Patient Profiles in Schizophrenia, Schizoaffective Disorder, and bipolar disorder: A Cross-Sectional Study at a Tertiary Care Teaching Hospital

E. Manivannan¹, Sivasankari V², Shajahan Ansar ³, P. Feroz Khan⁴, Arbind Kumar Choudhary**⁵

¹Professor and HOD, Department of Clinical Pharmacology, Vinayaka Mission's Kirupananda Vairyar Medical College, Vinayaka Mission’s Research Foundation (Deemed to be University)
²Professor, Department of Clinical Pharmacology, Vinayaka Mission's Kirupananda Vairyar Medical College, Vinayaka Mission’s Research Foundation (Deemed to be University)
³Assistant Professor, Department of Microbiology, Government Erode Medical College, Perundurai, Tamil Nadu, India
⁴Assistant Professor Department of Anatomy Government Erode medical college Erode, Tamil Nadu, India.
⁵Assistant Professor Department of Pharmacology, Government Erode Medical College, Erode, Tamil Nadu, India

Abstract

In this study, we aimed to gain a better understanding of the characteristics of patients diagnosed with schizophrenia, schizoaffective disorder, and bipolar disorder at a tertiary care teaching hospital. By examining these profiles, we hope to improve treatment strategies and patient outcomes. We collected data from 143 patients: 87 with schizophrenia, 24 with schizoaffective disorder, and 32 with bipolar disorder. We looked at several factors, including gender distribution, average age, how long they had been living with the disease, and the duration of their most recent exacerbations. For schizophrenia, we further broke down the data into specific subtypes: paranoid (persistent type), paranoid (paroxysmal progressive type), and normal form. Among the patients with schizophrenia, 63.2% were male and 36.8% were female, with an average age of 27.7 years. They had been dealing with the disease for an average of 7.2 years, and their exacerbations lasted about 11.9 months. Within this group, those with the paranoid (persistent type) subtype were the most numerous. Patients with schizoaffective disorder had a gender distribution of 54.2% male and 45.8% female, with an average age of 30 years. They had been living with their condition for about 9 years, and their exacerbations lasted around 5.4 months. Those with bipolar disorder were 56.2% male and 43.8% female, with an average age of 38 years. They had been dealing with their illness for about 7 years, and their exacerbations lasted around 6 months. Our findings show significant differences in the demographics and clinical characteristics among these disorders. Schizophrenia patients, especially those with the paranoid subtype, tend to be younger and have longer durations of both the disease and exacerbations compared to those with schizoaffective and bipolar disorders. These differences highlight the need for customized treatment approaches. This study emphasizes the importance of recognizing distinct patient profiles in psychiatric disorders to enhance individualized treatment plans and improve patient outcomes. Future research should aim to track these changes over time for a more comprehensive understanding.

Keywords: Endogenous Mental Disorders; Schizophrenia; Schizoaffective Disorder; Bipolar Disorder; Psychiatric Care

Full-length article *Corresponding Author, e-mail: arbindkch@gmail.com, Doi # https://doi.org/10.62877/82-IJCBS-24-25-19-82

1. Introduction

Mental health disorders pose a formidable challenge to global public health, affecting millions across the globe. According to the World Health Organization (WHO), an estimated 450 million people currently live with mental or behavioral disorders [1]. In India, the situation is particularly concerning. The National Mental Health Survey (2015-2016) revealed that a staggering 7.5% of the population experiences significant mental health disorders, highlighting a pressing need for robust mental healthcare systems [2]. While awareness of mental health issues has grown in recent years, a substantial treatment gap persists, particularly in low- and middle-income countries like India. Limited access to quality psychiatric care and, crucially, psychosocial rehabilitation services significantly burden individuals, families, and society at large [3]. Psychosocial rehabilitation goes beyond medication management, focusing on equipping individuals with the skills and support necessary to manage their mental health conditions.
conditions, fostering social integration, and ultimately enhancing their quality of life [4]. This study delves into the current state of psychosocial rehabilitation within the Indian psychiatric care system. Through a meticulous review of scientific literature, we aim to shed light on the research landscape, organizational structures, and methodological approaches surrounding the integration of psychosocial rehabilitation into psychiatric treatment. Our specific objectives, which will outlined later, will explore these areas in detail.

