

## PSYCHOTROPICS AND ADHERENCE: ACHIEVING THERAPEUTIC COMPLIANCE

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**ABSTRACT**

**Introduction:** Therapeutic adherence, defined as the degree of patient compliance with their medication regimen, is a crucial element in the management of psychiatric disorders in outpatient settings. With significant rates of non-adherence, therapeutic adherence remains a major challenge. Our study examines the factors influencing therapeutic adherence to psychotropic medications in an outpatient setting, highlighting interventions and clinical strategies contributing to improving this adherence. **Materials and Methods:** This was a descriptive, analytical, cross-sectional study using an anonymous questionnaire to assess adherence to psychotropic medication treatment among patients presenting at a pharmacy counter. **Results:** Out of 105 questionnaires distributed, 65 complete responses were obtained, resulting in a response rate of 60.95%. The mean age of participants was 39 years, with a standard deviation of 14 years; women represented 61.5% of our population (n=53). 81.5% of participants reported no addictions. Depression was the primary psychiatric disorder affecting our patients, accounting for 43.1% (n=37) of cases. Among those surveyed, 38% (n=25) were taking antipsychotics, and 61.5% reported medication non-adherence. Furthermore, 33.8% of participants (n=22) had adjusted their medication dosage without consulting their physician. **Conclusion:** It is evident that the challenges related to psychotropic adherence are multifactorial, but targeted interventions can significantly improve adherence rates and, consequently, treatment effectiveness.

**KEYWORDS:** psychotropic medications, therapeutic adherence, pharmacy survey, therapeutic effectiveness.**INTRODUCTION**

Affecting millions of individuals of all ages, psychiatric disorders are a major public health issue worldwide. Psychotropic medications, such as antipsychotics, antidepressants, and mood stabilizers, are essential tools in managing these conditions.

The COVID-19 pandemic has had a significant impact on the mental health of populations worldwide. Lockdown measures, health-related concerns, and social isolation have created an unprecedented climate of uncertainty and stress. In this context, the consumption of psychotropic medications has seen a notable increase. Individuals facing stress, anxiety, and depression may seek ways to alleviate their symptoms and cope with life's challenges. Providing temporary relief, psychotropic medications serve as a support for individuals seeking to address these mental health issues by reducing their symptoms. However, despite their proven clinical effectiveness, they often encounter a persistent obstacle: therapeutic adherence.

This study explores the crucial importance of therapeutic adherence in the use of psychotropic medications for managing psychiatric disorders. This will be

accomplished by examining the challenges related to psychotropic medication adherence and proposing potential solutions.

**MATERIALS AND METHODS**

This is a descriptive, analytical, cross-sectional study using an anonymous questionnaire, conducted from September 2022 to February 2023, aimed at evaluating therapeutic adherence to psychotropic medications among outpatient pharmacy patients.

**1. Target Population**

The study involved a sample of 65 participants selected based on their adherence to psychotropic medication treatment. Inclusion criteria were: having received a diagnosis requiring psychotropic treatment, a minimum treatment duration of six months, and the ability to respond to assessments and questionnaires related to therapeutic adherence. Individuals under 18 years of age, those who refused to participate in our survey, or those with severe cognitive impairment were excluded from this study.

## 2. Questionnaire

A structured questionnaire was developed to assess therapeutic adherence to psychotropic medications. The questionnaire consisted of 40 questions divided into four distinct sections, namely.

### ✚ Section 1: Sociodemographic Characteristics of the Patient

This first section of the questionnaire aims to gather data such as gender, level of education, age, social coverage, and family situation of the patient. The goal is to explore how these sociodemographic factors influence patients' adherence to their treatment, providing important contextual data.

### ✚ Section 2: Disease Characteristics

The questions in this section focus on the diagnosis of the disease for which psychotropic medications are prescribed, the time elapsed since diagnosis, the symptoms experienced, and the previous treatments received by the participants.

