Association between Medication Awareness and Medication Adherence among Psychiatric Outpatients

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Fiza Iman [1] Walija Maryum [2] Syeda Hadia Hassan [3] Hunaina Nadeem [4] Ayesha Abbas [5]

Abstract: The purpose of this study was to examine the relationship between medication awareness and medication adherence among psychiatric outpatients and to evaluate the influence of key sociodemographic factors on adherence. A total of 180 participants were assessed using structured measures of awareness, adherence, and demographic characteristics. The results revealed a significant and positive correlation between medication awareness and adherence ($r = 0.62$, $p < .001$), indicating that higher awareness is associated with improved adherence behaviors. This finding supports the first hypothesis (H1) and leads to the rejection of the second hypothesis (H2), which proposed no significant association. Education level, employment status, and family support were found to be significantly related to adherence, with higher adherence observed among participants with higher education, those who were employed, and those reporting greater family support. Gender, however, showed no significant association with adherence. This study explores the role of awareness and the influence of social and demographic factors in shaping medication adherence among psychiatric patients. These findings emphasize the need for targeted psychoeducation, enhanced social support, and individualized interventions to improve adherence and optimize mental health outcomes.

Key Words: Medication Awareness, Medication Adherence, Psychiatric Outpatients, Social Support

Introduction

The World Health Organization (WHO), in its adherence project, defines *adherence* as "the degree to which a person's behavior taking medication or following lifestyle changes corresponds with the recommendations given by healthcare professionals." Essentially, medication adherence represents the degree to which a patient follows medical advice, whereas *non-adherence* refers to refusal or neglect to follow prescribed treatments or attend scheduled appointments. To enhance adherence, healthcare professionals must employ effective communication strategies that acknowledge patients' positive responses to therapy. Social support, particularly from family members and formal support networks, is also crucial in promoting adherence, especially among females who are often more adversely affected (Shehu et al., 2023).

In developing countries, medication adherence remains notably low, exerting a substantial burden on public health. Studies suggest that poor adherence is frequently linked to inadequate social support, self-stigma, and reliance on spiritual practices. Non-adherence can result in chronic health complications and an increased rate of psychiatric consultations. Research indicates that many of the affected individuals are Muslim females aged between 15 and 78, predominantly married and residing in rural areas, where limited education is a key determinant of non-adherence (Onyango et al., 2012).

[1] BS Graduate, National Institute of Psychology, Quaid-I-Azam University, Islamabad, Pakistan.
Email: imanfiza092@gmail.com
[2] BS Graduate, Saulat Institute of Pharmaceutical Sciences, Quaid-I-Azam University, Islamabad, Pakistan.
Email: walijamaryum@gmail.com
[3] BS Graduate, Saulat Institute of Pharmaceutical Sciences, Quaid-I-Azam University, Islamabad, Pakistan.
Email: hadiahassan2004@gmail.com
[4] BS Graduate, Saulat Institute of Pharmaceutical Sciences, Quaid-I-Azam University, Islamabad, Pakistan.
Email: hunainanadeem875@gmail.com
[5] BS Graduate, Saulat Institute of Pharmaceutical Sciences, Quaid-I-Azam University, Islamabad, Pakistan.
Email: ayshaabbas996@gmail.com

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Corresponding Author: Fiza Iman (✉ imanfiza092@gmail.com)

Awareness of illness is equally essential for recovery in psychiatric patients. Studies reveal that about 20–30% of psychiatric patients are unable to comprehend their illness or treatment. Physicians must ensure that patients are informed about the severity of their symptoms and the importance of treatment adherence. Moreover, the healthcare provider should verify that treatment decisions are made voluntarily, free from external influence. Patients with intermediate or higher education levels tend to show greater disease awareness compared to illiterate or minimally educated individuals (Al Hathloul et al., 2016).