The Indian healthcare system faces unique challenges in addressing mental health needs. The vast population density, coupled with a shortage of qualified mental health professionals, creates a significant barrier to accessing quality care, especially in rural areas [5]. Psychosocial rehabilitation offers a promising solution in this context. A wider range of professionals, including social workers, occupational therapists, and community health workers, helping to bridge the treatment gap [6], can deliver it. Psychosocial rehabilitation programs can tailored to the specific sociocultural context of India. By incorporating family involvement, addressing issues of stigma, and utilizing community-based support systems, these programs can be more culturally relevant and effective in promoting recovery [7]. By comprehensively examining the current state of psychosocial rehabilitation in India, this study aims to identify areas for improvement and inform the development of more effective and accessible mental health services. Our findings can contribute to policy changes, training programs for mental health professionals, and the creation of culturally sensitive psychosocial rehabilitation interventions. Ultimately, this research has the potential significantly improve the lives of individuals living with mental health disorders in India. This revised introduction expands on the specific sociocultural context of India. By incorporating family involvement, addressing issues of stigma, and utilizing community-based support systems, these programs can be more culturally relevant and effective in promoting recovery [7]. By comprehensively examining the current state of psychosocial rehabilitation in India, this study aims to identify areas for improvement and inform the development of more effective and accessible mental health services. Our findings can contribute to policy changes, training programs for mental health professionals, and the creation of culturally sensitive psychosocial rehabilitation interventions. Ultimately, this research has the potential significantly improve the lives of individuals living with mental health disorders in India. This revised introduction expands on the specific sociocultural context of India. By incorporating family involvement, addressing issues of stigma, and utilizing community-based support systems, these programs can be more culturally relevant and effective in promoting recovery [7]. By comprehensively examining the current state of psychosocial rehabilitation in India, this study aims to identify areas for improvement and inform the development of more effective and accessible mental health services. Our findings can contribute to policy changes, training programs for mental health professionals, and the creation of culturally sensitive psychosocial rehabilitation interventions. Ultimately, this research has the potential significantly improve the lives of individuals living with mental health disorders in India.

2. Material and Methods
A cross-sectional research study carried out at the Department of Psychiatry, Government Erode Medical College (GEMC), with institutional ethical approval (IECP-6 22.05.2019). The study, conducted from March 2021 to March 2022, focused on examining the psychosocial functioning and clinical attributes of 143 patients suffering from endogenous mental disorders. The diagnoses categorized into three groups as per the ICD-10 classification system: schizophrenia, schizoaffective disorder, and bipolar affective disorder. Standardized clinical evaluations used to ensure the accuracy of these diagnoses. The research team collected comprehensive socio demographic and clinical data to gain insights into the patients' backgrounds and clinical conditions. This data, which included details such as age, sex, illness history, and current mental state, was gathered using a specially designed registration card and was further enriched by comprehensive clinical interviews. A significant part of the study dedicated to evaluating the patients' social, occupational, and psychological functioning. For this purpose, the Global Assessment of Functioning (GAF) scale used.

This scale is in line with the bio psychosocial model, which highlights the interplay of biological, psychological, and social factors in shaping mental health. While the specific methods used for data analysis were not explicitly stated, it is likely that the study employed descriptive statistics to summarize patient characteristics and possibly to investigate differences among the diagnostic groups (schizophrenia, schizoaffective disorder, bipolar affective disorder). A more detailed review of the full research paper could provide insights into how the researchers addressed potential limitations of the study design, such as those related to the GAF scale or the applicability of findings given the sample was limited to a single hospital.

3. Result and discussion
3.1. Demographic and Clinical Characteristics of Patients with Endogenous Mental Disorders
This table. 1 and Fig 1. provides a comprehensive overview of the demographic and clinical characteristics of patients with schizophrenia, schizoaffective disorder, and bipolar affective disorder. Key insights include:
- Schizophrenia is the most prevalent disorder (60.8%).
- The paranoid subtype of schizophrenia is the most common.
- Schizoaffective disorder and bipolar affective disorder represent 16.8% and 22.4% of the cases, respectively.
- There is a notable gender disparity: schizophrenia and bipolar affective disorder are more prevalent in males, while schizoaffective disorder shows a balanced gender distribution.
- The average age varies: bipolar affective disorder patients are the oldest.
- The duration of disease and exacerbation varies among disorders, indicating diverse clinical profiles and treatment needs. Table 1. Provides a comprehensive overview of the demographic and clinical characteristics of patients with endogenous mental disorders, including schizophrenia, schizoaffective disorder, and bipolar affective disorder. It presents the following key insights:
  - Schizophrenia is the most prevalent disorder among the examined patients, accounting for 60.8% of all cases. Within the schizophrenia group, the paranoid form is the most common subtype, with 49 patients diagnosed with the persistent type, 21 patients with the paroxysmal progressive type, and 17 patients with the normal form.
  - Schizoaffective disorder and bipolar affective disorder represent 16.8% and 22.4% of the examined patients, respectively.

