

## Original Article

# Effect of Instructional Module on Drug Adherence in Terms of Attitude among Patients with Schizophrenia

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## Abstract

Quasi experimental study was done with 40 samples using instructional module on drug adherence. The selection of the sample was done by non probability purposive sampling technique. The data were analyzed through descriptive and inferential statistical method. The findings of the study revealed that the instructional module helped the patients with Schizophrenia to develop a positive attitude towards drug adherence. The research hypothesis retained for this study also showed significant improvement in the level of attitude towards drug adherence.

Keywords : Drug adherence, attitude, schizophrenia.

## Introduction

"Heaven never helps man who will not act"

- Sophocles

Schizophrenia is the most common disorder with psychotic symptoms and ranks in the top 10 disease burden. The life span of patients with schizophrenia is reduced by 10 years. Onset of symptoms typically occurs in young adulthood with approximately 0.4 to 0.6%. Schizophrenia affects about seven per thousand of the adult population, mostly in the age group of 15-35 years. According to WHO 24 million people are affected. Among that 50% are not receiving appropriate care, 90% of untreated schizophrenia are present in developing countries. Of all the mental illnesses responsible for suffering in society, Schizophrenia probably causes more lengthy hospitalization, more chaos in family life more exorbitant costs to individuals and governments and more fears than any other illness. Because of such an enormous threat to life and happiness and because its causes are an unsolved puzzle, it has

probably been studied more than any other mental disorder.

## Background of the study

National institute of mental health (1996) states that worldwide 5 million people suffering from Schizophrenia and especially in India 87 million people are living with diagnosis of Schizophrenia. It is highly treatable, the treatment success rate with antipsychotic medications and psychosocial therapy being as high as 60%. The first line of psychiatric treatment for Schizophrenia is antipsychotic medication. These drugs are highly effective which can reduce the positive symptoms of psychosis. Most of the antipsychotics take around seven to fourteen days to have their main effect. 70% of people using medications for Schizophrenia improve in their symptoms and also prevent relapses. Boyd (2000) stated that major reason for relapse is non adherence with the medication regimen due to poor knowledge and attitude towards antipsychotic drugs. 40% of patients with Schizophrenia are at much greater risk for hospitalization due to poor adherence to antipsychotic drugs. Thus by providing proper information about the action, importance, side effects and management through instructional module, the patients with Schizophrenia are helped to improve the knowledge and attitude toward

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drugs adherence to prevent relapse.

Review of literature: Novak, L, Svab, V. (2009) conducted a study on antipsychotic drugs side effects, and their influence on stigma of mental illness. Results suggested that the patients felt most stigmatized in the areas of employment and occupation. They repeatedly skipped or discontinued regular medication due to side effects. Adweuya, B. (2006) conducted a study on attitude towards anti-psychotics among out-patients with Schizophrenia. Drug attitude inventory (10-item) was used. The overall results showed that the patients had a good attitude towards antipsychotic medication. The factors significantly associated with poor attitudes towards medication include presence of symptoms. Chabannes, J.P, et. al., (2008) conducted a study on relapse prevention by a new educational programme in patients with Schizophrenia treated with the same antipsychotic drug. Results revealed that the relapse risk was significantly reduced for patients who followed 7 modules.

#### Objectives

1. Assess the level of attitude towards drug adherence among patients with schizophrenia.
2. Evaluate the effect of instructional module on drug adherence in terms of attitude among patients with schizophrenia.
3. Compare the attitude towards drug adherence among patients with schizophrenia of pre and post score in both groups.
4. Associate the level of attitude towards drug adherence with selected demographic variables

#### Hypothesis

There is a significant difference in attitude towards the drug adherence among patients with schizophrenia who received instructional module than those who did not receive instructional module.

#### Assumptions

1. Patients improve their knowledge and attitude through teaching.
2. Patient with positive attitude may ensure regular follow

#### Methodology

Quasi experimental study design was selected. The selection of the sample was done by non probability purposive sampling technique and the sample size consists of 40 schizophrenic patients discharged from Psychiatric outpatient department of SRH, Porur. The patients who scored V and VI as per Ahuja's scale were selected for the study. Drug attitude inventory was used to assess the attitude towards antipsychotic drugs. Instructional module regarding importance, side effects and management of antipsychotic drugs were explained and given.

