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Prevalence of Anxiety Disorders in Psychiatric Units of Government Hospitals in Lahore: A Clinical Perspective

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Abstract

The objective of this study is to determine the prevalence of anxiety disorders in major government hospitals situated in Lahore city using a cross-sectional research design. A purposive sampling strategy was employed to gather data from outpatients over a period of 45-90 days. Demographic information was collected, and participants completed scales including generalized anxiety disorder-7 ([GAD-7] Spitzer et al., 2006), patient health questionnaire ([PHQ-9] Kroenke et al., 2001), and panic disorder severity scale ([PDSS] Shear et al., 1997). In total, 1755 participants were screened and 300 of them reported experiencing anxiety symptoms. Among the 300 identifies participants, 92.7% were classified in the severe-anxiety category on the GAD-7. Regarding depressive symptoms, 49.0% fell into the severe category on the PHQ-9. Women represented 93.0 of the identified cases ass compared to 7% men. The findings highlight the importance of comprehensive psychological assessment, early identification of anxiety-related symptoms and the assessment of co-occurring depressive symptoms in psychiatric outpatient settings. Future research should employ longitudinal designs and include diverse populations across different regions of Pakistan to examine the course of anxiety-related symptoms and the influence of cultural and socioeconomic factors. Such research may contribute to the development of evidence-based mental health policies and interventions in Pakistan.

Keywords: anxiety disorders, comorbidity, prevalence, Lahore

Introduction

Anxiety disorders are a group of mental health conditions that share common features of excessive worry, fear and related behavioral disturbances and they can significantly disrupt an individual's ability to perform daily activities, affecting various aspects of life such as work, school, and relationships. In DSM-5-TR, anxiety disorders include generalized anxiety disorder (GAD), panic disorder, social anxiety disorder, specific phobias, agoraphobia, and separation anxiety disorder are including in this category (American Psychiatric Association, 2022). Anxiety is not limited to external threats but can arise from internal psychological conflicts as well. Freud's theory of the unconscious suggests that anxiety stems from unresolved conflicts rooted in childhood experiences, which continue to affect individuals in adulthood. These internal conflicts give rise to neurotic anxiety, which Freud (1926/1959) argued was distinct from anxiety that results from real, external danger. Contemporary psychodynamic accounts continue to regard unconscious conflict as central to anxiety disorders (Pitman & Knauss, 2020). In addition to Freud's psychodynamic model, modern psychological theories offer various explanations for anxiety. The cognitive-behavioral model, for example, posits that anxiety disorders arise from maladaptive thought patterns.

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Individuals with anxiety disorders are tend to overestimate the probability and severity of potential dangers, leading to excessive worry and avoidance behaviors (Beck et al., 1985). This view is supported by recent meta-analytic evidence that cognitive behavioral therapy for anxiety disorders significantly improves threat reappraisal (Draheim & Anderson, 2021). In contrast, biological models focus on the neurobiological understanding of anxiety disorders. They propose that the imbalance in certain neurotransmitters such as serotonin, norepinephrine and GABA can result in anxiety disorders (Merkouris et al., 2025). The interpersonal model, proposed by Sullivan (1953), emphasizes the role of social relationships and interpersonal dynamics in both the onset and perpetuation of anxiety. Sullivan claims that anxiety is the result from social tension and poor social navigational skills. Recent reviews likewise identify interpersonal vulnerabilities, such as difficulties with affiliation and social rank, as important in social anxiety (Ginat-Frolich et al., 2024). From all these models, the integrative model uses their essence to provide a holistic approach to understanding anxiety disorders and developing personalized treatment plans (Barlow, 2002). Transdiagnostic treatments grounded in this integrative view, such as the Unified Protocol, have since been evaluated in meta-analyses of their effects on anxiety and depressive symptoms (Carlucci et al., 2021; Sakiris & Berle, 2019).

Anxiety disorders are widespread across the globe, affecting people of all ages and backgrounds. According to WHO about 4% people worldwide experience anxiety disorders (World Health Organization [WHO], 2025). But this number can vary a lot depending on where someone lives and the social and cultural conditions they face. In Pakistan, the rates (patients which shows anxiety symptoms are increasing ranging from 10% to 40% (Mirza & Jenkins, 2004). More recent evidence from a meta-analysis of South Asian studies estimated the pooled prevalence of anxiety at about 25.8% (Naveed et al., 2020). Meanwhile, in some major cities of Pakistan like in Lahore, the anxiety symptoms rate is much more prevalent. Many studies show this alarming rate of anxiety disorders, e.g., in one which is conducted among the university students, the results shown that about 20% of university students have reported anxiety symptoms in them from moderate to severe level of anxiety among them. Another study conducted among the general population of Lahore found that approximately 20% of adults experienced anxiety symptoms and were dealing with anxiety disorders.

