



# Insight into Patterns of Sociodemographic and Clinical Profile of Patient attending a Newly Started Psychiatry Outpatient in an Institute of National Importance from North India: A Retrospective Chart Review

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## Abstract

**Background:** Psychiatric disorders constitute a global public health concern. Despite advancements in mental health care, significant disparities persist in the accessibility and quality of services provided, particularly in under-resourced areas. There is no data on mental health from the Raebareli district of Uttar Pradesh. This study reports the initial trends in patient profiles in a newly established psychiatry outpatient department.

**Aim:** The present study was conducted to assess the sociodemographic and clinical profile of patients attending a newly started mental health establishment in an Institute of National Importance.

**Methodology:** This retrospective study analyzed case records of psychiatric patients who attended the psychiatry outpatient department from October 2020 to October 2022. Data regarding the sociodemographic profile and clinical profile was obtained. The data was analyzed using descriptive statistics as appropriate.

**Results:** A total of 5650 patients visited the outpatient department during the study period. The mean age of the patients attending was 37.38 years, with the majority of the patients being males (55.3%), Hindus (93.7%) and married (71.7%). The trends showed that there was rise in patients attending the centers during April and September. The most common diagnosis belonged to the group of F40, neurotic, stress-related and somatoform disorder (43.8%) disorders as per ICD 10 classification.

**Conclusion:** The profile of the presenting age of various disorders were in sync with the existing literature. A trend of increase in census could be seen during April and September. This study will be helpful in anticipating and planning the initiation of mental health services at a tertiary level.

## INTRODUCTION

Psychiatric disorders encompass a broad spectrum ranging from subclinical states to more severe forms. Mental health issues can progress to a level of disorder if left untreated, which are typically identifiable, diagnosable and treatable. Certainly, psychiatric epidemiology holds a significant position within the realm of health sciences as a scientific discipline as it plays a crucial

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role in understanding and addressing the patterns, causes and effects of mental health diseases in populations. There have been many epidemiological studies nationally and internationally. National mental health survey (NMHS) reported the overall weighted prevalence for any mental morbidity as 13.7% (lifetime) and 10.6% (current).<sup>1</sup> International studies, such as the epidemiological catchment area program and the national comorbidity survey, have documented varying prevalence rates of various psychiatric disorders.<sup>2</sup> The dynamic nature of mental disorders and methodological differences in epidemiological studies may contribute to the variability in reported rates within various studies.<sup>2</sup> Also, this may affect health care planning, delivery and policy making.

It is evident that psychiatric disorders and substance use disorders account for a substantial 13% of global burden of disease.<sup>3</sup> The burden has seen a notable 41% increase from 1990 to 2010, primarily attributed to population growth.<sup>4</sup> Alarming, a significant three-quarters of this burden lies in low- and middle-income countries, with a similar proportion lacking access to essential services due to resource constraints.<sup>5</sup> Additionally, more than two-thirds of the total population live in rural areas in India.<sup>6</sup> Where accessibility, availability and affordability always remains an area of concern. Although there is an increase in awareness of mental health a huge treatment gap exists, ranging from 70 to 92% for various psychiatric disorders.<sup>1</sup>

To reduce this enormous treatment gap in India there is a need of the development of effective, efficient services at the local level, which is culturally and socially acceptable and based on firm research base.<sup>7-9</sup> In this direction to meet the need of increasing demand, the initiation of a psychiatry outpatient department within an institute of national importance marks a significant milestone. This institute is situated on the outskirts of Raebareli town and serves nearby districts. The predominant composition of this population is rural with 91% of the population living in rural areas.<sup>10</sup> Hence, understanding the sociodemographic and clinical characteristics of patients accessing this newly established psychiatry outpatient department (OPD) is paramount for understanding the prevalent mental health disorders in this region, optimizing resource allocation,

tailoring interventions and ensuring the provision of high-quality, culturally sensitive mental health care. With this background, this study endeavors to delineate the diverse profile of patients who seek care at this institute, shedding light on the initial diagnostic trends.

