To Assess the Effectiveness of Psycho Education on Medication Adherence among Schizophrenic Patients

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Authors’ contributions
This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Background: Schizophrenia is one of the most leading perplexing complications, that creates a problem in an individual in which there is a disturbance in their thinking, emotion, and volition in the presence of their clear consciousness. Rehospitalization and reoccurrence of the symptoms are very common among these patients if medication is not taken properly.

Objective: 1) To assess pre test level of medication adherence among Schizophrenic patients. 2) To assess the effectiveness of psycho education on medication adherence among Schizophrenic patients after intervention. 3) To evaluate the effectiveness of psycho education on medication adherence among Schizophrenic patients. 4) To associate the post test level of psycho education on medication adherence score with their selected demographic variables.

Methodology: It is an interventional research approach study, and it will be conducted among 60schizophrenic inpatients who were selected by using a non-probability purposive sampling technique in psychiatric departments at Acharya Vinoba Bhave Rural Hospital, Sawangi (Meghe), Wardha. A standardized Medication Adherence Rating Scale (MARS) will be used to collect the data.

Expected Outcome: It is expected that the psycho education given to the patient will be effective and thus improve their medication adherence.

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**Conclusions:** Medication non-adherence is not a recent problem among schizophrenic patients; it is a problem that remains for a long-time. This study thus will provide recent data regarding the effectiveness of psycho education among schizophrenic patients.

**Keywords:** Assess; effectiveness; psycho education; medication adherence; schizophrenic.

## 1. INTRODUCTION

Schizophrenia is one of the most serious forms of mental disorder affecting about seven per one thousand adults worldwide. Even though the occurrence of schizophrenia is low, the prevalence is high because of its long-lasting chronic condition. (World Health Organization, 2011). In schizophrenia treatment and symptom regulation, antipsychotic medication plays a significant role. Effective management of schizophrenia necessitates constant long-term medication to keep symptoms under control and to prevent setbacks. (American Psychiatric Association, 2006). While medications are indispensable, non-compliance with prescription medication treatments has been highly regarded as an issue and maybe the weightiest task in handling schizophrenia patients (World Health Organization, 2003). Data from the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) study revealed that seventy-four percent of patients had terminated medication in 18 months due to unsatisfactory effectiveness, unbearable side effects, or further causes [1].

Patients with psychological disorders have high non-adherence or discontinuation rate, ranging from 34% in 10 days to 74% in 18 months [2].

Non-compliance with mental medications raises the risk of reoccurrence, hospitalization, emergency department treatment, rape, substance abuse, incarceration, suicides, and a generally lower standard of living otherwise [3].

The negative effects affect not only the individual patient but society as a whole. The causes for patients' inability to adhere to medications are multi-faceted and include patient, social, environmental, and psychical factors relating to medication [4,5].

The non-stick rates for antipsychotics have been reported to be 40–60%, mood stabilizer 18–56%, and antidepressants 30–97% (average 63%), respectively (Pampallona et al., 2002; Scott and Pope, 2002; Zygmunt et al., 2002). Although these numbers may seem extremely high, all other medical specialties display similar (if much lower) rates. Non-compliance with prescriptions explains a significant disparity between pharmacopeia in ideal health settings and pharmacopeia in routine practice. For example, medication non-adherence schizophrenia patients are 3.5 times as likely to recur within two years as adherent patients. However, the association concerning non-adherence and deterioration is two-way, as non-adherence can lead to symptoms relapse, and weakening symptoms can precipitate inconsistent adherence (Demyttenaere, 1997; Fenton et al., 1997; Scott and Pope, 2002). In essence, non-adherence has a deep impact on clinical and financially problematic health services [6].

The non-compliance with medication which can be partial or complete and can lead to poor health results is a common issue for Schizophrenic patients. Failure to accept antipsychotic medications can lead to increased destructive activity episodes, aggravation of psychotic symptoms, increased suicide/homicide rate, and drug refusal [7].

Non-adherence care of mental patients helps increase the risk of suicides, aggravation of disease, and hospitalization, and death. Non-adherence to medication affects both the direct costs and loss of productivity on family and community in general. Most professional clinicians don't need details to persuade them of the widespread existence of this issue. Findings suggest that antipsychotics have a non-adherence range of 40% to 60%, antidepressant rates of 30% to 97%, and mood stabilizers rates of 18% to 56%. The prevalence of diagnosed non-adherence to medications was measured by Julius and colleagues. The incidence of non-compliance in MDD was 28 to 52 percent, in bipolar disorder 20 to 50 percent, in schizophrenia 20 to 72 percent, and anxiety 57 percent. A cross-sectional analysis found that the non-adherence rate for bipolar disorders was 45.5 percent, schizophrenia/schizoaffective disorder 12.1 percent, depression 18.2 percent, and other disorders 24.2 percent [8].

## 2. NEED OF THE STUDY

The disease is not asymptomatic for schizophrenia patients, and the symptoms may
hinder adherence. For those with schizophrenia, taking medicine as recommended is especially important since the costs of non-compliance are high. With schizophrenia predominating in about 1% of individuals, this mental health treatment accounts for approximately 2.5 percent of the United States' overall total health care expenses [9]. While schizophrenia has a high direct medical expense ($ 18.6 billion in 1991), indirect impairment and work losses are much more costly ($ 46.5 billion in 1991) [10].