Among various psychiatric disorders, *major depressive disorder (MDD)* has particularly high rates of medication non-adherence, which often leads to adverse clinical outcomes. In eastern countries, common causes of non-adherence include forgetfulness and premature discontinuation of medication after limited improvement. However, research conducted in Thailand demonstrated that many female patients with depression who had good disease knowledge and high family support were more likely to adhere to treatment (Pitanupong & Sammathit, 2023; Shehu et al., 2023).

Medication Adherence in Psychiatric Treatment

Medication adherence continues to be one of the most significant challenges in the management of psychiatric disorders such as schizophrenia, bipolar disorder, and major depressive disorder (Novick, 2015). Despite the availability of effective pharmacological therapies, non-adherence rates among psychiatric patients remain between 40% and 60%, contributing to relapse, hospitalisation, and poor recovery outcomes. Velligan et al. (2009) highlighted that assessing adherence itself poses methodological challenges due to variations in definitions, assessment tools, and patient-reported reliability. They emphasized the need for standardized, multidimensional approaches combining objective measurement and patient perspectives to better capture behavioral and contextual influences on adherence (Breggin, 2020).

Poremski et al. (2020) examined the role of *psychiatric advance directives (PADs)*, legal instruments allowing patients to record treatment preferences during stable periods, in improving adherence through increased autonomy and shared decision-making. In their study involving 123 outpatients with severe mental illness, those whose regimens included at least one self-requested medication showed significantly greater adherence after 12 months (odds ratio ≈ 7.8). This aligns with evidence that collaborative, patient-centred care strengthens the therapeutic alliance and promotes consistent engagement with treatment.

Further evidence by Stentzel et al. (2018) using the Medication Adherence Report Scale (MARS-D) identified sociodemographic and psychosocial predictors of adherence in individuals with schizophrenia, schizoaffective, and bipolar disorders. They found that female sex and lower functional status were associated with poorer adherence, while older age, employment, higher functioning, and strong social support improved adherence. Forgetfulness was the most frequent cause of non-adherence, emphasizing the role of behavioral and environmental barriers. Collectively, these studies illustrate that methodological, psychosocial, and patient-centered factors interact in complex ways to shape adherence, and that improving it requires not only precise assessment but also patient empowerment and stigma reduction (Novick, 2015).

The Core Importance of Medication Awareness

Medication awareness is the foundation upon which the entire treatment pathway relies, and two of the most important goals in that pathway are safety and effective treatment.

Mitigating the Risk of Adverse Drug Events (ADEs)

One of the most direct and important roles of awareness is in the prevention of ADEs: allergic reactions, side effects, and medication errors. When patients are educated about their medications, they act as an important line of defence.

Error Prevention: The knowledge of "Five Rights" (Right Patient, Right Drug, Right Dose, Right Time, Right Route) enables the patient to question errors in labeling or dispensing. Some recognized causes of harm due to patient error include incorrect administration or taking an expired product, and these can almost be completely prevented with targeted education (Tariq et al., 2018).

Early Symptom Recognition: Due to awareness of possible common and serious potential side effects, like nausea, dizziness, or allergic reactions, the patient will be in a good position to identify early signs and seek medical attention as early as possible. Thus, this can help keep a mild side effect from developing into a serious health crisis (CDC, 2024).
Managing Complexity: Polypharmacy. Most patients on multiple drugs, especially those with a chronic disease condition, are exposed to serious drug-drug or drug-supplement interactions. Maintaining a current list of medications and knowing some key contraindications is typical of an informed patient and, really, necessary in today's complex pharmacology (Winn & Shyagali, 2023)

Overcoming the Adherence Crisis

Medication non-adherence, failing to take medications as prescribed, is a global public health crisis, impacting up to 50% of patients with chronic conditions. Awareness directly impacts adherence through understanding the **"why"** and the **"how"** of treatment (Vain, 2024).

Understanding Efficacy and Duration: Most patients stop their medication as soon as symptoms improve, such as stopping antibiotics in mid-course, or when they are feeling well, such as in the case of hypertension medications, because one does not feel unwell. Knowledge of the complete mechanism of action of the drug and duration of therapy is required for complete cure and prevention of recurrence/complications (Renet et al., 2023).