Some major factors also helped to explain about the higher rates of anxiety disorders in hospitals of Lahore. Factors like Gender, economic status, age of different groups and cultural pressures play a part. In Pakistan, women tend to be more affected by anxiety than men. This could be due to a mix of social and traditional expectations, including gender discrimination, financial hardship, and limited access to mental health support (Farooq et al., 2019; Lasi et al., 2025; Malik et al., 2025). Most of the women (specially in Pakistan) often face social and cultural issues like family responsibilities, social and cultural roles, financial and economic issues that all leads to stress which causes anxiety symptoms in them like worry over worry or excessive worry among them. Economic hardship also plays a big role people from lower-income backgrounds may face more day-to-day struggles, increasing their risk for anxiety. Education matters too: individuals with higher levels of education are often better equipped to manage stress, while those with limited education may struggle more and have fewer opportunities to get the support they need (Ashraf et al., 2025; Lateef et al., 2026). Anxiety disorders are the major disorders worldwide which gone undiagnosed in untreated globally and in Pakistan as well. Specifically in rural areas where less facility are available and mental

health's issues are taken as sigma in many lower socio-economic status families and among uneducated people as well where it might be difficult to seek help in such mental issues thus it remains untreated. Increased awareness of anxiety as a serious mental health issue has led to a growing focus on research and treatment efforts, both globally and in Pakistan. Understanding how common these disorders are, the causes and ecological factors of these disorders, and the importance of intervention and effective management plan is also crucial (Lateef et al., 2026; WHO, 2025). Therefore, the objective of this study was to explore the prevalence of anxiety disorders, their severity levels, their comorbidity with depressive symptoms, and the demographic distribution across clinical populations in various hospitals of Lahore.

Method

Research Design

Cross-sectional research design was used to assess common anxiety disorders in major hospitals of Lahore.

Sample Strategy

The participants in this study were participants attending the outpatient departments (OPDs) of psychiatric units in various government hospitals in Lahore. These institutions included the Punjab Institute of Mental Health, Sir Ganga Ram Hospital, Mayo Hospital, Gulab Devi Hospital, Lahore General Hospital, and Jinnah Hospital The sample was recruited over a time duration, from May to July 2024. A total of 14,478 cases were reported, of which 1,755 individuals were interviewed by the research team. From these, 300 participants were identified as having anxiety disorders. The diagnoses were made by the respective clinical psychologist and psychiatrist. The demographic details of the participants are given below in Table 1.

Table 1

Demographic Characteristics of Participants (n=300)

Age Range	*n*	%
13-22	84	28
23-25	40	13.3
26-28	53	17.7
29-30	39	13
31-35	39	13
36-45	26	8.7
46 to above	19	6.3
Gender		
Men	21	7
Women	279	93
Marital Status		
Unmarried	250	83.3
Married	31	10.3
Separated/ Divorced	12	4
Widow/ Widower	7	2.3
Education		
Illiterate	56	18.6

Literate	196	65.3
Above 16 years of education	48	16.0
Profession		
Unskilled	7	2.3
Skilled	17	5.6
Private Job	6	2
Govt. Job	31	10.3
Business	20	6.6
Unemployed	219	73.0
Religion		
Islam	294	98.0
Christianity	6	2.0
Religious Inclination		
Extremely religious	55	18.3
Moderately religious	157	52.3
Somewhat religious	72	24.0
Less religious	13	4.3
Not religious	3	1.0
Income of Family		
Less than 20K	32	10.7
21K-40K	76	25.3
41K-60K	59	19.7
61K-100K	34	11.3
101K-3M	46	15.3
Not answered	53	17.7

Assessment Measures

The assessment measures used in the study included the Demographic Sheet, Frustration Tolerance Scale, Generalized Anxiety Disorder 7-item (GAD-7) Scale, Panic Disorder Severity Scale (PDSS), Patient Health Questionnaire (PHQ-9), Symptom Checklist-Revised (SCL-R), and the Symptoms Checklist for Anxiety Disorders (SSC3), all of which were administered to participants.