## **MATERIAL AND METHODS**

this retrospective chart review was conducted at the All India Institute of Medical Sciences (AIIMS), Raebareli, a tertiary mental health establishment in Uttar Pradesh state in northern India. In this case records of psychiatric patients above 18 years of age, who attended the psychiatry outpatient department (OPD) of this centre from October 2020, to October 2022 were reviewed. Sociodemographic details included age, gender, religion, education status, and marital status. The clinical details collected include psychiatric diagnosis as mentioned in the case records made by the treating psychiatrist as per International Classification of disease (ICD10)<sup>11</sup> criteria, any medical/psychiatric comorbidities, month of consultation and family history of psychiatric illness. The sociodemographic and clinical details were filled on a designed Excel sheet. All the data was collected by one of the authors to maintain uniformity of the data. The data was evaluated in the SPSS version 22. We Calculated descriptive statistics, including the mean, standard deviation and frequency distribution for all demographic and clinical variables.

The study was approved by Institute Ethics Committee (AIIMS Raebareli) Study/Protocol No 2023-13-IMP-4 dated 10/07/2023.

## **RESULTS**

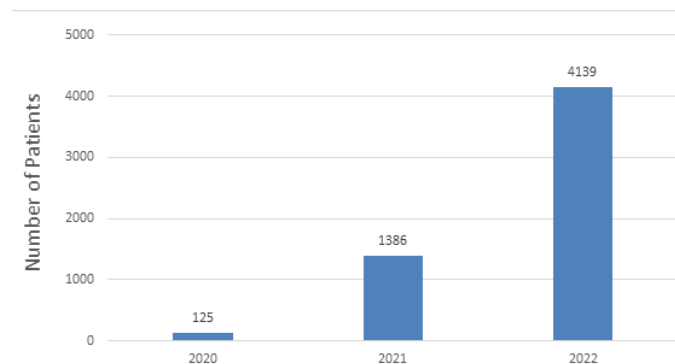
The outpatient services in this institute started in October 2020. Overall, the total number of new patients who have attended Psychiatry OPD was 5650 (Figure 1). The collected data was checked for completeness. In this process, we were unable to have all the data for 985 patients. We excluded them from the analysis. We included 4665 patients in the final analysis. The mean age of the patients attending was 37.38 (15.18) years with the majority of the patients being males (55.3%), Hindus (93.7%) and

married (71.7%)(Table 1). Overall, the most common diagnosis belonged to the group of F40, neurotic, stress-related and somatoform disorder (43.8%) disorders, followed by mood disorders (27.8%) and psychotic spectrum disorders (17.8%) as per ICD 10 (Table 2). Analyzing clinical data for a subset of 4661 patients, we observed variations in age distribution across different diagnostic groups. Patients with diagnoses related to organic mental disorders (F00-09) group presented at an older age (mean 64.67 years). While the younger age group is represented in substance use disorder (33.33), psychotic spectrum disorders(36.62), anxiety and stress-related disorders (35.15), mood disorder (39.07), personality disorders (29.90) and mental retardation (26.30) (Figure 2).

The trends showed that there was rise in patients attending the center during April and September (Figure 3). When interpreted for each group of disorder separately, the highest representation was from F40 group, followed by F30 group and F20 group (Figure 3). This trend was found to be uniform across all months of the year (Full form of ICD 10 codes is mentioned in Table 2).

## DISCUSSION

The findings from our study provide valuable insights into the patient profile and utilization patterns of the newly established psychiatry OPD, since its initiation in October 2020. A total of 5650 new patients sought services at the OPD. Notably, there was a marked increase in patient attendance over time, reflecting a growing recognition of the availability and accessibility of mental health services in our institute. It



**Figure 1:** Distribution of patients across Calendar years (since October 2020) (N=5650)

**Table 1:** Sociodemographic profile of the patients (N = 5650)

| Parameters                            |                     | N (%) or Mean (SD) |
|---------------------------------------|---------------------|--------------------|
| Age (in years)                        |                     | 37.38 (15.18)      |
| Gender                                | Male                | 3120 (55.3%)       |
|                                       | Female              | 2527 (44.7%)       |
| Religion                              | Hindu               | 5292 (93.7%)       |
|                                       | Muslim              | 344 (6.1%)         |
|                                       | Others              | 9 (0.2%)           |
| Education                             | Illiterate          | 858 (15.2%)        |
|                                       | Till Primary        | 1825 (32.3%)       |
|                                       | Till Secondary      | 2119 (37.5%)       |
|                                       | Till graduate       | 813 (14.4%)        |
|                                       | Professional        | 35 (0.6%)          |
| Marital Status                        | Never married       | 1561 (27.6%)       |
|                                       | Married             | 4053 (71.7%)       |
|                                       | Divorced/ Separated | 36 (0.7%)          |
| Family History of Psychiatric Illness | Present             | 331 (5.9%)         |
|                                       | Absent              | 5319 (94.1%)       |

also shows increasing awareness regarding mental health problems.<sup>12</sup> Nevertheless, it is vital to interpret the increase in patient numbers while taking into account external factors. Specifically, the year 2020 witnessed restrictions on physical interactions due to the COVID-19 pandemic, which could have had an impact on patterns of patient attendance.<sup>13</sup>