The early onset and recurrent existence and long-term debilitating consequences of schizophrenia and a need for repeated hospitalization and lifelong outpatient treatment lead to such high costs [11].

In most patients with first-episode schizophrenia, the psychotic symptoms can be monitored with adequate inpatient treatment; however, retaining control of symptoms after discharge is harder. There has been some progress with a compulsory ambulatory intervention that allows patients to be adhered to the care in court to carry out their services into the community [12].

However, if the maintenance of pharmacotherapy fails, the patient will eventually need to be hospitalized, which is the most expensive care environment for mentally ill individuals [13].

In schizophrenia patients, the risk of reoccurrence is high, with about 3.5 percent of patients per month recuperating after discharge (recurring previously managed symptoms) [14].

Although recurrence risk is impacted by many factors, [15] low antipsychotic effectiveness and non-compliance with the antipsychotic regimen are popular reasons [16].

3. METHODOLOGY

It is an interventional research approach in which a One group pre test post test design will be used. This study will be conducted among 60 schizophrenic inpatients at psychiatric departments of Acharya Vinoba Bhava Rural Hospital, Sawangi (Meghe), Wardha who will be selected by using a non-probability purposive sampling technique. A standardized Medication Adherence Rating Scale (MARS) will be used to collect the data for pre test and post test and self-structured psycho education will be given before post test.

3.1 Inclusion Criteria
- Schizophrenic patients who were admitted to psychiatric ward of AVBRH hospitals.
- Schizophrenic patients who were willing to participate.
- Schizophrenic patients who were able to read, write and understand Marathi, Hindi and English.
- Schizophrenic patients who were diagnosed for the first time and the relapse.
- Schizophrenic patients who were taking any kind of psychotropic medications including ECT.

3.2 Exclusion Criteria
- Schizophrenic patients who were already exposed to this type of study.

3.3 Sample Size
For this analysis, the sample size is 60.

3.4 Interventions
The purpose of the study will be clarified to all participants and the type of written consent will be taken before the study starts. Standardized Medication Adherence Rating Scale (MARS) will be used for pre test and post test and self-structured psycho education regarding the importance of adherence to medication will be given before post test and then, post test MARS scores will be obtained.

3.5 Data Management and Monitoring
Firstly, the samples demographic data will be collected and recorded. Then, pre test and post test will be done using a standardized Medication Adherence Scale (MARS) and the scores from MARS will be recorded and associated with post test level of psycho education on medication adherence score with their selected demographic variables.

3.6 Statistical Analysis
Descriptive statistics and Inferential Statistics will be used for statistical analysis.

3.7 Expected Outcomes/Results
This study is intended for evaluating the effectiveness of psycho education on medication adherence among schizophrenic patients. The
assessment will be done by using a standardized Medication Adherence Rating Scale (MARS) and self-structured psycho education will be given.

4. DISCUSSION

Schizophrenia, being the leading cause of hospitalization of all mental illnesses is a disease that cannot be neglect. Although, the schizophrenic patients were highly engaged in certain health deteriorative behavior. Schizophrenic patients were the ones who need assistance from their relatives especially regarding their daily medication since the best method of treatment for them was medication. Whereas negligence or non-adherence to medication was the main leading cause for the reappearance of their symptoms as well as rehospitalization. We can also say that medication adherence is the most important intervention for schizophrenic patients.

RESEARCH METHODOLOGY

**RESEARCH APPROACH**
Interventional Research approach

**RESEARCH DESIGN**
One group pre test post test Research Design

**TARGET POPULATION**
Schizophrenic patients who are admitted at AVBRH

**ACCESSIBLE POPULATION**
Schizophrenic patients who are admitted in psychiatric ward at AVBRH

**SAMPLING TECHNIQUE**
Non probability purposive sampling technique

**SAMPLE SIZE 60 (sixty)**

**TOOLS**
Medication adherence rating scale & self-structured psycho education

**DEPENDENT VARIABLE**
Schizophrenic patients

**INDEPENDENT VARIABLE**
Psychoeducation on medication

**DATA COLLECTION**

**ANALYSIS**
Descriptive statistics and Inferential Statistics

**INTERPRETATION**

**REPORT WRITING**

Fig. 1. Schematic presentation of One group pre testpost test research design for the present study
A study on Psychoeducation and Compliance in the Treatment of Patients with Schizophrenia revealed that if the patient is not fully informed about the treatment and the side effects, there is a higher risk for discontinuation of the therapy without consulting his psychiatrist as discontinuation of the treatment is one of the main reasons for the relapse of schizophrenia. Results of the study show the importance of education on compliance, as well as on the positive attitude towards the drug treatment, which is one of the most important predictors of the successful treatment of Schizophrenia [17].

A research study revealed that psychoeducation has contributed to changes in the long-term and suggested that psychoeducation influences long-term hospital patients which is close to the effect shown in some trials on patients who have just been admitted or discharged and patients who attend day-care or outdoor visits [18].

5. CONCLUSION

The conclusion will be made after statistical analysis is carried out from the result.

ETHICAL APPROVAL AND CONSENT

This study is approved by the Institutional Ethics Committee of DMIMS (DU)/IEC/Dec-2019/8676. Proper information about the study will be given to all the participants and they will be requested to go through the consent form and sign on it if they agree to participate.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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