Demographic Sheet

The demographic form was developed by the researcher specifically for this research purpose it consists of variables including age of participants, gender, education level social economic status of participants, their marital status and their relationship status, the relationship with their spouses and the family system and also about the home atmosphere, family history of psychiatric or mental illness.

Generalized Anxiety Disorder-7 ([GAD-7] Spitzer et al., 2006)

This is a brief scale (7 items) which is easy to complete and easy to comprehend as well. GAD-7 is used to measure the severity level of anxiety disorders and general anxiety-like symptoms as well. Each question of GAD-7 has a Likert type scale rating 0 “not at all” to 3 “nearly every day” giving a total possible score between 0 and 21. This questionnaire contains common anxiety symptoms like *constant worrying, restlessness, and trouble relaxing*. GAD-

7 has high reliability, and this scale is easy to use that's why GAD-7 is most commonly used among psychiatrist, psychologist and other mental health professionals to screen out anxiety disorders and common anxiety-like symptoms in populations of different countries overtime. The severity can be categorized on the basis of scores, such as 5 (mild), 10, (Moderate) ad 15(severe). The scale was translated into Urdu language by the researchers.

Patient Health Questionnaire ([PHQ-9] Kroenke et al., 2001)

It is a self-report screening instrument used to assess the severity of depressive symptoms. It consists of nine items based on the diagnostic criteria of major depressive disorder Each item is scored on a 4-point Likert scale ranging from 0 "not at all" to 3 "nearly every day". The total score ranges from 0-27. The scores are categorised as minimal (0-4), mild (5-9), moderate (10-14), moderately severe (15-19), and severe (20-27). Higher scores indicate more severe depressive symptoms. The total score ranges from 0 to 27. It is a screening tool and does not independently establish the diagnosis of depression. The Urdu translation of this scale was used in the present study. Urdu translated version of this tool is used in the present study (Hussain et al., 2018).

Panic Disorder Severity Scale ([PDSS] Shear et al., 1997)

The Panic Disorder Severity Scale (PDSS) has seven questions. This scale is used to assess the symptoms of Panic attack disorder, including how often someone experiences panic attacks, how much they worry about future attacks (anticipatory anxiety), whether they avoid certain places (agoraphobic avoidance), and how much these symptoms affect their daily life. Each question is scored from 0 "no symptoms" to 4 "extreme symptoms", with total scores ranging from 0 to 28. Based on the score, a person's symptoms are categorized as mild (0–7), moderate (8–15), severe (16–23), or very severe (24–28). To make sure the scale is culturally relevant and easy to understand, it was translated into Urdu language by the researchers.

Procedures

Before starting the study, the researcher obtained ethical approvals from the Departmental Doctoral Program Committee (DDPC) and the Institutional Review Boards (IRBs) from all hospitals from which data collected. Data collection was carried out by a team of researchers who were each assigned to different outpatient departments in major government hospitals across Lahore. These included institutions such as the Punjab Institute of Mental Health, Mayo Hospital, Ganga Ram Hospital, General Hospital, Gulab Devi Hospital, and Jinnah Hospital. The team made sure that participants clearly understood the questionnaires, which took about 20 to 25 minutes to complete. Participants provided informed consent and were assured that their personal information would remain confidential. They were also told they could reach out to the Centre for Clinical Psychology for any psychosocial support if needed during or after the interview.

Results

Descriptive and psychometric analyses were conducted using SPSS (Statistical Package for the Social Sciences) to examine the prevalence and severity of anxiety symptoms. Participants who met the criteria for anxiety disorders were identified, and the prevalence was calculated by evaluating their responses, with results presented in frequencies and percentages. Of the 1,755 participants screened across the participating psychiatric outpatient departments, 300 were diagnosed with an anxiety disorder, representing 17.09% of the screened population.

Table 2

Psychometric Properties of Scales

Scale	k	*M*	*SD*	Range	Cronbach's α
Generalized Anxiety Disorder-7	7	19.24	2.10	7-21	.67
Patient Health Questionnaire (PHQ-9)	9	18.72	7.53	12-27	.81
Panic Disorder Severity Scale	7	20.66	4.63	5-24	.74

The overall reliability analysis demonstrated that the scales used in the study had acceptable to excellent internal consistency, ranging from the values .67 to .81. The generalized anxiety disorder-7 had a mean of 19.24 (*SD*=2.10) and a Cronbach's Alpha value of .67, suggesting acceptable internal consistency. The panic disorder severity scale had a mean of 20.66 (*SD*=4.63) and a Cronbach alpha of .74, suggesting acceptable internal consistency. Lastly, the patient health questionnaire (PHQ-9) had a mean of 18.72 (*SD*=7.53) and a Cronbach alpha of .81, indicating good internal consistency.