#### A. Criteria for Sample Selection

##### 1. Inclusion Criteria

- a. Both male and female patients who were diagnosed as Schizophrenia based on ICD – 10 classifications and discharged from psychiatric ward at Sri Ramachandra Hospital, Porur, Chennai.
- b. Patients who had scored insight level of V and VI as per Ahuja's insight scale.
- c. Patients who had a relapse of Schizophrenia.

##### Exclusion Criteria

1. Patients who were suffering from psychiatric illness other than Schizophrenia.
2. Patients who were not willing to participate in this study.

#### Description of the tool.

Section A: Demographic variables of the patients with Schizophrenia were in relation to age, sex, residence, education, occupation, income, marital status, religion and duration of illness.

Section B: Drug attitude inventory was used to assess the level of attitude towards drug adherence among patients with schizophrenia. The drug attitude inventory scale is a standardized tool which was developed by Hogan T.P. and Awad A.G. It has been widely used by the researcher. The total number of items were 30. The scale has 15 positive and 15 negative items that will be scored as true and 15 scored as false.

A negative total score means a negative subjective response (non-compliant). The correct response was



Experimental Group Control Group

Fig. 1 : Mean Difference, Standard Deviation and paired 't' value of attitude score towards drug adherence among patients with Schizophrenia in experimental and control group

scored with 1 and the incorrect response was scored with -1.

A positive total final score means a positive subjective response (compliant).

#### Score Interpretation

The score was interpreted as

-1 to -30 = Negative Attitude

+1 to +30 = Positive Attitude

0 = Neutral Attitude

#### Development of Instructional module

The teaching program consisted of information on importance, side effects and management of antipsychotic drugs. The method of teaching was lecture cum discussion by using instructional module. The information on importance, side effects and management of antipsychotic drugs were presented and discussed with the patients with Schizophrenia. Instructional module was given to them. The content validity of the instructional module was obtained from the experts

#### Data Collection Procedure

Prior to data collection written permission was obtained from the Head of the Department of Psychiatry. Patients with Schizophrenia who had the insight scoring level of V

and VI as per Ahuja's scale were selected for the study. And verbal consent was obtained initially. Pre test was conducted to assess the level of attitude towards drug adherence by using drug attitude inventory. It took 15 minutes for the assessment with each participant. For the experimental group, instructional module about the importance, side effects and management of antipsychotic drugs were explained and given. It took 25 minutes. On the 15<sup>th</sup> day the post test was conducted to assess the level of attitude towards drug adherence using drug attitude inventory. No intervention was used for the control group.

#### Findings

The frequency and percentage distribution of demographic variables of the 40 patients with Schizophrenia in the experimental and control group. In the experimental group, 10 (50%) were in the age group of 21-30 years and two (10%) were in the age group of 41- 50 years and 51-60 years. In control group, 10 (50%) were in the age group of 21-30 years and three (15%) were in the age group of 41-50 years. Regarding educational status, most patients, six (30%) had higher secondary education, six (30%) had high school education and one (5%) was illiterate in the experimental group. In the control group, eight (40%) were graduates and one (5%) was illiterate. With regard to family income, 11(55%) belonged to Rs 2001-3000/- and one (5%) belonged  $\leq$  Rs1000/- in the experimental group. In the control group 12 (60%) belonged to Rs. 2001-3000/- and one (5%) belonged to  $\leq$  Rs.1000. With regard to the duration of the illness, 12 (60%) suffered for 13 months-24 months and one (5%) suffered for 25 months – 36 months in the experimental group. In the control group, nine (45%) subjects suffered for a period of 13 months -24 months and four (20%) suffered for a period of 25 months -36 months.

Table 1 : Frequency and Percentage distribution of the level of attitude towards drug adherence among patients with Schizophrenia in control and experimental group. (N=40).