Fitting Regimens into Daily Life: Good communication means that the dosage regimen is fit into the lifestyle of the patient, making it practical to adhere to. Pharmacist counseling that reinforces the regimen and addresses logistical barriers, such as cost and timing with meals, etc., improves compliance significantly (Parker et al., 2022).

The Current Knowledge Gap and Contributing Factors

In spite of the known importance, patient awareness remains poor. All studies on the measurement of patient knowledge on various parameters, such as knowing the name of the drug, indication, dose, and side effects, have reported large gaps (Patel et al., 2019), especially with respect to side effects and warnings. The deficit represents both patient-related characteristics and systemic failures in healthcare delivery.

Patient-Related Barriers

Health Literacy: The ability to understand basic health information is a very strong predictor of medication knowledge. Lower health literacy, often complicated by age or language barriers, is a major hindrance to understanding complex medical instructions.

Cognitive Burden: During any medical consultation, patients are either anxious, in pain, or sometimes puzzled by just the bulk of information provided verbally. This has greatly degraded the ability of the patient to remember important details, thus creating an immediate post-appointment knowledge deficit (Tariq et al., 2018).

Systemic and Communication Deficiencies

The Problem of Verbal-Only Instructions: The sole reliance on the prescriber or dispenser for verbal communication is highly ineffective. It is established from research that the provision of written information in the patient's native language significantly improves knowledge retention and long-term awareness, as compared to verbal instruction alone (Rameshkumar et al., 2022)

Lack of Confirmation: Health practitioners often fail to utilize any effective communication technique; for example, "teach-back" - where the patient is asked to summarize the instructions in his or her own words. Such an omission ensures that misconceptions or misunderstandings go uncorrected (Parker et al., 2022).

Information Quality: The quality of patient information leaflets can vary, with some being highly technical or confusing, further contributing to the information gap.

Strategies for Fostering Patient Empowerment

Effective medication awareness requires collaboration in strategy between the healthcare system and the patient.

The Patient's Proactive Role: Asking BRAN

Asking BRAN

It is important that patients are empowered to request clear information, using models like the BRAN principle when new treatments are being discussed (The Patients Association 2020).

Healthcare System Responsibilities

The system must ensure protocols that reinforce the following awareness:

Mandatory Written Documentation: The use of clear, concise, and personalized written drug information is mandatory PubMed Central, 2022.

Pharmacist Counselling Integration: The pharmacist's ability is utilized to provide dedicated, one-on-one counselling of all new or changed prescriptions, focusing on the practical application of the dosing schedule and the identification of barriers to adherence (Oenning, 2011)

Technology Utilisation: Digital tools and apps for medication reminders, insights into education, and a centralised digital record can help patients adhere to complex regimens outside the clinical setting (Vain, 2024).

Relationship between Awareness and Adherence

There is a strong, bidirectional relationship between medication awareness and adherence. Patients with higher awareness of their illness, prescribed drugs, and potential consequences of non-adherence are significantly more likely to follow treatment regimens. Conversely, poor awareness often results in irregular intake, premature discontinuation, or incorrect dosing. Educational interventions, pharmacist counselling, and written medication guides have been shown to increase both knowledge retention and long-term adherence (Rameshkumar et al., 2022).

Low health literacy, cognitive limitations, and ineffective communication between healthcare providers and patients are key barriers. Patients often receive verbal-only instructions, which are difficult to recall under stress or anxiety. Research shows that supplementing verbal communication with written materials and "teach-back" methods, where patients restate the instructions in their own words, significantly enhances comprehension and adherence (Parker et al., 2022).

Research Gap

Despite substantial research linking adherence with social and demographic variables, limited attention has been given to the direct correlation between *medication awareness* and *medication adherence* among psychiatric outpatients in developing countries. Most studies focus on chronic physical illnesses or inpatient psychiatric populations, leaving outpatient adherence mechanisms underexplored. There is thus a need to assess how patients' awareness levels influence their adherence behaviors within community-based psychiatric settings.

