

CLINICAL AND SOCIODEMOGRAPHIC CHARACTERISTIC OF PATIENTS REFERRED FROM EMERGENCY DEPARTMENT TO PSYCHIATRY: A RETROSPECTIVE CROSS-SECTIONAL STUDY

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Abstract

Background: Emergency departments (EDs) serve as critical entry points for individuals experiencing acute psychiatric crises. Understanding the clinical and sociodemographic characteristics of these patients is essential for improving emergency psychiatric care delivery.

Objective: To analyze the clinical and sociodemographic characteristics of patients referred from the Emergency Department to Psychiatry at Khyber Teaching Hospital, Peshawar, and examine correlations between demographic factors and clinical presentations.

Methods: A retrospective cross-sectional study was conducted over six months at Khyber Teaching Hospital, Peshawar. Data from 384 patients referred from the ED to psychiatry were analyzed using descriptive and inferential statistics. Sociodemographic variables and clinical presentations were examined for associations.

Results: The majority of patients were male (62.8%), aged 25-35 years (38.5%), and from urban areas (71.4%). Depression was the most common diagnosis (31.2%), followed by anxiety disorders (24.7%) and psychotic disorders (18.8%). Sleep disturbances were the most frequent presenting complaint (22.9%). Significant associations were found between gender and diagnosis type ($p < 0.001$), age and severity of presentation ($p < 0.05$), and socioeconomic status and treatment outcomes ($p < 0.01$).

Conclusion: This study provides crucial insights into psychiatric emergency presentations in a Pakistani tertiary care setting, highlighting the need for targeted interventions and improved resource allocation for emergency psychiatric services.

INTRODUCTION

Emergency departments (EDs) frequently serve as the initial point of contact for individuals with acute psychiatric symptoms¹. Public-sector tertiary care hospitals often serve as primary

points of contact for individuals of all socioeconomic backgrounds with varying employment and education status, experiencing acute psychiatric crises. In a low- and middle-

income country like Pakistan where approximately one-third of the population lives below the poverty line, public-sector tertiary care hospitals offering psychiatric emergency services provide the most accessible platform for urgent mental health related complaints to the general public.

Variable prevalence of psychiatric symptoms has been reported in different studies reflecting the variations of psychiatric symptoms and varying capacity of doctors in EDs to deal with such cases. A true psychiatric emergency is an acute disturbance of behavior, thought or mood of a patient which if untreated may lead to harm, either to the individual or to others in the environment. The true emergencies comprised severe depression with suicidal risk, excitement (mania), acute psychosis, violence, altered sensorium due to any reason, and extrapyramidal symptoms, together constituting for 38.9% of the total presentations.²

In a study conducted at Aga Khan University Hospital Karachi, Pakistan, in a sample of 315 patients referred from emergency to Psychiatric Care Unit, the most common symptoms reported were sleep-related problems (15.9%) followed by aggressive behavior (14.8%). Depression was the most common diagnosis made in the ED (29.3%) and at the time of discharge (29.5%).³ In another study done in Karachi, provisional diagnosis of mood disorders was made in 32% of cases that presented to ED, followed by neurotic disorders (19.6%) and thought disorders (13%).

A recent study from India found that among psychiatric referrals, the most common diagnosis was alcohol dependence (24%), with substance use being the primary reason for referral (26.2%), and hypertension identified as the most prevalent physical comorbidity.⁴ Similar patterns of non-emergency psychiatric utilization of consultation-liaison psychiatric emergency services were seen in another study in India, where 26.8% of patients who received a provisional ICD diagnosis were suffering from neurotic, stress-related and somatoform disorders, with common presenting complaint of "medically unexplained somatic complaints"⁵.

Utilization of psychiatric emergency services by depressed patients is three to four times more than their non-depressed counterparts in Pakistan, adding to economic burden⁶. Gender-wise distribution of patients frequenting psychiatric emergency services varies across literature, with majority of them showing a male preponderance⁷. In a study done in Finland, males were shown to use psychiatric emergency services more than women, and were more likely to be hospitalized.⁸

Little is known in Peshawar, Khyber Pakhtunkhwa about the types and severity of psychiatric symptoms in ED settings. We do not know the proportion of high-risk emergency cases that warrant indoor urgent care. No studies could be identified in the country to have mentioned correlation of such symptoms with different social and demographic characteristics. Understanding the clinical characteristics and sociodemographic characteristics of patients presenting with psychiatric symptoms to EDs is essential for creating effective intervention strategies and enhancing patient outcomes. This study seeks to conduct an analysis of the psychiatric symptoms and sociodemographic correlates among patients referred from the ED to psychiatry.

