

Effectiveness Of Specific Nursing Intervention On Treatment Adherence Of Persons With Mental Illness: A Pilot Study

Krishan Murari Manish sharma Payal Sharma

Phd Scholar Malawanachal University Indore India

Phd Scholar Malawanachal University Indore India

Associated Professor Malwanchal University Indore India

Abstract

Even with a wide variety of pharmacological and psychosocial treatments for people with mental illnesses, treatment nonadherence remains one of the greatest barriers to recovery.

Aims:

The objective was to assess the efficiency of particular strategies in enhancing the treatment compliance of people with mental diseases.

Settings and Design:

A quasi-experimental study was conducted at a tertiary mental health care setting in NMCH KOTA RAJASTHAN.

Materials and Methods:

A total of 20 patients were chosen at randomly for the purpose of study. Treatment adherence was assessed using the Medication Adherence Rating Scale and a structured Treatment Adherence Checklist. The patients' and their families' data were gathered both before and one month after the specific interventions

Results:

Sociodemographic factors, the average age of people with mental illness was 35.2 years old. 60% of the patients were men and 40% were women. 55.3% of the 20 patients were married, 34.7% were single, and 10% were either divorced or widows. 90% of the individuals in the research identified as Hindu, and 10% as Muslim. Most participants, or 69.7%, are members of nuclear families, and 59.7% have only completed a secondary education. 35.3% of individuals were determined to be unemployed, while 30.7% were housewife.

The results demonstrated a significant improvement in the patient's verbal reporting of treatment adherence (paired $t = 3.973$, $P = 0.00$, $df = 29$) as well as the family members' reporting (paired $t = 2.94$, $P = 0.00$, $df = 29$) after the specific intervention.

Conclusion:

The study's findings indicated that certain interventions might be employed to improve the course of mental disease treatment. Following the application of the intervention to a wider sample, the results might be generalized.

Keywords: Mental illness, specific nursing intervention, treatment adherence, NMCH

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I. INTRODUCTION

One of the main problems with treating people with mental illness has always been nonadherence to therapy. According to a recent World Health Organization research, 50% of people with chronic diseases do not take their medications as directed.¹ Literature review revealed that persons with schizophrenia were nonadherent to their prescribed treatment about 41.2–49.5%.² For unipolar and bipolar illnesses, medication nonadherence is thought to range from 10% to 60%, with a median of 40%. In an Indian environment, Chakraborty et al.'s research [4] reported that 88% of antidepressant-taking patients missed the drug within 25% of the days throughout a three-month period. For those who suffer from mental diseases, the repercussions of nonadherence might be disastrous. When using an antipsychotic medication, the risk of relapsing increases three to five times.⁵ One month or less between treatments is observed to be related with a 2.8 times higher chance of hospital admission in a year, while more than one month increases the risk by about 4 times.⁶ Failure to follow the recommended drug regimen might result in health problems, a decline in functional capacity, and a decrease in quality of life.⁷ Furthermore, it is discovered that nonadherent schizophrenic patients have a 3.75 times higher risk of suicide than adherent patients.⁸

There are several ways to increase treatment adherence. according to Velligan et al. [9]. Cognitive Adaptation Training, such as signs, checklists, alerts, and the structuring of possessions to cue, has been found to enhance medication adherence. Drug treatment counselling increases treatment compliance while significantly reducing the clinical symptoms of major depression.¹⁰ The necessity to examine the effectiveness of evidence-based techniques addressing the problems linked to treatment adherence in an Indian environment was felt in light of the aforementioned. The purpose of the current pilot study was to determine the efficacy of particular treatments for enhancing the treatment compliance of individuals with mental illness.

Objectives

- To evaluate patients with mental diseases' adherence to therapy.
- To assess the impact of particular nursing interventions on patients' adherence to treatment for mental illnesses.
- To find out the association between selected clinical variables and treatment adherence.

II. MATERIALS AND METHODS

Approach and design

An evaluative approach with one group pre- and post-test design was adopted.

Setting of study

The study was carried out at the tertiary care mental hospital's outpatient unit at NMCH Kota, where a multidisciplinary team offers all services free of charge.

Study Duration: Jan 2022 to March 2022.

Sample

Twenty individuals with mental diseases and the members of their families who met the following requirements were chosen using a systematic random sample technique.

- People who have been given the ICD-10 diagnosis of psychosis and mood disorders (F20-F39).
- Families of those with mental problems caring for and residing with the patient
- Family members and patients who can read and comprehend Hindi
- Cases with recent diagnoses were disqualified.

Measurement tools

Socio-demographic Performa

A structured tool including both socio-demographic and clinical variables of persons with mental illness. Validity of the items ensured before data collection.

Medication adherence rating scale questionnaire

Thompson et al., 2000, created a 10-item, self-rated, dichotomous answer option questionnaire.¹¹ The tool has been determined to have internal consistency and stability of 0.75 and 0.68, respectively.¹² After being translated into Hindi, the tool's internal consistency was determined to be 0.669.

Treatment adherence checklist

The structured tool comprises of five qualitative questions asking about reasons for nonadherence as judged by the family caregiver and 18 quantitative questions measuring treatment adherence. The tool's content validity was guaranteed. The tool's internal consistency was discovered to be 0.779.