### ✚ Section 3: Assessment of Adherence to Psychotropic Treatment

This part is of paramount importance in our study, aiming to thoroughly explore the degree of adherence of participants to their psychotropic treatment.

### ✚ Section 4: Evaluation of Determinants of Adherence to Psychotropic Treatments

This section is highly important as it captures the factors that impact how patients adhere to their treatment in order to improve therapeutic outcomes and quality of life for individuals with psychiatric disorders.

## 3. Anonymity and Confidentiality

To ensure participant anonymity, no information allowing personal identification was collected. Each participant was assigned a unique code for questionnaire

tracking purposes. The data were stored securely and accessible only to members of the research team.

## 4. Distribution and collection of the questionnaire

The questionnaire was provided to the patient upon their presentation at the pharmacy counter. Participants were encouraged to complete the questionnaire after receiving a detailed explanation of each question and assistance if needed. Data were collected using appropriate statistical software. The results were presented using descriptive statistics, tables, and graphs to facilitate understanding and interpretation.

## 5- Data Analysis

For the descriptive analysis of both qualitative and quantitative variables, we used two distinct methods. For qualitative variables, we calculated frequencies and percentages, while for quantitative variables, we calculated means and standard deviations.

Additionally, a bivariate analysis was conducted to compare percentages. All these analyses were performed using SPSS 21.0 software.

## RESULTS

For the period of our study, the results obtained, categorized according to the questionnaire themes, were as follows.

### ✚ Section 1: Sociodemographic Characteristics of the Patient

During our study period, 65 patients participated in this survey. The average age of our participants was 39 years, with age ranging from 18 to 75 years. The distribution by gender in our sample demonstrated a predominance of females, accounting for 61.5% of the total sample, with 40 female participants compared to 38.5% of males, totaling 25 individuals (Figure 1). Regarding their marital status, 47.7% were married, 44.6% reported being single, 4.6% indicated being divorced, and 3.1% were widowed (Figure2).

Patient's gender

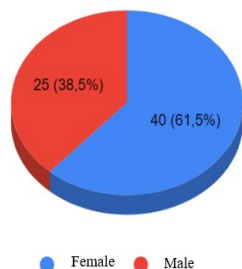


Figure 1 : Distribution by gender

The patient's family situation

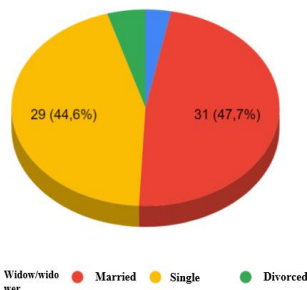


Figure 2 : Distribution by family situation

Out of our 65 patients, 16.9% were illiterate, 24.6% had received primary education, 33.8% had secondary education, and only 24.6% had attained a university-level education. The collected data revealed significant

variations among participants regarding their place of residence. Specifically, 5 individuals lived in rural areas, while 58 participants resided in urban environments, and 3.1% of participants lived in suburban areas,

corresponding to a group of 2 individuals. The distribution according to socioeconomic status showed that 48 individuals had unstable socioeconomic

conditions, while 17 displayed stable socioeconomic conditions. Some of our patients exhibited addictive behaviors, as described in Table 1.

Table 1: breakdown by addictions

Addictions	Workforce	Pourcentage
No addiction	53	81.5%
Tobacco	9	13.8%
CANNABIS	2	3.2%
Alcohol	1	1.5%
Total	65	100%

**Section 2 : Disease Characteristics**

In this section, the results reveal a notable diversity in the types of disorders observed among participants: 15.4% of participants were diagnosed with schizophrenia (10 /65).

Bipolar disorder affected 10.8% of individuals (7/65), while 7.7% of participants exhibited symptoms of obsessive-compulsive disorder (OCD). Depression was the most prevalent, affecting 43.1% of participants. Anxiety affected 9.2% of participants (6 individuals), and 10.8% suffered from insomnia. Other conditions such as severe migraine and facial neuralgia accounted for 3.1% of the sample.

