



# Assess The Prevalence And Factors Leading To Drug Non Compliance Among Patients Suffering With Psychotic Mental Disorders

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## Abstract:

Psychotic disorders are serious, chronic, multi-dimensional and devastating brain disease. Among patients suffering from psychotic disorders, compliance determines the effectiveness of treatment. Negative attitude towards antipsychotics is a common cause of non compliance, which is a multifaceted problem for patient, family, society and physician. In order to improve drug compliance it is important to know the crucial factors responsible for drug non compliance. **Objective:** The objective of this study was to assess the prevalence and factors leading to drug non compliance among patients suffering with psychotic mental disorders. **Methods:** A cross sectional study was carried out in the outpatient psychiatric department of an Indian tertiary care hospital over a period of 4 weeks. Purposive sampling was done to select the samples. Patients aged 20 years and above who presented with psychotic disorders as diagnosed by the International Classification of Diseases (ICD)-10, receiving psychotropic medicine for more than 3 months were included. Medication adherence was assessed using Morisky Medication Adherence Scale 08 (MMAS-08) and factors causing drug non compliance using a self structured questionnaire. SPSS version 23 was used to analyze the data, Chi square test was performed to associate the selected socio-demographic variables and factors affecting non compliance. **Result:** Out of 241 participants, 142 (58.9%) were non-adherent to their drugs. Most common factors affecting non compliance were 'waiting time is more', 'hospital is far away from home', 'expensive to visit the hospital', 'inability to attend hospital alone', 'afraid of drug dependence' and 'forgetting to take medicines'. Association was found between age, gender, co-morbidities and family history of mental illness with factors affecting non compliance. **Conclusion:** The highlights of this study will help in identifying the factors which lead to medication non-compliance, which will enable us to become more aware of problems faced by patients in maintaining a compliant behavior. Hence, indicating the need to provide adequate information about illness and medications prescribed to challenge their dysfunctional beliefs and cognitive remediation for tackling forgetfulness as a reason for non compliance.

**Key words :** Non compliance, psychotic disorders, prevalence, factors affecting drug non compliance.

## Introduction

Mental disorders require much more than just a brief medication intervention, it may include several months, years or even lifelong medication, along with psychotherapy and rehabilitation.<sup>1</sup> Management of psychotic disorders are full of countless, unavoidable emergency room visits and days in the hospital, which may be further increased if these patients are non compliant,<sup>2</sup> as "medicines don't work if patients do not take them".<sup>3</sup>

## Statement of the Problem

**“A study to assess the prevalence and factors leading to drug non compliance among patients suffering with psychotic mental disorders in selected psychiatry OPDs in West Bengal”.**

## Objectives

- To identify the prevalence of drug non compliance among patients suffering with psychotic mental disorder.
- To identify factors leading to drug non compliance among patients suffering with psychotic mental disorders.
- To find association between factors leading to drug non compliance and selected socio demographic variables.

## MATERIALS AND METHODS

### Research approach

Quantitative non experimental research approach was used in this study.

### Research Design

A descriptive cross sectional survey design was selected since it appeared to be the suitable design to accomplish the objectives of the study in the given frame of time.

### Setting of the Study

The present study was conducted over a period of one month at the selected psychiatry OPD in West Bengal. The setting was IOP Kolkata. This particular setting was selected due to maximum availability of the sample. The services provided by this centre covers a vast area of West Bengal, which can be a representative of the entire community.

### Variables under study

- Demographic variables which included age, sex, marital status, religion, socio-economic class, co-morbidities, family history of mental illness, living arrangement, duration on anti-psychotics, regularity in follow up, provision of drugs and source of reminder for medication .
- Research variables: which were unintentional and intentional factors leading to drug non compliance among psychotic patients.
  - A. Intentional factors
    - 1. Patient related
    - 2. Family/Others related
  - B. Unintentional factors
    - 1. Patient related
    - 2. Financial related
    - 3. Medication availability related
    - 4. Accessibility related
    - 5. Communication/Physician related

### Population

The target population selected for the present study comprised of patients with psychotic mental disorders in West Bengal.

Accessible population was the patients with psychotic disorders attending selected psychiatry OPD in West Bengal during the study period.

## Sample size

The sample size was planned based on the prevalence rate of 38.7%, as per the study conducted by Baby R (2008) in New Delhi and level of significance was set at 95% confidence interval. Calculated sample size was 142.

## Sampling technique

In the present study, 142 non-adherent sample fulfilling the inclusion criteria, attending psychiatry OPDs were selected using purposive sampling technique.

## Ethical Considerations

Research proposal was submitted to the institutional ethical committee and approval was obtained. Permission to conduct the study in the selected psychiatry OPD in West Bengal was taken from the competent authority. Written informed consent was obtained from each individual in the sample, explaining them their rights to take independent decision regarding participating and continuing in the project in the language they understood.

## Sampling criteria

### Inclusion Criteria:

- Patients with diagnosed psychotic mental disorder.
- Patients on psychotic drugs for more than three months.
- Patients in the age group of 21 – 60 years.
- Patient/relatives willing to participate in the study.
- In case information is collected from caregiver he/she must be a primary caregiver of the patient.
- Patients/relatives able to read and write Hindi/English/Bengali.

### Exclusion Criteria:

- Critically ill patients
- Patients with intellectual disability.

## Data collection tools and techniques

The research tool had three parts :

- Part I - Socio demographic data
- Part II - Morisky Medication Adherence Scale-08
- Part III - Self structured questionnaire for assessing factors leading to drug non compliance.