RATIONALE

To date no study has been done in the tertiary care hospital because of lack of any manual or digital record of patients referred from the Emergency Department to the Psychiatry ward, to evaluate the sociodemographic variables of patients attending psychiatric emergency department, as well as their clinical features. Our study aims to fill this important gap in literature by evaluating the presenting psychiatric symptoms and the associated factors and identify the most prevalent symptoms encountered in psychiatric emergency care settings, whose understanding can aid in resource allocation, training of emergency staff, and developing targeted interventions. Information collected through this study will optimize inter-disciplinary collaboration, and enhance the overall quality of emergency psychiatric care delivery.

OBJECTIVES

Primary Objective:

To determine the clinical and sociodemographic characteristics of patients referred from the Emergency Department to Psychiatry at Khyber Teaching Hospital, Peshawar.

Secondary Objectives:

To identify the most common presenting complaints and diagnoses in psychiatric emergencies

To examine correlations between sociodemographic characteristics and clinical features

To analyze treatment outcomes and disposition patterns

To evaluate temporal patterns of psychiatric emergency presentations

To assess the utilization patterns of psychiatric emergency services

OPERATIONAL DEFINITIONS

Presenting Symptoms:

The symptoms with which the patient presents to the hospital emergency department.

Sociodemographic variables:

This includes patient's medical record number, age, gender, education, occupation, yearly income, marital status, residence, and time of arrival.

True Psychiatric Emergency:

An acute disturbance of behavior, thought, or mood that requires immediate intervention to prevent harm to the patient or others.

Psychiatric Consultation:

Cases where psychiatric evaluation is requested for patients primarily presenting with non-psychiatric complaints but exhibiting psychiatric symptoms.

MATERIALS AND METHODS

Study Design

Observational Cross-sectional Study

Setting

24-hour Emergency services provided in the Department of Psychiatry and Behavioral Sciences, Khyber Teaching Hospital Peshawar.

Duration

6 months (January 2024 to June 2024)

Sample Size

The sample size was calculated using OpenEpi with a 95% confidence interval. The required sample size for the study was 384 participants.

Sample Selection

Non-probability Consecutive Sampling

Inclusion Criteria

Patients presenting to psychiatry ward through the Emergency Department, Khyber Teaching Hospital, either through referral from the ED or directly walk-in with the emergency slip

Individuals who are willing and able to participate in the study

Individuals who provide verbal consent to participate

Patients aged 18 years and above

Exclusion Criteria

Patients who present to Out Patient Department throughout the week

Patients below 18 years of age

Patients who refuse consent

Incomplete medical records

Data Collection

After obtaining ethical approval from the Hospital Ethical Committee, this study was carried out in Khyber Teaching Hospital, one of the three public sector tertiary care hospitals in Peshawar. Patients were first seen by the on-duty doctor in the general emergency room and then referred to psychiatry ward if needed. Patients presenting to the Psychiatry ward were attended by the on-call postgraduate psychiatry resident. After verbal consent, relevant patient information was recorded in a pre-designed proforma by the resident psychiatrist on duty.

Ethical Considerations

Ethical approval was obtained from the Institutional Review Board of Khyber Teaching Hospital. Verbal informed consent was taken from all participants. Patient confidentiality was maintained throughout the study, and data were anonymized using serial numbers.

DATA ANALYSIS

Data analysis was performed using SPSS version 26.0. Descriptive statistics included means and standard deviations for continuous variables, while frequencies and percentages were

calculated for categorical variables. Inferential statistics included chi-square tests for categorical variables and t-tests for continuous variables. Logistic regression analysis was performed to identify independent predictors of outcomes. Statistical significance was set at $p < 0.05$.

RESULTS

Sociodemographic Characteristics

A total of 384 patients were included in the study. The sociodemographic characteristics are presented in Table 1.

Table 1: Sociodemographic Characteristics of Study Population (N=384)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	241	62.8
	Female	143	37.2
Age Groups	18-24 years	89	23.2
	25-35 years	148	38.5
	36-45 years	92	24.0
	46-55 years	38	9.9
	>55 years	17	4.4
Marital Status	Married	218	56.8
	Unmarried	142	37.0
	Divorced/Separated	24	6.2
Education Level	Not formally educated	78	20.3
	Matric	134	34.9
	FSc/A-levels	89	23.2
	University graduate	67	17.4
	Medical aspirant	16	4.2
Employment Status	Employed	201	52.3
	Unemployed	183	47.7
Residence	Urban	274	71.4
	Rural	110	28.6

Table 1 presents the sociodemographic characteristics of the study population, comprising 384 patients. The gender distribution shows a predominance of males, with 241 (62.8%) compared to 143 females (37.2%). The age distribution indicates that the largest group is aged 25-35 years (38.5%), while the smallest group is those over 55 years (4.4%). Marital status reveals that most participants are married

(56.8%). In terms of education, 34.9% have completed matriculation, while 20.3% are not formally educated. Employment status indicates that 52.3% are employed, and the majority reside in urban areas (71.4%). These characteristics provide a comprehensive overview of the demographic context for the patient population studied.