Specific Nursing intervention

In this particular intervention, a practical approach was used. The first identification of problems with treatment adherence increased the favourable outcomes of the therapeutic process, which was equivalent to raising motivation. A specific intervention comprised psycho-education, an explanation of how individualistic behaviour can be tailored or memory cues, a demonstration of how to prepare and use pill boxes, as well as the distribution of information booklets. Memory cues are reminders that help with drug memory, such as setting an alarm on a phone, placing medications on the dining room table, noting in a calendar, and taking medications after certain daily routines like meals and daily prayer. The patients and their families received the full interventions in two sessions on the same day. Experts from mental health services validated the particular nurse intervention module.

III. RESULTS

Using the SPSS 16.0 version, descriptive and inferential analysis of the gathered data were performed. Describe the clinical and sociodemographic characteristics of the person with mental illness. According to descriptive statistics for sociodemographic factors, the average age of people with mental illness was 35.2 years old. 60% of the patients were men and 40% were women. 55.3% of the 20 patients were married, 34.7% were single, and 10% were either divorced or widows. 90% of the individuals in the research identified as Hindu, and

10% as Muslim. The majority of participants, or 69.7%, are members of nuclear families, and 59.7% have only completed a secondary education. 35.3% of individuals were determined to be unemployed, while 30.7% were housewife.

Table No. 1: The clinical characteristics of people with mental diseases.

Table 1
Frequency and percentage of the clinical profile of the person with mental illness
(n=20)

Variable	Frequency	Percentage
Clinical diagnosis		
Schizophrenia (F20-F29)	15	75
Mood Disorder(f30-F39)	5	25
Duration of Illness		
<10 years	12	60
10 Years and More	8	40
Duration of Treatment		
<5 years	14	70
5 Years or More	6	30
Relapse		
Continuous illness	15	75
History of relapse	5	25
Hospital admission		
No admission	8	40
History of admission	12	60

Inferential statistics

Table no. 2: demonstrates that medication adherence according to patients and treatment adherence as observed by family members following the specific intervention were significantly improved (paired $t = 3.973$, $P = 0.000$ and paired $t = 2.94$, $P = 0.000$ respectively).

Table 2 Mean and SD with paired t value
(n=20)

Pairs	Means	SD	Paired t value	df	P
MARS pretest score	8.3	2.12	4.1	29	0.000
MARS posttest score	9.3	1.65			
Treatment adherence checklist pretest score	15.17	3.69	3.69	29	0.000
Treatment adherence checklist posttest score	17.1	1.46			

SD =standard deviation

MARS- Medication Adherence Rating Scale

To find the association, Chi-square test was applied for clinical variables with Medication Adherence Rating Scale (MARS) and Treatment Adherence Checklist scores. All the findings were nonsignificant.

IV. DISCUSSION

Demographic and clinical variables

The average age of the participants in the current study was found to be a bit lower than the mean age of people with schizophrenia who had received family psycho-educational intervention for treatment compliance, which was found to be 43.57 years in the existing data. In contrast to Ran et al.¹³ finding that women made up the majority of the group (60.7%), the current study indicated that both men and women experienced mental illness. Similar to the findings of the study done by Ran et al., the majority of study participants were found to be married. The bulk of the participants were from within 70 kilometres of the study setting.

Treatment adherence

Following a specific intervention, the MARS revealed an increase in mean value from 8.3 (SD 2.12) to 9.3 (SD 1.65) in terms of treatment adherence, showing improved adherence. The mean score of the Treatment Adherence Checklist also increased, as judged by the family members, from 15.17 (SD 3.69) to 17.1 (SD 1.46) after the targeted intervention. These findings correspond to those of a research by Montes et al.

Effectiveness of specific interventions on treatment adherence

The current study's findings on better treatment adherence as reported by the participants and their families are consistent with those of earlier research. Similar findings were found in a study by Farooq et al.¹⁵ that evaluated the efficacy of a family member intervention to promote treatment adherence. Participants in the treatment group had higher treatment adherence (67.3%) than those in the control group (45.5%), with a P value of 0.02 for this difference. In a different randomized control trial, conducted by Agara and Onibi¹⁶, treatment compliance was significantly improved (P = 0.0009) in the experimental group, with psycho-education coming in second.

According to Swanson et al.'s study¹⁷, patients who got a Motivational Interview in addition to Standard Treatment had a significantly greater rate of outpatient appointment attendance than those who only received Standard Treatment (2 = 8.87, df = 1, P 0.0). This outcome is consistent with the current study, where the targeted therapies included a motivating component. The unit-of-packaging of pharmaceuticals prescribed for various communicable and noncommunicable diseases is followed by increased adherence and clinical symptoms, according to a systematic review¹⁸. A randomized control trial¹⁹ found that patients and family members getting a pill box coupled with education and pamphlet distribution had significantly higher medication adherence (P 0.05) than patients receiving only education and pamphlet distribution.

No correlation between the patients' sociodemographic and clinical data and medication adherence was discovered in the current study. With the exception of age and work position, Montes et al.'s¹⁴ analysis of patients with optimal and sub-optimal medication adherence identified no significant differences in gender, living situation, or length of illness.

Limitations of the study

The current study has a few restrictions, including a weak research design, a small sample size, and no control over the prescribed medicine kind.

V. CONCLUSION

Simple interventions like psychoeducation, explanation of prescription information, and explanation of specific memory cues can help increase treatment adherence in people with mental illness. Psychiatric nurses can take the lead in carrying out such interventions as the primary member of the mental health care team, which will improve the outcome of treating mental disease.

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