## Data analysis and interpretation:

The collected data was coded, edited, compiled and planned to be analyzed as per the objectives of the study, using SPSS version 23. For analysis of the study data level of significance was set at 0.05% with a confidence interval of 95%.

## Objective 1: To identify the prevalence of drug non compliance among patients suffering with psychotic mental disorder.

Out of 241 sample more than half (58.92%) of the accessible population were drug non-compliant.

The result shows out of 142 sample nearly half (46.5%) belonged to the age group of 21-30 years and 67.6% were males. More than half (57.7%) were married, maximum (70.4%) were Hindus and majority (95.1%) were staying with their family.

Most (69.7%) of the sample had no family history of mental illness. Maximum (71.1%) of the sample belonged to upper lower socio-economic class and 74.6% did not have any co-morbidities.

Out of 142 sample maximum (71.8%) were on psychotropic drugs for more than 1 year, majority (90.1%) were regular in their follow up and 97.7% procured drugs from Government hospitals for free of cost. Most (78.9%) of them were taking medicines on their own and did not require someone to remind them.

### **Objective 2: To identify factors leading to drug non compliance among patients suffering with psychotic mental disorders**

The intentional factors affecting drug non compliance. Among the patient related factors, half (52.82%) of the sample were afraid of drug dependence and among the family/others related factors, 14.08% of the sample were suggested by outsiders for drug compliance whereas 11.97% were told by the family members to stop taking drugs.

The unintentional factors affecting drug non compliance. Among the patient related factors, more than half (52.82%) of the sample forget to take their prescribed medicines whereas 45.07% of them don't believe to have a mental illness. Among the finance related factors, maximum (68.31%) of the sample felt that hospital visits were too expensive and 60.56% of the sample stated that they were unable to attend hospital alone.

24.65% of the sample reported non availability of medications in the hospital and 16.20% of the sample stated the non availability of drugs in medical shops as the reason for drug non compliance. Among the accessibility related (unintentional) factors, 76.76% of the sample stated that prolonged waiting time in the hospital and 73.94% mentioned home being far away from hospital as the cause for drug non compliance. Out of the communication and physician related (unintentional) factors, approximately one third (31.69%) of the sample stated inadequate explanation about the condition by the doctor and for 17.61% of them inadequate explanation regarding drug administration was a reason for drug non compliance.

Most common factors for drug non compliance among the psychotic patients were prolonged waiting time in the hospital (76.76%), hospital being far away from home (73.94%), hospital visits being expensive (68.31%), unable to attend the hospital alone (60.56%), being afraid of drug dependence (52.82%) and forgetfulness (52.82%).

### **Objective 3: To find association between factors leading to drug non compliance and selected socio demographic variables**

A statistical significance exists between the factor hospital being far away and age, forgetfulness and gender, inadequate explanation provided by physician and family history of mental illness. A statistical significance also exists between the factors, forgets to take medications and afraid of side-effects with co-morbidities among the study group.

( $p < 0.05$ )

### **Limitations of the study**

The present study had the following limitations:

- Clinic based data on non-adherence provides conservative estimates of the community burden.
- Sampling technique used was non probability purposive sampling. Hence possibility of sample bias is present.
- The tool to assess the factors leading to non-compliance is self-structured and has been pilot tested but will require further study to evaluate construct validity.
- Structured interview schedule restricts the amount of information collected from the participants.
- Patient reported adherence may result in recall bias.
- The fact that majority of the samples were Hindu by religion and males also restricts the generalization of the study.

## Implication of the study

The findings of the study have implications in the field of medicine and nursing.

### Nursing practice

This study will enable the nurses to understand the importance of drug compliance in psychotic patients and identify the common factors affecting compliance. This study also throws light on the association of various factors with selected socio demographic variables. These factors can be incorporated in the history collection performa of psychotic patients who are admitted with relapse for better assessment and identification of the problems of these patients. This will help to understand the attitudes of patients with psychotic patients towards drug therapy in order to predict better compliance and provide psycho-education designed to forestall relapses.

Nurses have greater opportunity for unique and productive interaction with the patients and their families. Health education regarding various strategies to enhance drug compliance among psychotic patients can be rendered. Audio visual aids illustrating the importance of drug compliance can be displayed in psychiatric OPDs and ward.

### Nursing administration

Nursing administrators play an important role in emphasizing on in-service education. Workshop can be conducted for nurses as a part of in service education to reinforce the importance of drug compliance in psychotic patients. Nursing counsellors can be appointed in OPDs to deal with various preventable factors leading to drug non compliance in patients suffering from psychiatric disorders .

Nurse as an administrator should effectively participate in various IEC campaigns to promote drug compliance thus reduces the rate of relapse and re-hospitalization among psychotic patients.

### Nursing education

Nursing students are the torch bearers of the profession be it a nurse educator, administrator, researcher or practitioner. The baccalaureate programme should en-corporate issues related to drug non compliance and strategies to improve compliance in psychiatric patients. Student nurses should provide health education to the patients on various aspects of non compliance.

### Nursing research

The findings of the study can provide a base for further studies. The study can be replicated on a larger population to generalize the findings.

## Conclusion

Drug non compliance is a common and important issue, especially in psychiatry. This study has highlighted that non adherent patients are likely not to follow the drug regimen prescribed to them. The result of this study will help us to identify the factors which lead to medication non- compliance, which will enable us to become more aware of problems faced by patients in maintaining a compliant behavior thus preventing relapses and helping them lead a more productive life.

### **Acknowledgements:**

Authors would like to thank all the samples, friends and colleagues, without whom we would not have been able to complete this research.

**Funding:** No funding sources

**Conflict of interest:** None declared

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