Objectives of the Study

1. To assess the level of medication awareness among psychiatric outpatients.
2. To evaluate the degree of medication adherence in the same population.
3. To examine the relationship between medication awareness and medication adherence.
4. To identify key demographic and psychosocial factors influencing this relationship.

Hypotheses

H1: There is a significant positive correlation between medication awareness and medication adherence among psychiatric outpatients.

H2: There is no significant relationship between medication awareness and medication adherence among psychiatric outpatients.

Rationale of the Study

Medication adherence is one of the most significant determinants of successful psychiatric treatment outcomes (Hassan et al., 2019). Despite the proven efficacy of psychotropic medications in managing disorders such as depression, schizophrenia, and bipolar disorder, non-adherence remains a pervasive issue, with estimates ranging from 40% to 60% of patients failing to comply with prescribed regimens (Tesfaye et al., 2020; Velligan et al., 2009). The consequences of poor adherence are profound, including symptom relapse, frequent hospitalization, functional decline, and an overall reduction in quality of life.

However, while adherence has been widely studied, the underlying factor of *medication awareness*, the patient's understanding of their treatment purpose, dosage, duration, and side effects, has received relatively less attention in psychiatric populations, particularly in outpatient settings. Awareness not only supports safer medication use by preventing adverse drug events but also fosters patient empowerment, self-efficacy, and active engagement in treatment decisions (CDC, 2024). A well-informed patient is more likely to perceive medication as essential to recovery, thereby improving adherence and clinical outcomes.

In developing countries, particularly in South Asia, factors such as low literacy, poor access to healthcare education, and stigma surrounding mental illness further exacerbate the problem. Many psychiatric outpatients lack sufficient knowledge of their diagnosis or medication purpose, which leads to erratic or discontinued treatment (Al Hathloul et al., 2016). Previous studies have revealed that even when psychiatric patients receive medication counseling, the absence of confirmation methods such as written materials or "teach-back" communication limits long-term understanding (Rameshkumar et al., 2022).

The existing research primarily addresses either adherence or awareness in isolation, leaving a substantial gap in understanding how these two constructs interact in psychiatric outpatient populations. The present study, therefore, seeks to bridge this gap by investigating the *association between medication awareness and adherence* among psychiatric outpatients. Identifying this relationship will not only deepen understanding of behavioral determinants of adherence but also guide the development of targeted educational interventions for pharmacists, psychiatrists, and mental health care teams.

Methodology

Demographics

The demographics include age, gender, marital status, educational level, employment status, diagnosis, duration of illness, number of medications, and family support.

Research Design

In this study, a quantitative, cross-sectional design was used, which aimed at examining the association between medication awareness and medication adherence among psychiatric outpatients. Data will be collected through standardised self-administered questionnaires.

Sample and Participants

The study population will consist of 180 psychiatric outpatients receiving pharmacological treatment at selected mental health facilities. The participants will include adults diagnosed with psychiatric disorders such as depression, bipolar disorder, schizophrenia, and anxiety disorders who are currently on prescribed psychotropic medications. Participants will be selected according to predefined inclusion and exclusion criteria.

Sampling Technique

A non-probability purposive sampling technique will be used to recruit participants who meet the inclusion criteria. This technique is appropriate as it focuses on selecting individuals who are relevant to the research objectives.
Inclusion and Exclusion Criteria

Inclusion Criteria

- Adults aged 18 years and above.
- Diagnosed with a psychiatric disorder (e.g., major depressive disorder, schizophrenia, bipolar disorder, anxiety).
- Receiving pharmacological treatment for at least the past three months.
- Capable of understanding and responding to the study questionnaires.
- Willing to provide informed consent.

Exclusion Criteria:

- Patients with acute psychosis or severe cognitive impairment that limits comprehension.
- Individuals are currently hospitalised for psychiatric crises.
- Patients are not taking any prescribed medication.
- Participants who decline to provide informed consent.