Sociodemographic characteristics revealed mean age of patient was 37.88 years. With a slightly higher representation of males(55.3%). Which was similar to earlier conducted studies.<sup>14-16</sup> In our sample, Hindus were over-represented, which is also supported by the district-level data that Hindus comprise of about 87.39% of the population of Raebareli.<sup>17</sup> However, even considering this data, the mental health help-seeking was poorer in non-Hindu patients and thus further initiatives should be planned to improve access to mental health in these communities.

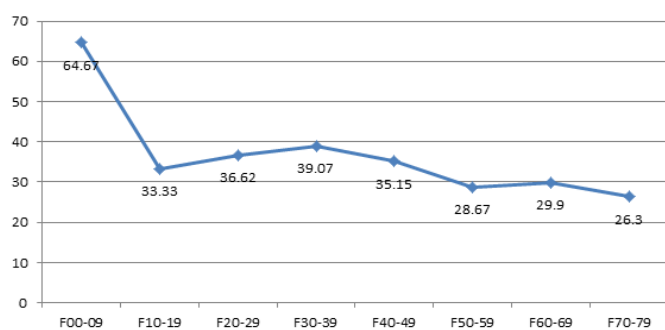
In our sample, increased morbidity is seen in the younger age group, similar to earlier conducted studies.<sup>14,18-20</sup> In our study we found that patients with affective and psychotic spectrum were pre-

**Table 2:** Prevalence of primary psychiatric diagnoses at first presentation according to ICD 10 (N=4661\*)

| Diagnosis | Number of patients [n (%)] |
|-----------|----------------------------|
| F00-F09   | 161 (3.4)                  |
| F10-19    | 195 (4.1)                  |
| F20-F29   | 830 (17.8)                 |
| F30-F39   | 1300 (27.8)                |
| F40-F48   | 2042 (43.8)                |
| F50-59    | 31 (0.6)                   |
| F60-69    | 50 (1.1)                   |
| F70-79    | 52 (1.1)                   |
| TOTAL     | 4661                       |

\*- Excludes patients who had incomplete data or deferred diagnosis  
 F00 to F09: organic,including symptomatic,mental disorders  
 F10 to F19: Mental and behavioral disorders due to psychoactive substance use  
 F20 to F29: Schizophrenia, schizotypal and delusional disorders  
 F30 to F39: Mood (affective) disorders  
 F40 to F48: Anxiety, dissociative, stress-related and somatoform disorders  
 F50 to F59: Behavioral syndromes associated with physiological disturbances and physical factors  
 F60 to F69: Disorders of adult personality and behavior  
 F70 to F79: Mental retardation

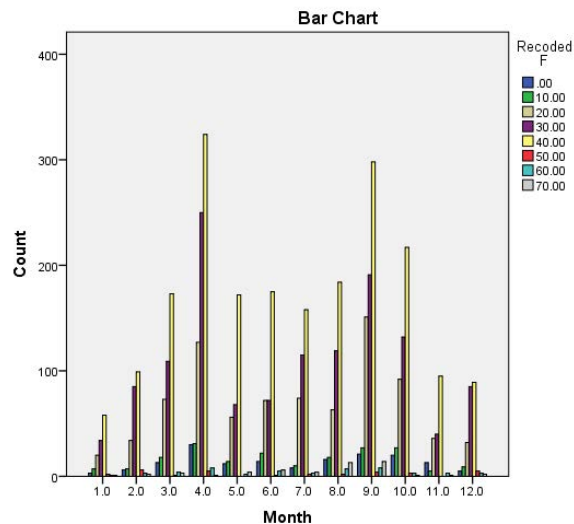
**Age of the patient at first presentation**



Horizontal axis of the figure represents the ICD 10 F code.

