



CLINICAL AND SOCIODEMOGRAPHIC CORRELATES OF TREATMENT NON-ADHERENCE IN PATIENTS WITH SCHIZOPHRENIA: A CROSS-SECTIONAL STUDY FROM A TERTIARY CARE CENTRE

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ABSTRACT

Background: Treatment non-adherence is a major challenge in the management of schizophrenia and is associated with relapse, hospitalization, poor psychosocial functioning, and increased healthcare burden. Understanding the clinical and sociodemographic factors associated with non-adherence is essential for improving long-term outcomes. **Aim:** To evaluate the prevalence and correlates of treatment non-adherence among patients with schizophrenia attending a tertiary care psychiatric centre. **Materials and Methods:** This hospital-based cross-sectional study was conducted among 120 patients diagnosed with schizophrenia according to DSM-5 criteria attending the psychiatry outpatient and inpatient departments of a tertiary care centre between January 2025 and June 2025. Sociodemographic and clinical details were collected using a semi-structured proforma. Medication adherence was assessed using the Medication Adherence Rating Scale (MARS). Patients scoring ≤ 6 were categorized as non-adherent. Statistical analysis was performed using chi-square test, independent t-test, and multivariate logistic regression. **Results:** Among the 120 participants, 46 (38.3%) were found to be non-adherent to treatment. Non-adherence was significantly associated with younger age ($p=0.02$), unmarried status ($p=0.01$), unemployment ($p=0.03$), lower educational status ($p=0.04$), substance abuse ($p<0.001$), longer duration of illness ($p=0.03$), poor insight ($p<0.001$), and history of multiple hospitalizations ($p=0.02$). Logistic regression analysis identified poor insight (AOR=3.8, 95% CI: 1.7–8.4), comorbid substance abuse (AOR=3.2, 95% CI: 1.4–7.1), and unemployment (AOR=2.4, 95% CI: 1.1–5.3) as independent predictors of treatment non-adherence. **Conclusion:** Treatment non-adherence is common among patients with schizophrenia and is strongly influenced by both clinical and sociodemographic factors. Early identification of high-risk patients and targeted psychoeducation and rehabilitation programs may improve adherence and clinical outcomes.

KEYWORDS : Schizophrenia; Treatment Adherence; Non-Adherence; Antipsychotics; Insight; Substance Abuse**INTRODUCTION**

Schizophrenia is a chronic psychiatric disorder characterized by disturbances in thought, perception, affect, and behavior. Despite advances in psychopharmacology and community-based mental health care, treatment adherence remains a major obstacle in achieving optimal clinical outcomes. Non-adherence to antipsychotic medication is associated with symptom exacerbation, frequent relapses, rehospitalization, suicidal behavior, reduced quality of life, and increased socioeconomic burden.^(1,2)

The prevalence of medication non-adherence among patients with schizophrenia has been reported to range from 20% to 60% globally. Multiple factors contribute to non-adherence, including lack of insight, adverse drug effects, cognitive impairment, stigma, substance abuse, poor social support, financial constraints, and inadequate access to healthcare services. Sociodemographic variables such as unemployment, low educational status, and marital instability may further influence adherence behavior.^(3,4)

In developing countries, family dynamics, social stigma, and economic limitations significantly affect continuity of psychiatric care. Identifying predictors of non-adherence in local populations is important for designing culturally appropriate interventions.⁽⁵⁾

The present study was conducted to assess the prevalence of treatment non-adherence among patients with schizophrenia and to identify associated clinical and sociodemographic correlates in a tertiary care psychiatric setting.

Aim and Objectives**Aim**

To study the clinical and sociodemographic correlates of treatment non-adherence in patients with schizophrenia.

Objectives

- To determine the prevalence of treatment non-adherence among patients with schizophrenia.
- To evaluate sociodemographic factors associated with treatment non-adherence.
- To assess clinical variables associated with treatment non-adherence.
- To identify independent predictors of non-adherence.

Methodology

This hospital-based cross-sectional observational study was conducted in the Department of Psychiatry of a tertiary care teaching hospital over a period of six months from January 2025 to June 2025. The study aimed to evaluate the clinical and sociodemographic correlates of treatment non-adherence among patients diagnosed with schizophrenia attending outpatient and inpatient psychiatric services.