Among the 65 participants, distinct cohorts emerged based on the duration of their illness. Specifically, 38 patients reported a disease duration of less than 3 years. Twelve patients were diagnosed between 3 and 8 years ago, reflecting an intermediate follow-up period. Additionally, 15 patients had a diagnosis with a disease duration exceeding 8 years, demonstrating prolonged experience with their condition.

The classification of our patients based on the number of doctors consulted reveals that 53.8% of patients consulted one doctor, while 38.5% consulted two doctors, and 7.7% consulted more than three doctors. Considering the diversity of prescribed treatments is a crucial element of our analysis. Indeed, the study sample exhibits heterogeneous distribution of therapeutic regimens.

- Monotherapy: 19 patients (29.20%) receive a single medication
- Dual therapy: 15 patients (23.10%) receive two medications.
- Triple therapy: 21 patients (32.30%) receive three medications
- Quadruple therapy: 10 patients (15.4%) receive four medications.

Our survey revealed a varied therapeutic regimen among these patients: 43 patients were taking antidepressants, 12 patients were on anxiolytics, 8 patients were using hypnotics, 37 were receiving antipsychotics, 7 patients were taking anticonvulsants, and 4 patients were using antiparkinsonian medications (Figure 3).

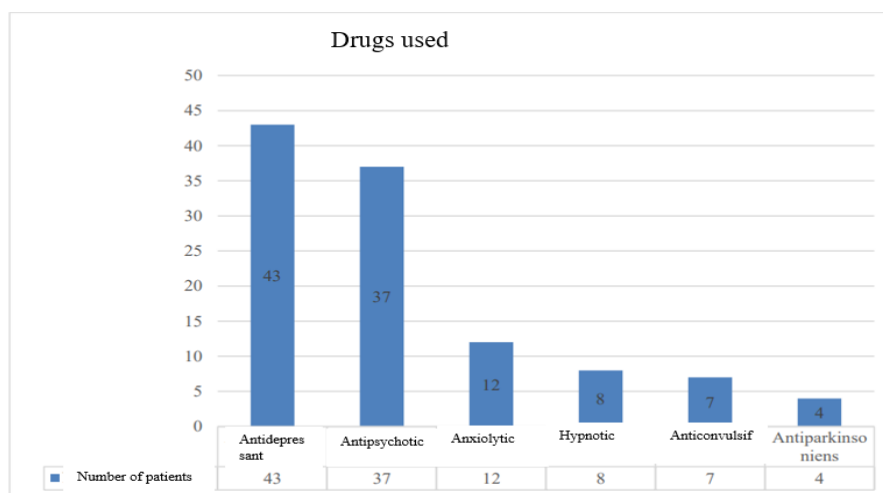


Figure 3 : Breakdown by psychotropic drugs used

The daily management of the disease varied from one patient to another: "Fairly well" management was reported by 28 participants, "Good" management by 17 participants, "Poor" management by 14 participants who encountered difficulties in managing their condition, and "Very good" management by 6 participants.

### ✚ Section 3: Evaluation of Adherence to Psychotropic Treatment

The analysis of attendance at medical appointments revealed encouraging results. Indeed, 72.3% of

participants (n=47) reported regular attendance at medical consultations. However, it is important to note that 27.7% of participants (n=18) did not regularly attend their medical appointments. Forgetting to take doses was a common issue among study participants. 61.5% (n=40) of them reported having skipped a dose due to forgetfulness, while 38.5% of participants indicated never having missed a dose. The distribution according to medication interruption in case of health improvement is described in Table 2.