Table 3

Severity level of Generalized Anxiety Symptoms as per GAD-7

Severity Level	*n*	%
Minimal	0	0
Mild	3	1.0
Moderate	19	6.3
Severe	278	92.7
Total	300	100

Table 3 represents that majority of the participants (*n* = 278) were classified in the severity category. 19 participants feel into the moderate category and 3 participants fell into mind category. This showed that severe generalized anxiety symptoms were predominant in the sample. The percentages are shown in Figure 3.

Figure 1

Percentage Distribution of Severity Levels of Generalized Anxiety Symptoms as per GAD-7

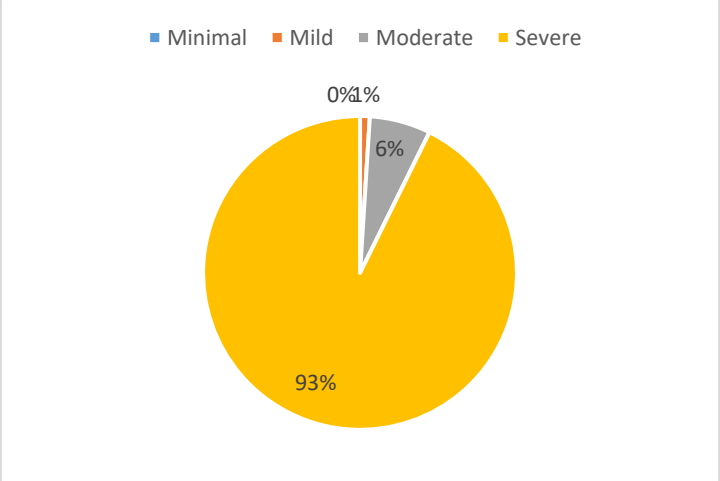


Table 4

Severity level of PHQ-9 of participants.

Severity Level	*n*	%
Minimal or none	7	2.3
Mild	33	11.0
Moderate	48	16.0
Moderately Severe	65	21.7
Severe	147	49.0
Total	300	100

Table 4 shows the frequency and percentages of participants according to the severity level of depressive symptoms measured by the patient health questionnaire (PHQ-9). Nearly half of the participants (*n*=147) fell into severe category. 65 participants reported moderately severe symptoms, 48 reported moderate symptoms, and 33 reported mild symptoms. Only 7 participants fell into minimal or no symptom category. It showed that most of the participants have severe level of depressive symptoms along with anxiety symptoms. The results are presented in Figure 2.

Figure 2

Percentage Distribution of Depressive Symptoms Severity

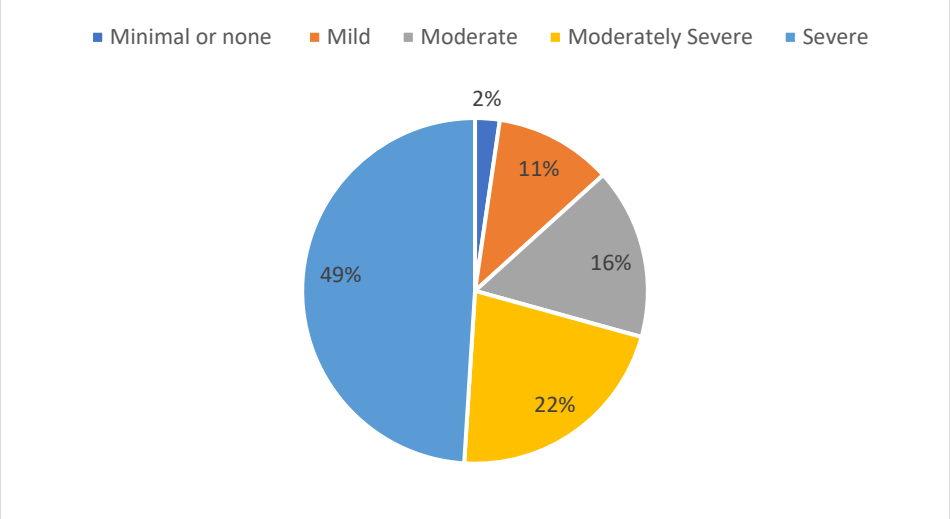


Table 5

Severity level of Panic Disorder Symptoms

Severity Level	*n*	%
Minimal or no symptoms	0	0
Mild symptoms	1	7.1
Moderate symptoms	8	57.1
Severe symptoms	3	21.4
Extreme symptoms	2	14.3
Total	14	100

Table 5 represents that most of the participants reported moderate symptoms of panic disorder (*n*=8). Severe symptoms were reported by 3 participants while 2 participants fell into extreme symptoms category. The percentages are shown in Figure 4.

