: Personality traits refer to the enduring patterns of perceiving, relating to, and thinking about environment and oneself. Generalized anxiety disorder (GAD) is characterized by persistent and significant tension and restlessness, accompanied by autonomic nervous function excitation and hypervigilance persisting for most of at least 6 months. The present study aimed to know the prevalence of personality traits in patients diagnosed with generalized anxiety disorder.

Materials and Methods: The study was conducted at a tertiary care hospital in Shahabad, Haryana, to determine the prevalence of personality traits among patients diagnosed with generalized anxiety disorder (GAD). The study involved gathering reliable information through history taking and mental status examination, diagnosing GAD based on ICD-10 criteria, assessing patients' socio-demographic profile using the Modified Kuppuswamy Scale (2022 version), and scoring the severity of GAD symptoms using the Hamilton Anxiety Rating Scale (HAM-A). Additionally, International Personality Disorder Examination for ICD-10 (IPDE) was used to assess personality traits.

Result: On Modified Kuppuswamy Scale mostly patients belonged to lower middle SES (48%), 72% patients were of younger age group (19-28 years) and most patients were females (64%). On HAM-A scale, most patient's scores ranged in the mild severity (64%), followed by mild to moderate severity (28%) and moderate to severe (8%). Using IPDE (ICD-10) module PD traits were detected in 72% GAD patients (n=8). PDs were present in 8% patients (n=2), no PD-traits or PDs in 20% patients (n=5). Cluster C and mixed cluster PD-traits were most prevalent, 28% each. Within Cluster-C, Anankastic PD-traits (16%) were of highest prevalence, followed by Anxious (8%) and Dependent (4%) PD-traits. Majority of patients (57.14%) with mild to moderate severity on HAM-A had mixed PD traits. Cluster-C PD traits with mild severity on HAM-A were statistically significant (p value=0.036), calculated using Pearson Chi-square.

Conclusion: Personality impairments were seen in majority of the patients with generalized anxiety disorders having variable sociodemographic distribution. Cluster-C and mixed personality disorder traits were most prevalent while there was a significant association of milder severity of GAD with Cluster-C PD traits.

Keywords: Personality traits, Personality disorder, Generalized anxiety disorder, Hamilton anxiety rating scale, International Personality Disorder Examination.

Introduction

Personality traits refer to the enduring patterns of perceiving, relating to, and thinking about environment and oneself. [1] Generalized anxiety disorder (GAD) is characterized by persistent and significant tension and restlessness, accompanied by autonomic nervous function excitation and hypervigilance persisting for most of at least 6 months. [2] Studies have shown a prevalence rate of 35% to 50% of personality disorders in patients with GAD. [3] It is implied that anxious personality traits increase the frequency of experienced anxious states, via fear generalization. [4] The strong

association of presence of underlying personality traits or personality disorders (PD) in generalized anxiety disorder, warrants a need to further study the association between the same. The present study aimed to know the prevalence of personality traits in patients diagnosed with generalized anxiety disorder.

Review of Literature

A study was conducted by Doering S et al, 2018 in Austria, on seventy patients diagnosed with anxiety disorders. It was seen that patients with comorbid PD presented significantly worse personality functioning than patients without comorbid PD (p<0.001). Anxiety disorder patients without comorbid PD also revealed a significant impairment in their personality functioning when compared to the control group. It was concluded that anxiety disorders are associated with a significant impairment in personality functioning, which is significantly increased by comorbid PD. [5]

Another study was conducted by Elizabeth J. Prince et al, 2021 in the USA, to see how the personality traits and the anxiety and depressive disorders relate longitudinally; and its implications on etiologic research and prevention. It demonstrated that the occurrence of high neuroticism in young adults was either a true risk factor or a marker of risk for the first-onset of anxiety and depressive disorders; while introversion was predicted for the first onset of agoraphobia, taking p<0.15. The results of this study showed substantial neuroticism "state" effects from panic disorder, agoraphobia, and major depressive disorder; a moderate "scar" effect from major depressive disorder was seen. Also, low extraversion is associated for agoraphobia. [6]

Materials and Methods

A cross-sectional study was carried out over a span of one month in the department of psychiatry at a tertiary care hospital in Shahabad, Haryana to study the prevalence of personality traits in patients diagnosed with generalized anxiety disorder. Purposive sampling was done. Patients who were eighteen years and above, belonged to male/ female/ other genders, who were willing to participate and give written informed consent were included in the study. The patients with primary diagnosis of personality disorders, neurological illness, head injury, intellectual disability, or dementia were excluded. After taking reliable information from the patient and/or the attendant/s for history taking and mental status examination, the diagnosis was made on the basis of the ICD-10 criteria for GAD. [7] The socio-demographic profile of the patients were assessed using Modified Kuppuswamy Scale, version 2022. [8] The severity of symptoms of patients with GAD, meeting the inclusion criteria, were scored by Hamilton Anxiety Rating Scale (HAM-A). [9] Subsequently, IPDE, International Personality Disorder Examination for ICD-10 [10], a freely available, semi-structured interview was employed to assess the personality traits. The data collected was entered into Microsoft Excel worksheet and analysed by SPSS, version 27 using appropriate statistical tools.