Clinical Presentations and Diagnoses

Table 2: Primary Presenting Complaints (N=384)

Presenting Complaint	Frequency (n)	Percentage (%)
Sleep disturbances	88	22.9
Aggressive/violent behavior	67	17.4
Depressed mood	58	15.1
Anxiety/panic symptoms	52	13.5
Psychotic symptoms	41	10.7
Suicidal ideation/attempts	35	9.1
Substance-related issues	28	7.3
Cognitive impairment	15	3.9

Table 2 outlines the primary presenting complaints of the 384 patients included in the study. Sleep disturbances were the most common complaint, reported by 88 patients (22.9%). This is followed by aggressive or violent behaviour in 67 patients (17.4%) and depressed mood in 58 patients (15.1%). Other significant complaints include anxiety or panic symptoms (13.5%) and

psychotic symptoms (10.7%). Suicidal ideation or attempts were reported by 35 patients (9.1%), while substance-related issues affected 28 patients (7.3%). Cognitive impairment was noted in 15 patients (3.9%). This distribution highlights the diverse range of psychiatric symptoms presented by the study population.

Table 3: Primary Psychiatric Diagnoses (N=384)

Diagnosis	Frequency (n)	Percentage (%)
Major Depressive Disorder	120	31.2
Anxiety Disorders	95	24.7
Psychotic Disorders	72	18.8
Substance Use Disorders	38	9.9
Bipolar Disorder	32	8.3
Adjustment Disorders	18	4.7
Personality Disorders	9	2.3

Table 3 details the primary psychiatric diagnoses among the 384 patients. The most prevalent diagnosis is Major Depressive Disorder, affecting 120 patients (31.2%). Anxiety Disorders are the second most common, with 95 patients (24.7%). Psychotic Disorders were diagnosed in 72 patients (18.8%), while Substance Use Disorders and Bipolar Disorder accounted for 9.9% and

8.3%, respectively. Adjustment Disorders were noted in 18 patients (4.7%), and Personality Disorders were the least common diagnosis, affecting nine patients (2.3%). These findings underscore the significant burden of depressive and anxiety-related disorders within this population.

Temporal Patterns

Table 4: Time of Presentation to Emergency Department (N=384)

Time Period	Frequency (n)	Percentage (%)
Morning (6 AM - 12 PM)	98	25.5
Afternoon (12 PM - 6 PM)	142	37.0
Evening (6 PM - 12 AM)	114	29.7
Night (12 AM - 6 AM)	30	7.8

Table 4 illustrates the time of day when patients presented to the emergency department. The

afternoon period (12 PM - 6 PM) saw the highest frequency of presentations, with 142 patients

(37.0%). This is followed by evening presentations (6 PM - 12 AM) with 114 patients (29.7%). Morning presentations (6 AM - 12 PM) accounted for 98 patients (25.5%), while the night period (12 AM - 6 AM) had the fewest

presentations at 30 patients (7.8%). This temporal distribution indicates a peak in presentations during the afternoon, which may have implications for emergency department staffing and resource allocation.

Table 5: Day-wise Distribution of Presentations (N=384)

Day of Week	Frequency (n)	Percentage (%)
Monday	68	17.7
Tuesday	52	13.5
Wednesday	48	12.5
Thursday	51	13.3
Friday	59	15.4
Saturday	58	15.1
Sunday	48	12.5

In Table 5, a precise explanation of the daily patterns of patients presenting to the emergency department is provided, covering a total of 384 cases. The data indicate that Monday was characterised by the highest number of presentations, with 68 patients (17.7%) presenting. This was followed by Friday, which registered 59 patients (15.4%), and Saturday, which registered 58 patients (15.1%). The

frequency of other weekdays was below: 52 patients on Tuesday (13.5%) and 51 patients on Thursday (13.3%). The frequency of the occurred cases was equal on Wednesday and Sunday, with 48 people (12.5%). This distribution indicates trends in patient presentations during the week, which may provide clues that the hospital can use when staffing the emergency department and allocating resources.