A total of 120 patients fulfilling the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) criteria for schizophrenia were included in the study through consecutive sampling. Patients aged between 18 and 60 years with a duration of illness of at least six months were considered eligible for participation. Individuals with severe cognitive impairment, acute psychotic agitation interfering with assessment, severe neurological or medical illness, and intellectual disability were excluded from the study.

Prior to commencement of the study, approval was obtained from the Institutional Ethics Committee. Written informed consent was obtained from all participants and, where appropriate, from caregivers. Confidentiality of patient information was maintained throughout the study.

Data were collected using a semi-structured proforma specifically designed for the study. Sociodemographic variables recorded included age, gender, marital status, educational qualification, occupation, socioeconomic status, place of residence, and family support. Clinical variables assessed included age at onset of illness, duration of illness, number of psychiatric hospitalizations, family history of psychiatric illness, history of substance abuse, current treatment status, and adverse drug effects.

Medication adherence was assessed using the Medication Adherence Rating Scale (MARS), a validated self-report instrument widely used in psychiatric populations. The scale consists of 10 items assessing medication-taking behavior and attitudes toward treatment. Patients scoring less than 6 on the MARS were categorized as non-adherent, while those scoring 6 or above were considered adherent to treatment.

Insight into illness was assessed clinically using the Schedule for Assessment of Insight (SAI). Patients demonstrating poor awareness regarding illness and need for treatment were categorized as having

poor insight. Substance abuse was identified based on history and clinical evaluation according to DSM-5 criteria.

All collected data were entered into Microsoft Excel and analyzed using Statistical Package for Social Sciences (SPSS) version 26. Continuous variables were expressed as mean and standard deviation, whereas categorical variables were represented as frequencies and percentages. Comparison between adherent and non-adherent groups was performed using independent sample t-test for continuous variables and chi-square test for categorical variables. Variables showing statistical significance on univariate analysis were included in multivariate logistic regression analysis to identify independent predictors of treatment non-adherence. A p-value of less than 0.05 was considered statistically significant.

RESULTS

A total of 120 patients diagnosed with schizophrenia participated in the study. Among them, 74 patients (61.7%) were adherent to treatment, whereas 46 patients (38.3%) were found to be non-adherent based on Medication Adherence Rating Scale scores. The mean age of the study population was 36.7 ± 9.3 years.

The mean age of patients in the non-adherent group was significantly lower compared to the adherent group (33.5 ± 8.8 years vs. 38.7 ± 9.4 years; $p=0.02$), indicating that younger individuals were more likely to discontinue treatment. Males constituted the majority of participants in both groups; however, gender distribution did not show statistically significant association with treatment adherence ($p=0.41$).

Marital status demonstrated a significant association with adherence patterns. Nearly 47.8% of non-adherent patients were unmarried compared to 25.7% in the adherent group ($p=0.01$). Similarly, unemployment was significantly more common among non-adherent individuals, with 56.5% of non-adherent patients being unemployed compared to 32.4% among adherent patients ($p=0.03$). Lower educational status was also significantly associated with non-adherence, suggesting that poor literacy and reduced awareness may influence treatment continuation.

Clinical variables revealed several significant associations with treatment non-adherence. Patients with a duration of illness greater than five years showed significantly higher rates of non-adherence compared to those with shorter illness duration (60.9% vs. 37.8%; $p=0.03$). Repeated psychiatric hospitalizations were also more common among non-adherent individuals, with more than half of the non-adherent group reporting two or more hospital admissions (52.2%) compared to 31.1% among adherent patients ($p=0.02$). This finding highlights the cyclical relationship between poor adherence and relapse requiring hospitalization.

Substance abuse emerged as one of the strongest correlates of treatment non-adherence. Nearly 47.8% of non-adherent patients had comorbid substance abuse compared to only 14.9% in the adherent group, and this association was highly statistically significant ($p<0.001$). Alcohol and cannabis were the most commonly reported substances. Patients with substance abuse frequently exhibited irregular follow-up, poor family supervision, and impaired insight into illness.