Result

On the Modified Kuppuswamy Scale mostly belonged to lower middle SES (48%), majority (72%) of the patients were of younger age group (19-28 years) and most patients were females (64%). On HAM-A scale, scores of most patients ranged in the mild severity (64%), followed by mild to moderate severity (28%) and moderate to severe (8%), as seen in Figure 1.
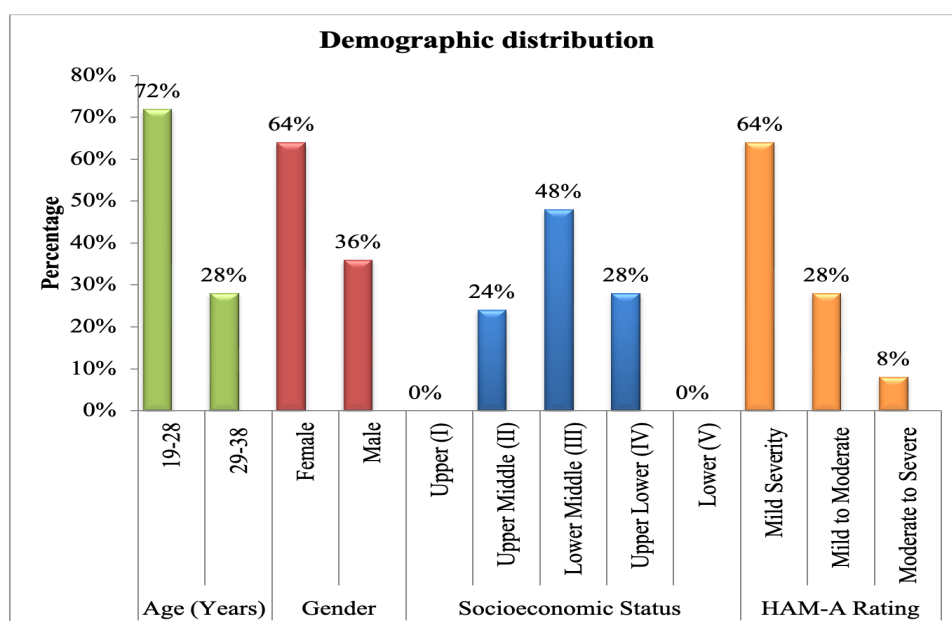

Figure 1: Demographic distribution of patients with GAD

Using IPDE (ICD-10) module PD traits were detected in 72% GAD patients (n=8). PDs were present in 8% patients (n=2), no PD-traits or PDs in 20% patients (n=5). Cluster C and mixed cluster PD-traits were most prevalent, 28% each. Within Cluster-C, Anankastic PD-traits (16%) were of highest prevalence, followed by Anxious (8%) and Dependent (4%) PD-traits, as seen in Table 1.

Table 1: Prevalence of personality dimensions in GAD patients

IPDE (Total n=25)	Patients (n)	Prevalence (%)
PD traits Present	18	72%
PD traits Absent	5	20%
PD present	2	8%
PD traits:		
Paranoid	1	4%
Schizoid	0	0%
Dissocial	0	0%
Impulsive	2	8%
Borderline	0	0%
Histrionic	1	4%
Anankastic	4	16%
Anxious	2	8%
Dependent	1	4%
Mixed (>1 Cluster)	7	28%
Cluster A	1	4%
Cluster B	3	12%
Cluster C	7	28%

Majority of patients (57.14%) with mild to moderate severity on HAM-A had mixed PD traits. Cluster-C PD traits with mild severity on HAM-A were statistically significant (p value=0.036), calculated using Pearson Chi-square, as seen in Table 2.