**Table 2: breakdown by discontinuation of medication when health status improved**

Stop taking medication	Workforce	Pourcentage
No	25	38.5%
Yes	40	61.5%
<b>Total</b>	<b>65</b>	<b>100%</b>

The study also reveals that 33.8% of participants (n=22) have modified their medication dosage without consulting their doctor, while 66.2% of participants (n=43) have never altered their medication dosage without the advice of a healthcare professional. Additionally, 70.8% of participants admitted to having stopped taking their medications without consulting their doctor.

66.2% of participants responded affirmatively, stating that their doctor had explained their illness well, while 33.8% of patients expressed doubts about the quality of the explanations provided by their doctor. Among the 65 patients surveyed, 26.2% of participants felt that their treatment was not effective. Forty-one patients encountered difficulties in following the medical prescription (Table 3).

### ✚ Section 4: Evaluation of Determinants of Adherence to Psychotropic Treatments

Understanding the doctor's explanations about the illness was a key question in this section: it was found that

**Table 3: Distribution according to difficulties in applying the medical prescription**

Difficulties in applying the medical prescription	Workforce	Pourcentage
No	24	36.9%
Yes	41	63.1%
<b>Total</b>	<b>65</b>	<b>100%</b>

Adverse effects were observed in 58.5% of our patients. However, 41.5% never noticed any adverse effects related to the use of psychotropic medications. The analysis of participants' perceptions regarding explanations provided by the pharmacist reveals divergent opinions. 55.4% of participants (n=36) found the pharmacist's explanations useful, while 44.6% of

participants (n=29) felt that the explanations did not meet their needs.

### DISCUSSION

The topic of therapeutic adherence often raises divergent definitions. Before delving into it, it is crucial to understand the meaning of "observance." It is defined as the act of adhering carefully and rigorously to what is

prescribed. This concept applies to various areas, such as religion, medical treatment, legislation, or rules in general.<sup>[1]</sup>

In accordance with Haynes' definition from (1979), therapeutic adherence is defined as "the extent to which an individual's behaviors (regarding medication intake, adherence to a diet, or lifestyle changes) align with medical or health advice."<sup>[2]</sup>

Therapeutic adherence is a crucial element in the management of patients with psychiatric disorders. However, putting it into practice is far from simple. Various factors influence how patients adhere to their treatments, and it is essential to understand these factors to improve the effectiveness of interventions and the quality of life of patients.<sup>[3, 4, 5]</sup>

### 1. Factors related to the patient

Factors related to the patient are intrinsic to the individual and can influence their ability or willingness to adhere to treatment. These factors may include.

**Age:** Treatment adherence can be influenced by the patient's age. Younger patients, especially males, may be less inclined to follow treatment recommendations. This could be due to their desire to differentiate themselves from older generations and reject authority. Elderly individuals, on the other hand, may struggle to follow instructions due to memory issues or the complexity of managing multiple medications.<sup>[6]</sup>

**Gender:** In our study, we conducted a bivariate analysis to examine the relationship between therapeutic adherence and the gender of the participants. Our observations on the sample of 65 patients were revealing. It is noteworthy that among those correctly adhering to their psychotropic medication regimen, 66.7% were women, while among those with low adherence, 63.6% were also women.

While the observed results may suggest a potential difference in adherence between genders, it is crucial to consider the composition of the sample. The predominance of women in the study limits the statistical scope of the conclusions and precludes definitive conclusions about the impact of gender.

This result aligns with a medical thesis conducted at the FMPM focusing on therapeutic adherence among patients with schizophrenia, a survey involving 153 cases. Despite this substantial patient sample, the study did not detect a notable difference between men and women in terms of adherence to antipsychotic treatment. The lack of statistically significant relationship between gender and psychotropic medication adherence warrants further investigation in future research.<sup>[7]</sup>

**Family Situation:** We explored the relationship between family structure and treatment adherence in our study,

which clearly indicated that both single individuals and married individuals have a higher rate of poor adherence. This aligns with the study from the Department of Psychiatry in Tampere, which states that individuals living alone are more likely to be non-adherent to their medical prescriptions.<sup>[8]</sup>