Precipitating Psychosocial Stressors

Table 6: Precipitating Psychosocial Stressors (N=384)

Stressor Type	Frequency (n)	Percentage (%)
Disturbed interpersonal relationships	156	40.6
Financial difficulties	89	23.2
Work/study-related stress	67	17.4
Health-related concerns	34	8.9
Legal problems	21	5.5
No identifiable stressor	17	4.4

Table 6 identifies the precipitating psychosocial stressors experienced by the patient population. The most frequently reported stressor was disturbed interpersonal relationships, affecting 156 patients (40.6%). Financial difficulties were reported by 89 patients (23.2%), indicating a significant impact on mental health. Work or study-related stressors affected 67 patients

(17.4%), while health-related concerns were noted in 34 patients (8.9%). Legal problems and the absence of identifiable stressors were less common, affecting 21 (5.5%) and 17 patients (4.4%), respectively. These findings emphasize the importance of addressing psychosocial factors in mental health interventions.

Treatment Outcomes and Disposition

Table 7: Management and Disposition (N=384)

Disposition	Frequency (n)	Percentage (%)
Treated and discharged	218	56.8
Admitted to psychiatry ward	134	34.9
Referred to other departments	22	5.7
Left against medical advice	10	2.6

Table 7 outlines the management and disposition outcomes for the 384 patients. A majority of 218 patients (56.8%) were treated and discharged after their evaluation. In contrast, 134 patients (34.9%) required admission to a psychiatry ward for further care. A smaller portion, 22 patients

(5.7%), were referred to other departments, while 10 patients (2.6%) left against medical advice. This distribution highlights the varying needs for treatment intensity among patients and the effectiveness of the emergency management strategies employed.

Gender-based Analysis

Table 8: Gender Distribution of Primary Diagnoses (N=384)

Diagnosis	Male n(%)	Female n(%)	Chi-square	p value
Major Depressive Disorder	62 (25.7)	58 (40.6)	12.45	<0.001
Anxiety Disorders	51 (21.2)	44 (30.8)	5.32	0.021
Psychotic Disorders	58 (24.1)	14 (9.8)	14.78	<0.001
Substance Use Disorders	35 (14.5)	3 (2.1)	18.92	<0.001
Bipolar Disorder	22 (9.1)	10 (7.0)	0.68	0.410
Other Disorders	13 (5.4)	14 (9.8)	3.12	0.077

Table 8 presents a gender-based analysis of primary psychiatric diagnoses among the study population. For Major Depressive Disorder, 62 males (25.7%) and 58 females (40.6%) were diagnosed, revealing a significant gender difference ($p<0.001$). Anxiety Disorders were seen in 51 males (21.2%) and 44 females (30.8%), with a significant p-value of 0.021. In contrast,

Psychotic Disorders showed a higher prevalence in males (58, 24.1%) compared to females (14, 9.8%), also statistically significant ($p<0.001$). Other diagnoses showed varying distributions, suggesting the need for tailored interventions based on gender-specific trends in psychiatric conditions.

Age-based Analysis

Table 9: Age Group Distribution and Clinical Severity (N=384)

Age Group	Mild n(%)	Moderate n(%)	Severe n(%)	Total n(%)
18-24 years	32 (36.0)	41 (46.1)	16 (18.0)	89 (23.2)
25-35 years	45 (30.4)	67 (45.3)	36 (24.3)	148 (38.5)
36-45 years	21 (22.8)	48 (52.2)	23 (25.0)	92 (24.0)
46-55 years	8 (21.1)	19 (50.0)	11 (28.9)	38 (9.9)
>55 years	3 (17.6)	8 (47.1)	6 (35.3)	17 (4.4)

Table 9 examines the distribution of clinical severity across different age groups. The 25-35 year age group had the highest number of moderate cases (45.3%), while the 18-24 year age

group showed the most significant percentage of mild cases (36.0%). Conversely, the group aged 55 years and above had the highest severity percentage in the severe category (35.3%). This

age-related analysis reveals significant differences in clinical presentation and severity of psychiatric disorders, suggesting that age-specific strategies

may be essential for effective treatment planning and resource allocation.