Table 2: Severity rating of GAD with personality dimensions

IPDE	Patients	Mild Severity (≤17)	Mild to Moderate (18-24)	Moderate to Severe (25-30)	χ^2	p value
Personality Disorder Present	2	2 (100%)	0 (0%)	0 (0%)	1.33	0.248(NS)
Personality Traits Absent	5	5 (100%)	0 (0%)	0 (0%)	0.10	0.752(NS)
PD traits:						
Paranoid	1	1 (100%)	0 (0%)	0 (0%)	2.00	0.157(NS)
Schizoid	0	0 (0%)	0 (0%)	0 (0%)	---	---
Dissocial	0	0 (0%)	0 (0%)	0 (0%)	---	---
Impulsive	2	1 (50%)	0 (0%)	1 (50%)	1.33	0.248(NS)
Borderline	0	0 (0%)	0 (0%)	0 (0%)	---	---
Histrionic	1	0 (0%)	1 (100%)	0 (0%)	2.00	0.157(NS)
Anankastic	4	2 (50%)	1 (25%)	1 (25%)	1.74	0.187(NS)
Anxious	2	1 (50%)	1 (50%)	0 (0%)	1.33	0.248(NS)
Dependent	1	1 (100%)	0 (0%)	0 (0%)	2.00	0.157(NS)
Mixed (>1 Cluster)	7	2 (28.57%)	4 (57.14%)	1 (14.29%)	1.78	0.182(NS)
Cluster A	1	1 (100%)	0 (0%)	0 (0%)	2.00	0.157(NS)
Cluster B	3	1 (33.33%)	1 (33.33%)	1 (33.33%)	0.38	0.540(NS)
Cluster C	7	4 (57.14%)	2 (28.57%)	1 (14.29%)	4.38	0.036 (S)

Discussion

Considering the association of PDs with anxiety disorders, this study demonstrates that some personality pathology was seen in 80% of GAD patients- 8% PDs and 72% PD-traits. Cluster C PD (8%) and PD-traits (28%) along with mixed cluster PD traits (28%) were most prevalent among the GAD patients. According to a study by Saini et al, 2021, among patients diagnosed with neurotic disorders 65% had PD-traits and 8% had PDs, with cluster C PD-traits being the highest. [11] In another

study, 35% of anxiety disorders had at least one personality disorder and prevalence ranged from 12%-61%. [12] There are evidences establishing that shared genetic etiologies and personality traits are potential predictors of anxiety and depression and their co morbidities. [13]

Another study showed anankastic PD was associated with GAD, borderline PD with new onset of GAD and schizotypal PD with chronicity of GAD. [14] Also, in a meta-analysis by Friborg et al, 2013, comorbid PD were prevalent across all anxiety disorders, ranging from 35% (for PTSD) to 52% (for OCD). Cluster C PDs were twice as more common as cluster A or B PDs. Within cluster C the avoidant PD was most frequent, followed by the obsessive-compulsive and the dependent PD. [15] In our study majority (72%) patients had some underlying personality disorder traits, with individual clusters order ranging from cluster mixed=C>B>A. Mixed (>1 PD cluster present) and Cluster-C PD traits were most prevalent (28% each). Amongst Cluster-C, Anankastic (16%) >Anxious (8%) > Dependent (4%) were prevalent. Within Cluster-B (12%), Impulsive (8%) and Histrionic (4%) PD-traits were prevalent. Cluster-A PD traits were least prevalent (4%) with only Paranoid PD traits present. Further majority (64%) patients ranged in the mild severity on HAM-A, among whom 25% had Cluster-C PD traits with statistical significance (p value=0.036).

A study found that personality disorders were highest in 26 to 35 years age group, more common in males and belonged to higher socio-economic strata. [16] In contrast this study found that the proportion of GAD patients was highest in the younger age group (19-28 years) and most of the patients were females (64%) and mostly belonged to lower middle SES (48%). The inference is that particular traits associate with generalized anxiety disorder.

Strengths and Limitations

Data collected was supported by multiple reliable informants to reduce information bias. Confirmation of psychiatric diagnosis and review of personality inventory scores were done by a psychiatry consultant to address any interviewer bias, and the personality interview was conducted after remission, to prevent confounding.

One limitation is the small sample size and a larger sample size would make for a more comprehensive study. A longitudinal study would offer understanding about the progression and outcomes of patients exhibiting personality disorder traits. Likewise, due to the cross-sectional design of the study, the direction of the relationship could not be determined. Including control subjects as a comparison group would have provided a clearer distinction between individuals without personality

pathology, those with personality disorder traits, and those with personality disorders.

Conclusion

Personality impairments were seen in majority of the patients with generalized anxiety disorders having variable sociodemographic distribution. Cluster-C and mixed personality disorder traits were most prevalent while there was a significant association of milder severity of GAD with Cluster-C PD traits. It can be inferred that concomitant personality assessment must be done in anxiety disorder patients for better prognosis and management.

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