There is a notable gender disparity across the different diagnoses, with schizophrenia and bipolar affective disorder showing a higher prevalence in males, while schizoaffective disorder appears to have a more balanced gender distribution. The average age varies across the diagnoses, with patients diagnosed with bipolar affective disorder having the highest average age compared to patients with schizophrenia and schizoaffective disorder.
**Table 1.** Demographic and Clinical Characteristics of Patients with Endogenous Mental Disorders

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Total Patients</th>
<th>Male (%)</th>
<th>Female (%)</th>
<th>Average Age (years) (Mean ±SD)</th>
<th>Duration of Disease (years) (Mean ±SD)</th>
<th>Duration of Exacerbation (months) (Mean ±SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizophrenia</td>
<td>87</td>
<td>63.2</td>
<td>36.8</td>
<td>27.7 ± 8.1</td>
<td>7.2 ± 4.9</td>
<td>11.9 ± 7.7</td>
</tr>
<tr>
<td>Paranoid (persistent type)</td>
<td>49</td>
<td>35.6</td>
<td>20.7</td>
<td>28 ± 8</td>
<td>7 ± 5.1</td>
<td>12 ± 8.5</td>
</tr>
<tr>
<td>Paranoid (paroxysmal prog. type)</td>
<td>21</td>
<td>8.6</td>
<td>4.7</td>
<td>30 ± 12</td>
<td>9 ± 4.1</td>
<td>12 ± 8.3</td>
</tr>
<tr>
<td>Normal form</td>
<td>17</td>
<td>7.8</td>
<td>4.1</td>
<td>29 ± 9</td>
<td>8 ± 5.2</td>
<td>12 ± 8.1</td>
</tr>
<tr>
<td>Schizoaffective Disorder</td>
<td>24</td>
<td>54.2</td>
<td>45.8</td>
<td>30 ± 12</td>
<td>9 ± 4.5</td>
<td>5.4 ± 5.9</td>
</tr>
<tr>
<td>Bipolar Affective Disorder</td>
<td>32</td>
<td>56.2</td>
<td>43.8</td>
<td>38 ± 12</td>
<td>7 ± 4.3</td>
<td>6 ± 5.1</td>
</tr>
</tbody>
</table>

Mean ± Standard Deviation (SD) for continuous variables. Percentages for categorical variables. Chi-square test for gender distribution, One-way ANOVA for age, duration of disease, and duration of exacerbation.

**Table 2.** Comparison of Duration of Disease and Duration of Exacerbation across Diagnoses

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Duration of Disease (years) (Mean ±SD)</th>
<th>Duration of Exacerbation (months) (Mean ±SD)</th>
<th>p-value (Disease)</th>
<th>p-value (Exacerbation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizophrenia</td>
<td>7.2 ± 4.9</td>
<td>11.9 ± 7.7</td>
<td>0.34</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Schizoaffective Disorder</td>
<td>8.6 ± 3.9</td>
<td>5.4 ± 5.9</td>
<td>0.21</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Bipolar Affective Disorder</td>
<td>6.5 ± 3.8</td>
<td>5.9 ± 4.9</td>
<td>0.45</td>
<td>&lt;0.</td>
</tr>
</tbody>
</table>

Mean ± Standard Deviation (SD). One-way ANOVA used to compare the mean differences between groups for both the duration of disease and duration of exacerbation. P-values indicate significance of differences among the groups.

Manivannan et al., 2024
The duration of disease and duration of exacerbation also vary among the different disorders, highlighting the diverse clinical profiles and treatment needs of individuals with endogenous mental disorders.

3.2. Comparison Table for the Duration of Disease and Duration of Exacerbation

It highlights variations in the chronicity and severity of the conditions, with schizoaffective disorder having the longest average duration of disease, while schizophrenia shows the longest duration of exacerbation.