Instruments

1. Medication Awareness Questionnaire (MAQ)

The Medication Awareness Questionnaire (MAQ) is a structured tool developed to assess patients' understanding and awareness of their prescribed medications. It consists of items that evaluate key domains of medication knowledge, including recognition of medication names and purposes, understanding of dosage instructions, awareness of possible side effects, and responses to missed doses. Each item is scored using a 5-point Likert scale ranging from *"Strongly Agree"* to *"Strongly Disagree."* Higher scores reflect greater awareness and understanding of one's medication regimen.

2. Medication Adherence Scale (MAS)

The 8-item Morisky Medication Adherence Scale (MMAS-8) was developed by Morisky (2008) to assess patients' adherence to prescribed medications. It consists of eight questions that evaluate specific behaviors related to medication-taking patterns, such as forgetting doses, carelessness, and stopping medication when feeling better or worse. Each item is scored using a dichotomous response format (Yes or No), except for the last item, which is a 5-point Likert scale ranging from "Never" to "Always". The total score ranges from 0 to 8, where scores <6 indicate low adherence, 6–7 indicate medium adherence, and 8 indicates high adherence. The scale has demonstrated acceptable internal consistency (Cronbach's $\alpha = 0.625–0.83$).

Procedure

After obtaining ethical approval, participants will be recruited from outpatient clinics during their routine visits. The purpose and significance of the study will be explained clearly, and informed consent will be obtained. Participants will then complete the demographic form, Medication Awareness Questionnaire, and Medication Adherence Scale under the supervision of the researcher to ensure clarity of responses. The estimated completion time for all instruments will be approximately 15–20 minutes per participant. Confidentiality and anonymity will be maintained throughout the process.

Results

This section presents the statistical findings obtained from the analysis of data collected from psychiatric outpatients ($n = 180$) regarding their medication awareness and adherence. The data were analyzed using the SPSS-26. Descriptive statistics were applied to summarize demographic characteristics, medication awareness, and adherence levels. Inferential statistics, including Pearson's correlation, were used to examine the relationship between medication awareness and adherence, as well as the influence of demographic and psychosocial variables.

Table 1

Demographic Characteristics of Study Participants (n = 180)

Variable		Frequency (n)	Percentage (%)
Gender	Male	78	43.3
	Female	102	56.7
Diagnosis	Major Depression	63	35.0
	Schizophrenia	50	27.8
	Bipolar Disorder	39	21.7
	Anxiety Disorders	28	15.5
Employment Status	Employed	72	40.0
	Unemployed	108	60.0
Education Level	Secondary	58	32.2
	Undergraduate	86	47.8
	Postgraduate	36	20.0
Medication Awareness Levels			
	Low	40	22.2
	Moderate	67	37.2
	High	73	40.6
Medication Adherence Levels			
	Low	45	25.0
	Moderate	81	45.0
	High	54	30.0

Table 1 illustrates the demographic description of the study sample, percentages and frequency. These Variables include gender, education, diagnosis, employment status, medication awareness level and medication adherence level.

Table 2

Correlation Analysis Between Awareness and Adherence

Variable	Pearson's r	p-value
Awareness vs. Adherence	0.62	.62

Pearson's correlation coefficient ($r = 0.62$, $p < .001$) indicates a **positive and statistically significant relationship** between awareness and adherence, indicating that as awareness increases, medication adherence also tends to increase.

Table3

Association Between Sociodemographic Variables and Medication Adherence

Variable	Category	Mean	SD	*p*-value
Gender	Male	6.2	1.3	0.413
	Female	6.4	1.1	
Education	Secondary	5.9	1.5	0.004
	Undergraduate	6.3	1.2	
	Postgraduate	6.9	0.9	
Employment	Unemployed	6.0	1.3	0.017
	Employed	6.6	1.0	
Family Support	Low	5.9	1.4	0.002
	High	6.8	1.1	

Note. NS = Not significant; SD = Standard deviation. Statistical significance is considered at $p < .05$.