**Figure 2:** Age-wise distribution of the patients according to their diagnosis at first presentation (N = 4661)

sented in their fourth decade which is in line with findings reported in NMHS of India.<sup>1</sup> Earlier research has consistently highlighted a significant link between gender and mental health, often noting that the female gender is associated with a higher risk of certain psychiatric disorders. However, In our



Numbers in the horizontal axis of the figure represent the months of a year. For example, 1.0 represents January month

**Figure 3:** Distribution of patients first presentation according to the calendar months (N=4661)

study, there was a slight predominance of males over females. This finding aligns with previous studies.<sup>14,21,22</sup> This could be indicative of a gender bias inherent in a patrilineal family system, influencing help-seeking behavior. The gender-specific norms and other sociocultural factors may contribute to women facing additional barriers when attempting to seek help for mental health concerns.<sup>14,24</sup>

The majority of the patients had education primary and secondary. Remarkably, a substantial majority (94.1%) reported no family history. Only 5.9% of the subjects reported history of family members suffering from mental health problems. Which was lower than the findings of Shakya *et al.*<sup>24</sup> This could be due to stigma or unwillingness to divulge familial information.

In our study we found neurotic, stress related and somatoform disorder (43.8 %) was the most common diagnosis followed by mood disorders (27.8%) and psychotic spectrum disorders(17.8%). This was consistent with the findings of Kameshvell,<sup>14</sup> Regmi *et al.*<sup>21</sup> and Shakya *et al.*<sup>24</sup> Whereas in other studies showed schizophrenia and other psychotic disorder as main diagnostic groups.<sup>19,22</sup> Our findings are similar to another study conducted in rural community of Uttar Pradesh(India),in which about 44% of the patients were suffering from neurotic and related disorders and 9.1% from schizophrenia.<sup>25</sup> One

of the criticism of the existing literature on this area, which comprises of more of the community based studies is that these studies have been unable to tap the disorders that have relatively lesser prevalence (like sleep disorders and sexual disorders). One of the major reasons behind that is the fact the studies are conducted using pre-decided tools administered by trained staff. Our study adds valuable information in this aspect, as psychiatrists made the diagnoses in these patients after detailed interviews (and not based on semi-structured or structured tools).

Another important trend we noticed was rise in patients attending the services during April and September. When interpreted for each group of disorder separately, the highest representation was from F40 group followed by F30 group and F20 group. This trend was found to be uniform across all months of the year. This could be explained as few psychiatric disorders can occur in seasonal pattern, especially with the onset of summer and winter. A study conducted by Avasthi *et al.*, highlight distinct seasonal trends in psychiatric diagnosis. It has reported peak of mood disorders during winter months.<sup>26</sup>

## CONCLUSION

Overall our findings provide an overview of patient profile and utilization patterns at newly established psychiatry OPD. These insights are crucial for tailoring services, optimizing resource allocation and planning targeted interventions to address the diverse mental health needs of the community we serve. Also, it shows that awareness is increasing regarding mental health issues.

## LIMITATIONS

It was a single centre, retrospective study which limits its generalizability. For a subset of patients complete data could not be retrieved, potentially introducing selection bias.

## IMPLICATIONS

The study provides knowledge about initial trends in a newly established OPD patient profile. The fact that early age of presentation in anxiety and stress-related disorders underscores the need for

early intervention and prevention efforts. Tertiary psychiatry care was not available in this part of the region earlier. Hence, this study can form the basis of larger population-based studies that should be performed henceforth to garner a better idea about the epidemiology of psychiatric disorders.

## ETHICAL APPROVAL

The study was approved by the Institute Ethics Committee (AllMS Raebareli) Study/Protocol No 2023-13-IMP-4 dated 10/07/2023.

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None.

## CONFLICTS OF INTEREST

There are no conflicts of interest. The authors whose names are listed above certify that they have no affiliations with or involvement in any organization or entity with any financial interest.

## AUTHORS CONTRIBUTION

Dr RS-Conceptualization, supervision, data collection, writing the manuscript, review and editing. Dr AP: Analysis of data, writing, and review of manuscript. Ms SK-Data collection, editing and review of the manuscript. All the authors confirm that all of them have contributed in the conception of design; analysis, interpretation of data; drafting of the article; critically revisiting the article for important intellectual inputs; and approval of the final version. Manuscript has been read and approved by all the authors.

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