Figure 3

Percentages Distribution of Severity level of Panic Disorder Symptoms

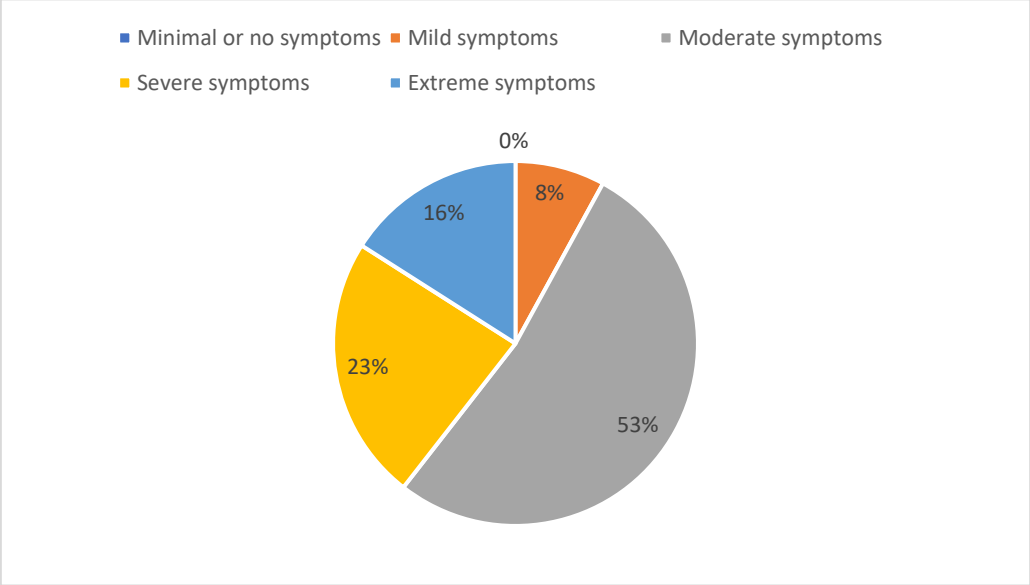


Table 6

Cases Reported in Different Hospitals

Hospitals Name	*n*	%
Sir. Ganga Ram Hospital	93	31.0
Lahore General Hospital	57	19.0
Gulab Devi Hospital	54	18.0
Pakistan Institute of Mental Health (PIMH)	42	14.0
Mayo Hospital	39	13.0
Jinnah Hospital	15	5.0

Table 6 presents the distribution of participants recruited from six hospitals of Lahore. The results showed that Sir Ganga Ram Hospital reported the highest number of participants with anxiety disorders (*n*=93), followed by Lahore General Hospital (*n*=57), Gulab Devi Hospital (n=54), PIMG (n=42), Mayo Hospital (n=39), and Jinnah Hospiatl (n =15).

Table 7

Gender Distribution of Anxiety Disorders

	n	%
Men	21	7.0
Women	279	93.0
Total	300	100

Table 7 shows the gender distribution of participants with anxiety disorders. The results showed that 279 participants were women, while 21 were men. These findings indicate that women constituted the majority of the study sample.

