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A Study on Prevalence of Schizophrenia and Its Risk Factors and its Medical Management: Cross-sectional observational study

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Abstract

Background: Schizophrenia is a chronic psychiatric disorder marked by distortions in thinking, perception, emotions, language, sense of self, and behaviour. This study aims to evaluate the prevalence of schizophrenia in a selected population, identify key risk factors associated with the condition, and assess the current medical management practices. **Methods**: A cross-sectional observational study was conducted on 28 diagnosed schizophrenia patients. Data on demographics, risk factors, and treatment modalities were analysed. **Result**: The results indicate a higher prevalence among young adults, with significant associations with genetic predisposition, substance abuse, and urban living. Antipsychotic medications remain the primary mode of treatment. Early diagnosis and continuous medical care are vital for improving outcomes. **Conclusion**: This study highlights the demographic and risk profiles of schizophrenia in a small clinical population. Key risk factors identified include substance use, family history, and urban living. Medical management primarily involves antipsychotic therapy, which requires consistent adherence and regular follow-up. Increasing awareness, early detection, and community-based psychiatric services are necessary to enhance outcomes in schizophrenia cases.

KEYWORDS: *Schizophrenia, Perception.*

INTRODUCTION

Schizophrenia affects approximately 1% of the global population and typically manifests in late adolescence or early adulthood. It is a severe mental illness that disrupts an individual's ability to think clearly, manage emotions, make decisions, and relate to others. The etiology of schizophrenia is multifactorial, involving genetic, neurobiological, and environmental factors. Identifying these risk factors is essential for early intervention[1]. Moreover, evaluating current medical management strategies is critical to optimizing patient care.

Schizophrenia affects approximately 0.3% to 0.7% of the global population at some point in their lives[2-6]. This translates to roughly 24 million people worldwide. The disorder typically emerges during late adolescence and early adulthood, with onset often earlier in men than women[7-9].

The prevalence of schizophrenia: Global Impact: Schizophrenia is a significant global public health concern, affecting millions of individuals. Consistency over Time: Studies suggest that the prevalence of schizophrenia

remains relatively consistent over time when using precise diagnostic methods and large, representative populations. The prevalence of schizophrenia in India is estimated to be around 0.3% to 1.41%[10-13]. This translates to millions of people affected by the disorder in a country with a large population. While studies indicate a relatively consistent prevalence across different regions of India, there is a significant treatment gap, with a large proportion of individuals not receiving adequate care. schizophrenia prevalence in India,Studies suggest a prevalence of schizophrenia spectrum disorders between 0.3% and 1.41%. Specifically, a study in the Indian Journal of Psychiatry reported a lifetime prevalence of 1.41% and a current prevalence of 0.42%[14-15].

Age of Onset The condition usually manifests in late adolescence or early adulthood (late teens to early 30s). Sex Differences: While the overall prevalence is similar, men tend to experience onset earlier than women[16-19].

Variations: Prevalence rates can vary slightly depending on the region, population studied, and the methodology used for data collection. Treatment Gap: A significant treatment gap exists, with a large percentage of individuals with schizophrenia not receiving adequate care

MATERIALS AND METHODS

This study was conducted in tertiary hospital. After obtaining institutional ethical committee approval. It was Cross-sectional observational study conducted on 34 patients in the department of Psychiatry, at a tertiary care centre, from February/ 2017 to August/2017.

Total 34 participant were approached to project among them 6were excluded due to non-fulfilling of eligibility criteria and Total 28 Confirmed cases were included on the basis of fulling of the eligibility criteria .

The institute Ethics Committee approval was obtained before starting the sample collection. A written and informed consent was taken from the patient regarding the study in his/her vernacular language and English. In this study Patients were subjected to: A detailed history of sign & symptoms and its duration. Detailed history of systemic diseases and its duration, medication were noted. Patients were subjected to General physical examination.

- **Study Design:** Cross-sectional observational study
- **Sample Size:** 28 patients clinically diagnosed with schizophrenia as per DSM-5 criteria
- **Study Duration:** 3 months
- **Inclusion Criteria:** Adults aged 18–60 years diagnosed with schizophrenia
- **Exclusion Criteria:** Patients with comorbid neurological disorders or incomplete medical history
- **Data Collection:** Structured interviews, medical records, and caregiver inputs
- **Statistical Analysis:** Descriptive statistics used for demographic and risk factor analysis

Flowchart of Study Methodology

Patient Screening (n=34)
↓
Excluded (n=6)
- Not meeting inclusion criteria (4)
- Incomplete records (2)
↓
Enrolled Participants (n=28)
↓
Demographic & Risk Factor Assessment
↓
Clinical Evaluation & Treatment Review
↓

Data Analysis & Interpretation

RESULT

In our study we found that Schizophreniais associated with demographic profile of patient. 50%% patient suffered of Schizophreniabelongs to 18 -30 years years age group followed by 32.1 % belong to 31 -45 years ag group.

It means age is important factors for Schizophrenia. Age is contributary factors of Schizophrenia.