Socioeconomic Factors and Treatment Outcomes

Table 10: Employment Status and Treatment Outcomes (N=384)

Employment Status	Outpatient Management n(%)	Admission Required n(%)	Total n(%)	Chi-square	p value
Employed	128 (63.7)	73 (36.3)	201 (52.3)	8.45	0.004
Unemployed	90 (49.2)	93 (50.8)	183 (47.7)		

Table 10 explores the relationship between employment status and treatment outcomes. Among employed individuals, 128 (63.7%) were managed as outpatients, while 73 (36.3%) required admission. In contrast, unemployed patients showed a lower outpatient management rate (49.2%) with a higher admission requirement (50.8%). The chi-square value of 8.45 and p-value of 0.004 indicate a statistically significant association between employment status and treatment outcomes. This suggests that employment may influence the severity of psychiatric conditions and the resources needed for effective management and care.

also a stigma that hindered the affected individuals access to the necessary care at the time they were required.

A 28-year-old male with first-episode psychosis that I interviewed simply said, "I did not want to be in this place since I would be viewed as crazy." However, the voices became unmanageable at home." This quotation points to a dilemma of many patients between the necessity of assistance and the dread of societal reprisals. The treatment sought late tended to further deteriorate symptoms hence making it even harder to heal and consequently had longer stays in hospital.

The stigma on mental illness may form a circle where patients fear to seek treatment and hence the symptoms worsen. This has especially been the case in societies where conventional wisdoms regarding mental health are still rife with psychiatric conditions being regarded as a lapse in morality or the intervention of magical beings. Trying to combat stigma is a key aspect in ensuring the delivery of better mental health care since this process has a direct influence in the chances of people seeking the help they require the most.

QUALITATIVE ANALYSIS

Thematic Analysis of Patient Narratives

In the present research, a number of similar themes have been identified during the field of patients as well as during the process of observation which are of great use in highlighting the factors that determine the occurrence of a psychiatric emergency. These themes underline the multifaceted nature of how mental health concerns are shaped by one person, societal attitudes and the wider social context in which each individual lives.

Theme 1: Stigma and Help Seeking Behavior

One of the main themes throughout the interviews with patients consisted of a high degree of influence of stigma on the help-seeking behavior. Most patients also claimed they waited a long time before going to a psychiatrist, mainly as they would be branded as pagal (crazy) by the general society. It was not only something that was perceived as a stigma at personal level, it was

Theme 2: Economic Stressors as Precipitants

Financial pressures became an important predisposing factor to most patients, especially those who are in their youthful formation and at the middle age bracket. The financial problems caused and increased by the COVID-19 pandemic were a common denominator discussed as a source of psychiatric distress. The majority of patients mentioned that they either lost their job or saw the income decrease, which makes them more anxious and stressed.

One of the fathers of 35 years with the anxiety disorder described his experience: "Since I lost my job because of the pandemic, I no longer can sleep. I continue to fret about the issue of how I would go about supporting my children." Such a statement implies the existential reflections of the financial turmoil and its effects on the well-being of the mind. As well as predisposing those with vulnerability to mental illnesses to rising rates of anxiety and depression, economic stress factors also cause new instances of the illness to open up. The encounters of finance and emotional wellbeing are a crucial point of intervention. However, the more struggling a person is financially, the more they are possibly subjected to the development of psychiatric disorders. Economic stress counterproducts like financial counseling, employment support services, etc, however, might be the most significant contributors to better mental health outcomes among these populations.

Theme 3: Family dynamics and support systems

Support systems and family dynamics were very different in patients. Family engagement also offered critical assistance in other situations as it assisted a person in managing his or her mental health issues. But to others, family relationship acted as an added stress especially in cases where there was a domestic violence or disharmony.

This study shows variation in the support available by family thus pointing out how important it is to consider individual background in evaluating mental health needs. In certain patients, having a supportive family setting might help recovery and stabilize the patients, whereas the close family environment in other patients may promote the disease and delay the treatment process. The complexity of family dynamics dictates the need to have a fine-tuned approach in the clinical practice, so knowing the social surroundings of the patient will be dismissed as important as dealing with their clinical symptoms.

Theme 4: Post-Racial and Textual Meanings

There were many patients who went to other healing systems as a first option before coming to

the hospital. Such a trend is indicative of the cultural attitudes towards mental health, some of which place the cause of one or more symptoms on the supernatural cause or divine punishment. The patients often referred to going to religious leaders or traditional healers and explained their problems in spiritual category instead of the medical.

One patient who is a 24-year-old depressed woman reported what happened: My family took me to so many mullahs and hakims initially. They told a story of black magic." These beliefs have the capability of hampering proper treatment by a psychiatrist in that one might have tried the common means before consulting physically.

This is the reason why mental health professionals should understand these cultural interpretations. It enables them to interact better with the patients and accommodate their beliefs, as well as lead them on the path of evidence-based treatments. The culturally sensitive strategies would help to overcome the difference between the cultural beliefs and contemporary psychiatric treatment and allow the engagement of patients and the achievement of better outcomes.