Table 3 shows the association between various sociodemographic variables and medication adherence among individuals. The findings suggest that education level, employment status, and family support were significantly associated with medication adherence. Participants with higher education levels, those who were employed, and those reporting greater family support demonstrated higher mean adherence scores and suggested better compliance with their prescribed medication regimens, and gender was not significantly associated with medication adherence ($p = 0.413$), indicating that adherence behaviours did not differ between male and female participants.

Discussion

The purpose of this study was to examine the relationship between medication awareness and medication adherence among psychiatric outpatients and to determine whether sociodemographic factors, such as education, employment status, gender, and family support, influence adherence levels. The findings of the study demonstrate a positive relationship between medication awareness and adherence.

As in the hypothesis (H1), it was proposed that there would be a significant positive correlation between medication awareness and medication adherence. The results demonstrate the strong and statistically significant correlation ($r = 0.62$, $p < .001$). This indicates that patients who possess greater awareness and understanding of their prescribed medications are more likely to adhere to their treatment regimens. These findings align with previous research demonstrating that knowledge about medication purpose, benefits, potential side effects, and correct administration enhances patients' willingness and ability to follow treatment recommendations (Semahegn et al., 2020). Increased awareness reduces misconceptions, builds confidence in therapy, and ultimately contributes to improved treatment outcomes (García et al., 2016).

In the second hypothesis (H2), which assumed that there is no significant relationship between medication awareness and adherence, the second hypothesis is rejected. The strong positive association identified in the study contradicts this hypothesis and further emphasizes the essential role that awareness plays in influencing adherence behaviors among psychiatric outpatients.

This study also examined the impact of various sociodemographic factors on medication adherence. Education level emerged as a significant factor, with participants having higher education demonstrating better adherence scores. This is consistent with literature indicating that individuals with higher educational attainment tend to exhibit better health literacy, enhanced understanding of medication instructions, and more effective decision-making regarding their treatment (WHO, 2019; Diler & Demirci, 2023). Employment status also had a significant impact, as employed participants showed higher adherence levels than those who were unemployed. Employment may contribute to greater financial stability, structured routines, and improved psychological well-being, all of which support adherence (Semahegn et al., 2020). Family support further played a crucial role. Participants reporting strong family support showed higher adherence levels, consistent with previous findings that emotional encouragement, reminders, and reduced stigma provided by families facilitate better treatment engagement (Velligan et al., 2010; Brooks et al., 2018).

Gender was not significantly associated with adherence, indicating that adherence behaviors did not differ between male and female participants. This finding is supported by earlier studies showing that gender alone is not a strong predictor of medication adherence in psychiatric populations compared with psychosocial and clinical determinants (Semahegn et al., 2020).

Limitations and Suggestions

The limitation of this study is the use of a cross-sectional design that limits the ability to establish causality between awareness and adherence; the relationship observed is correlational rather than directional. Secondly, this study is based on self-reported measures of awareness and adherence, which may be subject to recall bias or social desirability bias. Third, the sample was restricted to psychiatric outpatients from a single setting, which may limit the generalizability of the results to other populations or clinical environments. Future research should employ longitudinal designs, larger sample sizes, and more diverse clinical settings to strengthen the robustness and applicability of the findings.

Conclusion

The aim of this study is to examine the positive relationship between medication awareness and adherence among psychiatric outpatients, and the results demonstrated a significant and positive relationship between medication awareness and adherence among psychiatric outpatients. Higher awareness levels were associated with better adherence, supporting the proposed hypothesis that knowledge plays an essential role in treatment engagement. The influence of education level, employment status, and family support further highlights the multifactorial nature of adherence and the need to consider patients' social and economic contexts. The findings emphasize that enhancing medication awareness, promoting supportive family environments, and addressing socioeconomic disparities are critical strategies for improving adherence and achieving better clinical outcomes in psychiatric care.

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