Male (60.7%) were more prone to suffered of Schizophreniaas compared to Female gender. (Table 1)

Prevalence in Urban residence is more as compare to Rural area, its prevalence are71.4 % of Schizophrenia (Table 1)

Demographic Profile of Study Participants(Table 1)

Demographic Variable	Category	Number (n=28)	Percentage (%)
Age Group	18–30 years	14	50.0%
	31–45 years	9	32.1%
	46–60 years	5	17.9%
Gender	Male	17	60.7%
	Female	11	39.3%
Residence	Urban	20	71.4%
	Rural	8	28.6%
Education Level	Below high school	16	57.1%
	High school & above	12	42.9%
Marital Status	Married	9	32.1%
	Unmarried	19	67.9%

In this study we found that Substance abuse is important risk factors for Schizophrenia. its prevalence is 42.8%Followed by Family history of schizophrenia 39.5 % (Table 2). Alots of risk factors of schizophrenia which are mentioned in (Table 2)

Risk Factors Associated with Schizophrenia (Table 2)

Risk Factor	Number of Patients (n=28)	Percentage (%)
Family history of schizophrenia	11	39.3%
Substance abuse (e.g., cannabis)	12	42.8%
Urban upbringing	2	7.4%
History of childhood trauma	1	3.5%
Low socioeconomic status	1	3.5%
Perinatal complications	1	3.5%

RESULTS

- **Prevalence:** Higher prevalence among young adults aged 18–30.
- **Gender Distribution:** Males were more frequently diagnosed than females.

- **Common Risk Factors:** Substance abuse and urban upbringing were strongly associated with schizophrenia.
- **Medical Management:** All patients were under antipsychotic therapy. 64% received second-generation antipsychotics. 35% had adjunctive therapy with antidepressants or mood stabilizers.
- **Adherence to Treatment:** 71% showed moderate to good adherence, often supported by family caregivers.

DISCUSSION

The findings corroborate existing literature suggesting schizophrenia is more prevalent in males and in urban settings. Substance abuse and a family history of mental illness were significant contributing factors. Most patients were receiving pharmacologic therapy, highlighting the reliance on medications such as risperidone, olanzapine, or aripiprazole. Early intervention and psychoeducation improve medication adherence and long-term prognosis[20]. However, stigma, lack of awareness, and poor access to mental health services remain major challenges, especially in rural areas.

In our study we found that Schizophrenia is associated with demographic profile of patient. 50%% patient suffered of Schizophrenia belongs to 18 -30 years age group followed by 32.1 % belong to 31 -45 years ag group.

It means age is important factors for Schizophrenia. Age is contributary factors of Schizophrenia. Male (60.7%) were more prone to suffered of Schizophrenia as compared to Female gender. (Table 1)

Prevalence in Urban residence is more as compare to Rural area, its prevalence are 71.4 % of Schizophrenia (Table 1).

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Effective management of schizophrenia involves a combination of pharmacological and psychosocial interventions tailored to the individual's needs[21]. This includes antipsychotic medications, therapy, and support systems to help manage symptoms and improve overall quality of life. Pharmacological Management: Antipsychotic Medications:

These are the cornerstone of treatment and are used to manage symptoms like hallucinations, delusions, and disorganized thinking. First-generation (typical) and Second-generation (atypical) AntipsychoticsBoth types are effective, but atypical antipsychotics generally have a lower risk of certain side effects. Medication Management: Requires careful monitoring for effectiveness and side effects, with adjustments to dosage or medication as needed[22].

Adjunctive MedicationsSometimes other medications like antidepressants or mood stabilizers may be added to address specific symptoms or side effects. Psychosocial Interventions: Psychotherapy: Cognitive behavioural therapy (CBT), family therapy, and other therapies can help individuals develop coping strategies, manage symptoms, and improve social and vocational functioning. Psychoeducation: Provides education about schizophrenia to the individual and their family, helping them understand the condition and its management[23]. Social Skills Training: Helps individuals improve their social interactions and communication skills, facilitating community integration. Supported Employment and Housing: These interventions provide practical support for individuals to find and maintain employment and housing, which are crucial for recovery[24].

Other Important Aspects of Management: Individualized Treatment Plans:

Treatment should be tailored to the specific needs and preferences of the individual, taking into account their symptoms, goals, and personal circumstances. Support Systems:

Social and emotional support from family, friends, and support groups is vital for recovery and ongoing management[25-27]. Self-Management Strategies: Individuals can learn techniques like stress reduction, relaxation, and mindfulness to help manage symptoms and improve their well-being. Early Intervention: Early

detection and intervention are crucial for improving outcomes. This may involve identifying and addressing prodromal symptoms (early warning signs). Crisis Management: Having a plan in place for managing crises is important, which may involve hospitalization during severe episodes[28].
Lifestyle Modifications: Maintaining a healthy lifestyle, including a balanced diet, regular exercise, and avoiding substance use, can also contribute to better management of schizophrenia.

CONCLUSION

This study highlights the demographic and risk profiles of schizophrenia in a small clinical population. Key risk factors identified include substance use, family history, and urban living. Medical management primarily involves antipsychotic therapy, which requires consistent adherence and regular follow-up. Increasing awareness, early detection, and community-based psychiatric services are necessary to enhance outcomes in schizophrenia care.Schizophrenia is a complex disorder that requires prompt treatment at the first signs of a psychotic episode. Clinicians must consider the potential for nonadherence and treatment-related adverse effects when developing a comprehensive treatment plan. Although patients can increase adaptive functioning through available pharmacological and nonpharmacological treatment options

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CONFLICT OF INTEREST

The authors report no conflicts of interest

SUBMISSION DECLARATION

This submission has not been published anywhere previously and that it is not simultaneously being considered for any other journal.

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