Insight into illness demonstrated a particularly strong association with adherence behavior. Poor insight was observed in 63.0% of non-adherent patients compared to only 21.6% of adherent patients ($p<0.001$). Patients lacking awareness regarding their psychiatric condition and the importance of continuous medication were more likely to discontinue treatment after symptomatic improvement.

Family history of psychiatric illness and extrapyramidal side effects did not show statistically significant association with treatment adherence in the present study. Although side effects were more commonly reported among non-adherent patients, the difference did not reach statistical significance.

Variables found significant on univariate analysis were entered into multivariate logistic regression analysis to identify independent predictors of treatment non-adherence. Poor insight emerged as the strongest independent predictor, with patients having poor insight demonstrating nearly four times higher odds of non-adherence (Adjusted Odds Ratio [AOR]=3.8; 95% CI: 1.7–8.4; $p=0.001$). Substance abuse was another major independent predictor, increasing

the likelihood of non-adherence by more than threefold (AOR=3.2; 95% CI: 1.4–7.1; $p=0.004$). Unemployment also remained statistically significant on multivariate analysis (AOR=2.4; 95% CI: 1.1–5.3; $p=0.03$). Although unmarried status showed significance on univariate analysis, it did not retain independent significance after adjustment for other variables.

Table 1: Socio-demographic Characteristics

Variable	Adherent (n=74)	Non-adherent (n=46)	p-value
Mean age (years)	38.7 ± 9.4	33.5 ± 8.8	0.02
Male gender	41 (55.4%)	29 (63.0%)	0.41
Unmarried	19 (25.7%)	22 (47.8%)	0.01
Unemployed	24 (32.4%)	26 (56.5%)	0.03
Low educational status	18 (24.3%)	21 (45.7%)	0.04
Rural residence	39 (52.7%)	27 (58.7%)	0.52

Table 2. Clinical Variables Associated with Treatment Non-Adherence

Variable	Adherent (n=74)	Non-adherent (n=46)	p-value
Duration of illness >5 years	28 (37.8%)	28 (60.9%)	0.03
Substance abuse	11 (14.9%)	22 (47.8%)	<0.001
Poor insight	16 (21.6%)	29 (63.0%)	<0.001
≥2 hospitalizations	23 (31.1%)	24 (52.2%)	0.02
Family history positive	17 (23.0%)	15 (32.6%)	0.25
Extrapyramidal side effects	12 (16.2%)	11 (23.9%)	0.29

Table 3. Logistic Regression Analysis for Predictors of Non-Adherence

Variable	Adjusted Odds Ratio (AOR)	95% CI	p-value
Poor insight	3.8	1.7–8.4	0.001
Substance abuse	3.2	1.4–7.1	0.004
Unemployment	2.4	1.1–5.3	0.03
Unmarried status	1.9	0.8–4.5	0.11

DISCUSSION

The present study demonstrated that approximately 38.3% of patients with schizophrenia were non-adherent to treatment, which is comparable to previous studies reporting adherence difficulties in one-third to one-half of patients.

Younger age and unmarried status were associated with poor adherence, possibly due to inadequate family supervision and lower illness acceptance. Unemployment was also significantly associated with non-adherence, reflecting the influence of financial dependency and impaired social functioning.⁽⁶⁻⁹⁾

Substance abuse emerged as a major predictor of non-adherence. Patients with comorbid substance use disorders often exhibit poor insight, impaired judgment, and irregular healthcare utilization, contributing to treatment discontinuation.

Poor insight showed the strongest association with non-adherence. Lack of awareness regarding illness and the need for long-term treatment is a well-recognized barrier in schizophrenia management. Psychoeducation and family interventions may improve insight and medication compliance.⁽¹⁰⁻¹²⁾

Longer duration of illness and repeated hospitalizations were also significantly associated with poor adherence, indicating the cyclical relationship between relapse and discontinuation of treatment.

The findings highlight the importance of integrated psychosocial interventions, community mental health support, and individualized adherence-enhancing strategies.

CONCLUSION

Treatment non-adherence is highly prevalent among patients with schizophrenia and is influenced by multiple clinical and sociodemographic factors. Poor insight, substance abuse, and unemployment were significant independent predictors. Early screening for adherence difficulties and implementation of multidisciplinary interventions may improve long-term psychiatric outcomes and reduce relapse rates.

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