**Education level:** It's important to consider patients' education levels when assessing their treatment adherence, as it can significantly impact how they follow their prescriptions. This was confirmed by a study conducted at the National Institute of Cardiovascular Diseases in Karachi, Pakistan, evaluating adherence among patients with heart failure.<sup>[9]</sup> Contrary to common belief, another study focusing on antidepressant treatment found that higher education levels can sometimes contribute to non-adherence by leading to treatment discontinuation.<sup>[10]</sup>

**Life partners and socioeconomic level:** Our study revealed that patients living in structured families are more likely to adhere to their treatments. Studies conducted in Asia, Europe, and North America demonstrate that family intervention reduces the risk of relapse, makes family life less burdensome, and improves treatment adherence.<sup>[11]</sup> Conversely, patients from unstable backgrounds may encounter socioeconomic challenges that hinder their ability to consistently follow their treatment regimen.<sup>[12]</sup>

**Addictions:** The results of our study suggest a link between treatment adherence and patient addictions. Patients who maintained good adherence were free from dependencies. Conversely, smoking prevalence, cannabis dependence, and alcohol-related issues were higher among participants with poor adherence. These findings are consistent with other studies indicating that tobacco use, cannabis dependence, and alcohol-related problems can impede proper adherence to psychotropic medication treatment in patients.<sup>[13]</sup>

2. Disease-related factors: These factors encompass several determinants including the patient's psychiatric disorder or illness, the duration of the illness, the number of consulted physicians, the medications used, and the presence of concurrent diseases.

This work strengthens the link between these relationships and treatment adherence among patients. In our population, patients with good adherence were those suffering from depression, with some cases of anxiety; however, poor adherence was observed among patients with bipolar disorder, sleep problems, and schizophrenia. This is because it is challenging to convince patients experiencing grandiose delusions or manic symptoms to follow treatment recommendations. In this regard, a study involving 53 cancer patients who discontinued chemotherapy revealed that psychological distress was associated with low treatment adherence. Patients

experiencing depression, anxiety, or stress were more likely to discontinue their treatment.<sup>[14]</sup>

**Duration of illness:** When discussing adherence, the duration for which a person must follow their treatment regimen is crucial. For many psychotropic medications, it is essential to take them over an extended period. The longer the treatment duration and the longer the person remains in remission, the greater the risk of discontinuing treatment.<sup>[3]</sup> A study involving 46 patients who started an antidepressant treatment prescribed by their doctor showed a progressive increase in the number of patients discontinuing their treatment over time: 11% during the first week, 32% after 6 weeks, and 52% after 12 weeks of treatment.<sup>[15]</sup>

**Number of Physicians Consulted:** The duration for which a patient is followed by the same physician influences their level of adherence. Patients who receive continuous care from the same physician for one year demonstrate better adherence. This observation stems from the development of trust over time in the patient-physician relationship, a relational construct that requires a significant period.<sup>[16]</sup>

**Medications Used:** There was a diversity of therapeutic regimens present among both adherent and non-adherent patients in our population. A significant decline in adherence occurs when the number of different medications exceeds three. Likewise, adherence is closely associated with the number of daily doses of the treatment. Generally, better adherence is achieved when the treatment involves one or two doses per day at most.<sup>[17,18]</sup>

3. Therapeutic Management Factors: Among these factors, we mention: attendance at medical appointments, accessibility to the consultation location, consultation costs, and consultation duration. These factors are important to consider in any study on medical treatment adherence, but they are particularly crucial in studies on psychiatric treatment adherence. Indeed, the nature of psychiatric illness and the severity of symptoms significantly impact a patient's capacity and motivation to adhere to treatment. Patients with severe disorders are likely to attend medical appointments more regularly, as their health condition requires close monitoring. Additionally, our results emphasize the significant impact of healthcare costs on therapeutic adherence among patients taking psychotropic medications. For many patients, the cost of medical consultations is seen as a major barrier, which can affect their ability to consistently adhere to their treatment.<sup>[19]</sup>

4. Treatment-related factors: this section includes:

**Understanding the doctor's explanations about the illness** is crucial, as an excessive use of complex medical terms can discourage the patient and compromise their motivation to understand and take action for their health. By simplifying medical language during interactions

with the patient, we can promote better engagement on their part.<sup>[20]</sup>

**Understanding of the treatment:** Indeed, the influence of understanding on adherence to psychotropic medications can vary from person to person.