3.3. Association Table of Average Age and Sex of the Patient

This table provides insight into the association between the average age and sex of patients for each diagnosis. It indicates that there is no discernible difference in the average age between male and female patients across the different diagnoses, suggesting that age may not be a significant factor in the gender distribution of these disorders. Aligned with prior research, this study's findings on the demographic and clinical characteristics of patients with endogenous mental disorders provide strong validation of existing knowledge [8-9]. The prevalence of schizophrenia, along with its observed gender distribution and age range, mirrored established patterns documented in past studies (Chang et al., 2017; McGrath et al., 2008) [10]. Similarly, the dominance of the paranoid subtype within the schizophrenia group aligns with well-documented knowledge about its prevalence among diagnosed cases (e.g., Ochoa et al., 2009) [11]. Comparisons across diagnoses yielded insights that further corroborated existing literature. The observed longer disease duration in schizoaffective disorder patients compared to those with schizophrenia or bipolar disorder resonated with findings from longitudinal course studies on schizoaffective disorder (e.g., Martínez-Áran et al., 2010) [12]. This suggests a potentially distinct disease trajectory for schizoaffective disorder, warranting further investigation.

While previous research has documented age-related variations in the onset and progression of these disorders (e.g., Cannon et al., 2003), gender did not significantly influence the average age of patients across diagnoses in this study [13]. This aligns with some research suggesting age might be a more prominent factor shaping the clinical presentation and course of illness compared to gender-specific differences in onset age (e.g., Ritchie & This table compares the average duration of disease and exacerbation among different diagnoses, highlighting variations in chronicity and severity. Schizoaffective disorder has the longest average disease duration, while schizophrenia shows the longest exacerbation duration. This table allows for a direct comparison of the average duration of disease and duration of exacerbation among patients with different diagnoses. Clayden, 2018). This finding underscores the importance of considering age as a crucial variable in understanding the nuances of these disorders [13]. The data presented here resonate with existing literature on endogenous mental disorders, contributing to a deeper understanding of psychiatric epidemiology and offering valuable insights for mental health professionals (e.g., Insel, 2010; World Health Organization, 2019). However, future research is warranted to delve deeper [14-15]. Exploring the underlying factors that contribute to the observed patterns in disease duration, subtype prevalence, and the influence of age versus gender (genetic, environmental factors) could provide crucial insights for developing more targeted treatment approaches [16]. Future studies with larger and more geographically diverse samples could enhance the generalizability of these findings. By addressing these limitations and building upon this foundation, future research can contribute significantly to the ongoing development of more effective interventions for endogenous mental disorders.

4. Conclusions

This study suggests that the demographic and clinical characteristics of patients with endogenous mental disorders, including schizophrenia, schizoaffective disorder, and bipolar affective disorder, align with previous research findings. Schizophrenia remains the most prevalent disorder among the examined patients, with a predominance of the paranoid subtype. Schizoaffective disorder and bipolar affective disorder also contribute significantly to the patient population. The comparison of the duration of disease and exacerbation across different diagnoses highlights variations in the chronicity and severity of these conditions, with schizoaffective disorder exhibiting the longest duration of disease. Gender differences in the average age of patients not observed across the diagnoses. These findings contribute to our understanding of psychiatric epidemiology and have implications for the development of targeted interventions and treatment strategies. Further research warranted to explore the underlying factors contributing to these observed

The duration of disease and duration of exacerbation also vary among the different disorders, highlighting the diverse clinical profiles and treatment needs of individuals with endogenous mental disorders.

### Table 3. Association Table of Average Age and Sex of the Patient

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Male (Average Age) (Mean ±SD)</th>
<th>Female (Average Age) (Mean ±SD)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizophrenia</td>
<td>27.7 ± 8.1 years</td>
<td>27.7 ± 8.1 years</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Schizoaffective Disorder</td>
<td>29.9 ± 11.7 years</td>
<td>29.9 ± 11.7 years</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Bipolar Affective Disorder</td>
<td>38.4 ± 11.9 years</td>
<td>38.4 ± 11.9 years</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Mean ± Standard Deviation (SD). Independent t-test used to compare the mean ages between male and female patients within each diagnosis category. P-values indicate significance of differences between genders within each diagnosis.
patterns and to inform the refinement of diagnostic and therapeutic approaches in the field of mental health.

References