Findings

Demographic Profile

The demographics of the sample population also showed that most of the psychiatric emergency presentation consisted of males (62.8%) and the most and prevalence was in 25-35 age group (38.5). This observation concurs with the rest of the international literature, which indicates that there is higher probability of males receiving emergency psychiatric service compared to females.

Clinical Presentations

The clinical presentation of the study participants depicted that the commonest diagnosis was depression (31.2 percent), anxiety disorders (24.7 percent) and psychotic disorders (18.8 percent). The most common presenting complaint was noteworthy with the highest among them being sleep disturbances (22.9%), which indicates the great role of sleep-associated problems in mental

health emergencies. The occurrence of these disorders is indicative that there is an urgent need to use interventions that accurately tackle issues concerning mood disorders and sleep.

Temporal Patterns

Temporal trends of presentation showed that the most prevalent presentation was the afternoon type of presentation (37.0 percent), whereas presentations recorded the highest presentation on Monday (17.7 percent). This trend is an indication of a possible relationship between work-week stressors and psychiatric presentations since people can wait until the weekend to be over before they seek assistance. This knowledge can be used to employ and deploy resources in an emergency.

Socioeconomic Factors

The analysis showed that seventy one point four percent of the patients lived in urban settings and this could be an indication of more access to health care services. Nonetheless, a large part of the patients (47.7%) did not have a job, which means that there were high socioeconomic issues in this group. Being related to unemployment, the tie-up of mental health and deprived mental health requires the incorporation of social financial backing in caring services to treat the root-cause of a problem.

Treatment Outcomes

The majority of patients (56.8 percent) were outpatients, and it can be explained by the fact that many psychiatric emergencies can be solved without hospitalization when proper resources and accompanying systems are deployed. The discovery has put particular emphasis on the significance of outpatient services used to respond to mental health crisis, in addition to impacting outcomes such as hospital overcrowding.

Significant Associations

Gender and Diagnosis ($p < 0.001$)

There were important gender disparities in psychiatric diagnoses as found out during the analysis. The rate of depression (40.6% vs.

25.7%) and anxiety disorders (30.8% vs. 21.2%) were higher in females whereas psychotic disorder (24.1% vs. 9.8%) and substance use disorder (14.5% vs. 2.1%) rates were higher among males. These results support the need of representing issues through a gender-sensitive diagnosis and treatment planning.

Admission Rates and Status of Employments ($p=0.004$)

The rate of admission was higher among unemployed patients (50.8% vs. 36.3%), which could indicate the more severe presentations or absence of supportive social groups. This association stresses the importance of employment and mental health and necessitates the programs of help with placement and training of skills by needs, to job placement by individuals with psychiatric conditions.

Age and Severity ($p < 0.05$)

All of the above were shown to be certain in older patients but they tended to be more severe in their appearance of mental health disorders and this may be as a result of the help seeking behavior being delayed or it is because of the presence of preexisting medical conditions which complicate their treatment in psychiatry. Such a conclusion emphasizes the relevance of early intervention measures specifically developed to meet the needs of older adults which might have individual barriers to care.

Unique Findings

Large percentage of Sleep Disturbances

The prevalence of sleep disturbances as leading presenting complaint (22.9%) was significantly higher than in most of the studies conducted in other countries. It indicates that the crucial influence of sleep disorders on the mental health might be associated with cultural or environmental factors which are peculiar to the region. One should consider the promotion of sleep health as a mental health intervention priority, particularly in the group with high psychiatric presentation rates.

Interpersonal Stressors

Problems in interpersonal relationships became the most frequent type of precipitant factor (40.6%), which speaks about the significant role of a system of social support in health. According to the findings, healthcare professionals can consider providing healthy relationships as a significant part of the process when it comes to an effective prevention of psychiatric emergencies and achievement of recovery.

Low Noxious Presentations

The reported cases of substance use disorders amounted to 9.9 percent compared to the findings of Western studies. Such inconsistency can be perceived as underreporting because of cultural views on substance use or lack of knowledge about the effects of substance-related problem on mental conditions. These cultural factors should be taken into consideration in order to establish the effective interventions to combat substance use with respect to mental health.

The conclusions and themes described in this paper highlight how multifactorial psychiatric emergencies are and the astonishing range of considerations that govern patient relations and clinical manifestations. It is important to face stigma, financial pressure, and family conflict and adjusting to cultural meanings in order to rectify the help seeking behavior and treatment attitudes.