**The treating physician: general practitioner or psychiatrist:** Patients who do not have psychiatric consultations generally show lower adherence compared to those followed by a psychiatrist.<sup>[21]</sup>

**The cost of treatment:** The financial accessibility of treatment plays a crucial role in patients' decision to adhere to their medical prescription. Indeed, treatments that are not reimbursed or inadequately covered, especially if they are costly, are less frequently purchased and consequently less used by patients.<sup>[22]</sup>

**Adverse effects of psychotropic medications:** Adherence to psychotropic treatments is reduced by the presence of adverse effects, especially if these effects are perceived as particularly bothersome by the patient. Whether adherent or non-adherent to their treatment, the patient places more importance on their quality of life than the daily burden of a treatment.

**The usefulness of pharmacist explanations:** Patients who received pharmaceutical advice showed better therapeutic adherence than those who did not.<sup>[23]</sup> This suggests that information provided by pharmacists positively contributes to treatment adherence by patients. Therefore, the role of the pharmacist is crucial in the management of chronic diseases. As a healthcare professional responsible for implementing treatment, the pharmacist also assumes responsibility for follow-up care.<sup>[24]</sup>

Although all these preceding factors influence the adherence to psychotropic treatment, there are nevertheless other determinants that can improve therapeutic adherence to psychotropic medications, notably those related to medication treatment, the patient, the physician, therapeutic alliance in the doctor-patient relationship, and support from family and friends.

Providing patients with educational programs and techniques inspired by psychotherapy is essential. Their effectiveness has been demonstrated in various medical conditions to enhance adherence, whether through behavioral techniques, cognitive-behavioral therapies, participation in patient groups, or supportive psychotherapies.<sup>[25]</sup> Additionally, adopting an empathetic attitude, the prescriber establishes a climate of trust with the patient, making them more likely to follow therapeutic recommendations and adhere to prescribed treatments. Attentive listening to the patient's concerns and consideration of their individual needs help create a strong therapeutic relationship, thus promoting better treatment adherence.<sup>[26]</sup>

The impact of family support on therapeutic adherence is widely recognized. When patients receive positive support and minimize family conflicts, they are more likely to adhere to recommended treatments. Family support reinforces the patient's motivation to follow their treatment, as a harmonious and caring family environment helps reduce the patient's stress, provides valuable practical assistance to the patient in remembering to take medications, organizing medical appointments, or managing side effects. When family members are willing to adapt their routine and lifestyle to support the patient, this facilitates the integration of treatment into daily life.

### CONCLUSION

Therapeutic adherence to psychotropic medications remains a major public health challenge. Indeed, non-adherence can have serious consequences on patient health, including worsening disease symptoms, increased risk of relapse and hospitalization, and diminished quality of life. By understanding the factors that influence adherence and implementing effective intervention strategies, it is possible to improve patient health and reduce the burden of mental illness.

In this regard, despite certain limitations (limited sample size, cultural and regional context, temporal constraints), our study lays the groundwork for a deeper understanding of therapeutic adherence in the field of mental disorders. Future research, guided by acknowledgment of current limitations, will refine our knowledge of this complex phenomenon and develop more effective intervention strategies to enhance adherence and, consequently, improve patient therapeutic outcomes.

**Conflict of Interest Statement:** The authors declare no conflicts of interest.

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