Discussion

The present study examined the prevalence among participants attending psychiatric outpatient departments in selected government hospitals in Lahore. Of the 1,755 participants screened, 300 (17.09%) met the criteria for anxiety disorders. Among the 300 identified cases, 31% were from Sir Ganga Ram hospital, followed by 19% from Lahore General hospital, 18% from Gulab Devi Hospital, 14% from Punjab Institute of Mental Health (PIMH), and 13% from Mayo Hospital. The lowest number of anxiety cases was recorded at Jinnah Hospital, where only 5% of participants showed symptoms. Anxiety disorders are becoming an important mental health concern, with an estimated 359 million people affected worldwide in 2021 (WHO, 2025). One key finding of the study is the occurrence of depressive symptoms alongside anxiety-related symptoms. The PHQ-9 results indicated that 49% of the participants fell into the severe category of depressive symptoms. This finding highlights the importance of assessing depressive symptoms among individuals presented with anxiety-related concerns. In each hospital, anxiety was most often found alongside depressive symptoms, a pattern well-supported by previous research. For instance, Wang et al. (2023) emphasized that anxiety and depression frequently occur together. Furthermore, a study of international medical students in China during the COVID-19 pandemic found that anxiety and depressive symptoms frequently co-occurred and were linked to perceived stress and negative coping (Yuan et al., 2023). Lamers et al. (2011) examined comorbidity of anxiety and depressive disorders in a clinical cohort, highlighting the importance of considering both conditions during psychological assessment.

The gender distribution revealed that women accounted for 93% of the identified cases as compared to 7% men. The finding indicates that women constituted the majority of the study sample. Previous studies also reported that a greater burden of anxiety disorder among women than men (WHO, 2025). Several factors may contribute to psychological distress among women. In Pakistan, Farooq et al. (2019) reported that female gender, presence of multimorbidity, higher number of children, lower educational level, and visiting a faith healer were associated with anxiety and depressive symptoms in adults. The previous research also showed the relationship between emotion regulation difficulties and anxiety symptoms. Zafar et al. (2021) reported associations between lack of emotional clarity, non-acceptance of emotional responses and psychological difficulties such as anxiety.

Age is another important factor in the present study. The largest proportion of participants belongs to 13–22 years, followed by those aged 26-28 years. The results indicate that younger participants constituted the larger proportion of individuals identified with anxiety disorders in the present study. Bano et al. (2021) examined anxiety among adults in Pakistan and reported different proportions across age groups. Their results showed that 17.5 % anxiety symptoms among those aged 20-29, 12.9% among those aged 30-39%, 16.5% among those aged 40-49, and 22.1 among those aged 50-60 years. Moreover, this findings of the present study may contribute to the development of more effective mental health services, improved assessment methods and treatment plan for individuals experiencing anxiety disorders. The

findings also highlight the important of comprehensive psychological assessments to identify co-occurring symptoms.

Conclusion

The present study concluded that anxiety disorders are a major issue reported in psychiatric outpatient departments of government hospitals in Lahore. Out of the 1,755 patients who were checked, 17.09% were diagnosed with an anxiety disorder. Most of these cases had a severe level of severity according to the GAD-7 scale. The prevalence of severe depressive symptoms in these patients indicated a significant comorbidity of anxiety and depressive symptoms.

Limitations of the Study

- Data was collected from selected government hospitals in Lahore, which limits the generalizability of the findings to other cities and regions.
- Moreover, the relatively short data-collection period may have limited the representativeness of the sample.

Suggestions for Future Research

Future researchers should explore anxiety disorders and related disorders across different regions of Pakistan, including rural, urban, and less-developed areas, to develop more comprehensive understanding of the distribution. In addition to that, researchers should take a closer look at the cultural and social factors that contribute to higher rates of anxiety in certain groups such as women, young adults, or those with lower incomes. A better understanding of these influences can help shape culturally appropriate and more effective mental health interventions with the needs of these vulnerable populations. Longitudinal research is also needed to understand the long-term course of anxiety and the role of cultural, socioeconomic, educational, and family factors.

Implications of the Study

The findings of the present study have several implications for clinical practice, prevention, healthcare services, and future research. Routine screening for anxiety symptoms in government hospital outpatient department may support early identification and timely treatment. Given the substantial proportion of participants reporting severe anxiety symptoms, healthcare professional should conder assessing symptom severity and associated difficulties. Mental health awareness and psychoeducation may help improve understanding of anxiety symptoms and encourage individuals to seek appropriate support. Stress-management and coping-skills programs may also be considered as part of individualized care. Psychologists, psychiatrists, physicians, nurses, and other healthcare professionals may benefit from training in recognizing anxiety symptoms, using validated screening instruments, interpreting results and, making suitable referrals. It also highlighted that government hospitals may consider strengthening psychological services and referral systems to facilitate access to appropriate assessment and treatment. Overall, the study highlights the need for early detection, preventive care, appropriate treatment, and stronger mental health services for anxiety disorders in Pakistan.

Author Declarations

Conflict of Interest

The authors declare that there is no conflict of interest.

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