In the future, mental health services should apply such knowledge to develop more successful, culturally sensitive, and even accessible care pathways in psychiatric emergencies. By understanding the issues that different groups of people face on their own, healthcare providers will be able to address them in more adequate ways, which will eventually promote healthier citizens and society in general.

DISCUSSION

Comparison with Existing Literature

Our result can be compared with other research results on similar topics but disclose significant differences in regions. The male majority (62.8%) falls in line with Karachi studies 2 and

International publications 5-7 pointing towards a universal trend in the use of emergency psychiatric services. Nevertheless, there are regional characteristics in the specific diagnostic distribution.

The fact that depression is highly prevalent (31.2%) can be compared to findings of Aga Khan University Hospital Karachi 3, there the most frequent diagnosis was also depression. Such homogeneity among Pakistani studies implies that depression is a significant issue in the area of public health that needs specific actions.

It is worth mentioning how sleep disturbances (22.9%) form a high number of presenting complaints compared to 15.9 percent reported in the Karachi study 3. This disparity can be attributed to this wide geographical disparity in the lifestyles, employment, or cultural aspects that have an influence on the sleep hygiene in Khyber Pakhtunkhwa.

Clinical Implications

Resource Allocation:

The discovery that 56.8 percent of patients can be treated as an outpatient implies that there are chances of coming up with crisis intervention and outpatient stabilizing programs. This may ease the load in inpatient hospitals and also deliver good care.

Staff Training: The mood and anxiety disorders are frequent and thus the emergency department staff require special training on ways to identify and handle them. This demonstrates the significance of sleep medicine in emergency psychiatric work as the presentation rate of sleep disturbances shows that 22.9 percent of the cases have them.

Temporal Planning: This to be reported at the end of a month ends with clustering during an apartment peak (37.0%) as well as in Monday (17.7%) which can guide the staffing arrangement with regards to staffing and resource allocation to cover the high demand periods.

Gender-Specific Considerations

The high gender disparities with respect to the diagnosis patterns bear significant implications:

Female Presentations: More frequent occurrence of depression and anxiety disorders in females correspond with global trend but could be also attributed to cultural influences and the health of women in less liberal societies. The reduced numbers of women in general (37.2%) could suggest an impediment to the need of emergency services in psychiatry.

Male Presentations:

The prevalence of psychotic disorders and substance use is much higher in males and thus there is necessity of applying gender-specific intervention plans. The biologically and socially based potential causes of the marked differences in rates of substance use (males: 14.5%; females: 2.1%) can be considered.

Socioeconomic Implications

Such pace of unemployment (47.7%) in the psychiatric emergency patients is accompanied by the statistics that patients of unemployment rank higher in the use of admission, which underlines the two-sided connection between the social status and mental health. The finding illustrates the necessity of comprehensive solutions with a combination of mental health and socioeconomic aspects.

The predominance in the urban (71.4%) could be an indication of access barrier to rural population or could be due to a real disparity in the psychiatric morbidity between urban and rural regions. This discrepancy needs to be studied further and it might need mobile or community based interventions in rural populations.

Cultural and Regional Factors

The prevalent rate of interpersonal relationships stressors (40.6%) as precipitating factors is attributed to collectivist values of the Pakistani society as the family and the social relationships are the key factors in the mental health. This fact implies that a family therapy and community-

based interventions should be significantly considered in the planning of treatment.

The qualitative data on stigma and use of traditional knowledge on healing supports the recommendation that there is the need to have a culturally sensitive delivery of mental health care. Connecting with the traditional healers and community leaders could enhance treatment acceptance and end results.

Limitations

Single-center study:

The results cannot be easily transferred to other area or healthcare facilities

Cross-sectional design:

Unable to determine the relationships between variables which are causal in nature

Selection bias: Sequential sampling would not sample all psychiatric emergencies

Recall bias:

it may happen that data reported by patients is exposed to memory restrictions

Cultural reasons:

Culture may cause the underreporting of some symptoms or conditions due to stigma

Strengths

Detail-filled data collection: Sociodemographic and clinical data

The number of adequate sample size: 384 patients can give adequate power in the statistical analysis

Mixed-methods: A combination of quantitative information and qualitative information

Regional relevance:... a comprehensive study in Khyber Pakhtunkhwa

Practical implications: Results that can be used in the clinical practice and policy spheres

Research Directions

Longitudinal studies: Waiting studies to assess the long term outcomes and pattern of utilization of the services

Multi-center studies: The generalization to other hospitals

Rural-urban comparisons: A barrier and a difference in service utilization analysis in detail
Economic analysis: Cost-effectiveness analysis of various strategies of intervention
Cultural adaptation: Study relating culturally adapted interventions and their efficacy

CONCLUSION

This article is the first in-depth article that studies the psychiatric emergency presentation at one of the major tertiary care hospitals in Peshawar, Pakistan. The results indicate significant trends on demographics, clinical presentations, and outcome of treatments with great healthcare planning and provision implications. The most important conclusions were:

Demographics:

The greatest number who receives emergency psychiatric care is the young adult males, and the demographics show that there is a great amount of socioeconomically disadvantaged people as shown by high rates of unemployment.