Level of Attitude	Control group (n=20)				Experimental group (n=20)			
	Pre test		Post test		Pre test		Post test	
	No	%	No	%	No	%	No	%
Negative Attitude	14	70	13	65	17	85	0	0
Positive Attitude	3	15	4	20	2	10	20	100
Neutral Attitude	3	15	3	15	1	5	0	0

In control group, during the pre test 14 (70%) showed negative attitude, 3 (15%) expressed positive and neutral attitude while 13 (65%) exhibited negative attitude, four (20%) showed positive attitude, and three (15%) showed neutral attitude during the post test. In experimental group, 17 (85%) revealed negative attitude, two (10%) showed positive attitude and one (5%) had neutral attitude in the pre test. The post test exhibited all the 20 (100%) gained positive attitude.

The Mean difference, Standard deviation and paired 't' value of attitude score towards drug adherence among patients with Schizophrenia in experimental and control group. It reveals that there was a high statistically significant difference at the level of  $p < 0.001$  in experimental group. Figure 1 shows that the participants in experimental group developed positive attitude after receiving instructional module with a mean difference of 16.50.

The paired 't' test analysis shows  $t=8.918$ , which proves that there was a statistically high significance in experimental group during the post test at the level of  $p < 0.001$  and there was no significance in the control group. There was a high statistically significant difference at the level of  $p < 0.001$  in experimental group. Anova shows that there was statistically significant association between the level of attitude towards drug adherence and income at the level of  $p < 0.05$ .

## Discussion

The findings of the study revealed that the instructional module helped the patients with Schizophrenia to develop a positive attitude towards drug adherence. The research hypothesis retained for this study also showed significant improvement in the level of attitude towards drug adherence among patients with Schizophrenia after they received instructional module. Therefore the hypothesis is accepted.

## Nursing Implications

Psychiatric nurse plays a major role in collaborating with other mental health team members. Patients who had

positive attitude will adhere to the antipsychotic drugs. The psychiatric nurse plays a major role in educating the psychiatric patients about the importance, side effects and the management of antipsychotic drug which improve their attitude towards drug adherence.

### 1. Nursing practice

a. Hospital: Most patients with psychiatric problems are frequently admitted in the psychiatric wards due to poor drug adherence. Relapse occurs with the patients who have negative attitude towards antipsychotic drugs. The nurse needs enthusiasm to provide information about the importance, side effects and management of antipsychotic drugs which would improve the positive attitude among patients with Schizophrenia and thereby prevent relapse.

b. Community: The community mental health nurse should have a thorough knowledge about the antipsychotic drugs management and its importance. She should teach not only the patient but also the family members. Family members play a major role in providing medication in proper time without fail which prevents relapse.

c. Nursing Education: Nurse educator and student nurses must have awareness about mental illness and their drug management. In schools and colleges of nursing, teachers should come forward and encourage the students in providing psycho education about the importance, side effects and management of antipsychotic drugs. Nursing educational institutions can organize educational programmes like continuing nursing educational programmes, workshops, seminar, and conferences to the nursing students on antipsychotic drug management which would help them to enhance their nursing care in ward set up.

2. Nursing administration: The nursing administration should organize in-service training programme on antipsychotic drug management for the nurses, so that they could provide information to the patients and the family members. The present study showed that the patients developed positive attitude after they received the instructional module. So the nursing administrator

intends to communicate the findings of this study to staff nurses, so that they could incorporate this to the patients with Schizophrenia. She can motivate the nurses to attend the classes on antipsychotic drug management.

3. Nursing research: The staff nurses are to be educated on antipsychotic drug management, in turn, they could educate the patients, their family members and enrich the evidence based care. Nurses can also be involved in research activities and implement their findings with other patients with mental illness. The institutional authorities should provide opportunity and necessary support to do research on antipsychotic drug management and its

importance to improve the aspect of patient's attitude

#### Recommendations for future research

1. This study can be replicated on a larger sample size with extended period of time.
2. This study can be conducted by using experimental design.
3. Psycho education can include innovative technologies like use of video shows.
4. This study can be compared between the patients with Schizophrenia and other mental illness.
5. This similar study can be conducted in community settings.

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