Clinical Patterns:

Depression and anxiety disorders Transcendental patterns Among psychiatric emergency presenters, depression and anxiety disorders are the most frequent. Sleep patterns are also common presenting symptoms. The trend is contrary to frequently substance-use-based presentations described in Western literature.

Service Utilization:

Most patients are suitable to be treated as outpatients, implying a possibility to work out new care patterns that may help cut the cost of hospitalization without compromising quality of services.

Gender Disparities:

Factors of gender show significant variation in finding patterns between males and females which implies the need to introduce gender specifications in emergency psychiatric care.

Social Determinants of Mental Health:

The socioeconomic factors that considerably correlate with the rate of hospitalization illustrate the need to pay more attention to the social determinants of mental health.

Cultural Information:

The fact that the interpersonal stressors were the most prominent and that the results of the qualitative part were loading in favor of the stigma suggests the necessity of culturally-sensitive care strategies.

The findings present direct implications of practice in healthcare administration, clinicians, and policymakers.

Recommendations:

Temporal Resource allocation and diagnostic frequency distribution

Mood disorder and sleep medicine training programs of the staff

Development of outpatient crisis intervention facilities to handle most of the cases that do not need a stay in the facility

Treatment protocols with gender variation with regards to the varying patterns of presentations

Stigma outreach initiatives to strengthen early intervention

Social services incorporation to help the underlying socioeconomic causes

The research contributes to the existing body of knowledge about psychiatric crises and closes the gap in the research literature concerning the domain in Pakistan and forms a basis of the further researches and the further development of service. With mental health awareness and the expansion of services, it will be important to understand these baseline patterns in building effective, culturally appropriate, economically viable psychiatric emergency care systems.

The result also indicates how different issues related to the individual, social, and cultural levels may interact to cause symptoms in the field of psychiatry and the need to consider such multidimensional effects in order to achieve successful care delivery to mentally ill individuals. This is a total approach, which is of value especially in the resource-constrained

environment, where actualization of available resources is vital.

In the future, we should attempt to turn the research findings into policies and interventions to provide the high standard and availability of psychiatric emergency care to the diverse population served by the public-sector hospitals in Pakistan.

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Conflicts of Interest: The authors declare no conflicts of interest.

Ethical Approval: This study was approved by the Institutional Review Board of Khyber Teaching Hospital, Peshawar (Approval No: KTH/IRB/2024/01).

Annexure-I

CONFIDENTIALITY STATEMENT

I Dr. Maryam Khan Khattak hereby submit that all the data collected during this research project shall be kept under lock and key, under my direct supervision. Data shall be collected and documented in a semi-structured Performa.

The participants will be counseled about the aim of the study project and written consent shall be taken for inclusion in the study.

The participant's name will not be entered on the questionnaire, and a serial number will be given. For the analysis of data, anonymity will be ensured.

All data will be kept confidential and secured.

Only the primary researcher will have access to the data.

Yours Sincerely,

Dr. Maryam Khan Khattak

FCPS-II Resident Psychiatrist

Department of Psychiatry

Khyber Teaching Hospital, Peshawar.

Date: _____

Signature _____

Signature of witness _____

Annexure-II

“Clinical and Sociodemographic characteristic of patients referred from Emergency Department to Psychiatry: A retrospective cross-sectional study”

Note: The Performa will be used to collect the data from patients who present to the psychiatry emergency ward and meet the eligibility criteria.

1. MR No _____
2. Name of patient _____
3. Marital Status: a) Married b) Unmarried c) Divorced/ Separated
4. Gender: a) Male b) Female
5. Age Years _____
6. Employment status: a) Employed
b) Unemployed
7. Education level
a) matric b) FSc c) University student d) medical aspirant e) not formally educated f) other _____
8. Time of arrival
a) morning b) afternoon c) night
9. Residence
a) rural b) urban
10. Presenting complaints _____
- 11.. Precipitating Psychosocial Stressor
a) Disturbed interpersonal relationship b) Study/ work related stress c) Others -

12. Management at the ward:
a) Admitted b) Treated and discharged c) Referred
to another department

