

Original Article

PREVALENCE OF MEDICATION NON-ADHERENCE AMONG THE PSYCHIATRIC PATIENTS –
RESULTS FROM A SURVEY CONDUCTED IN A TERTIARY CARE HOSPITAL.

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Received: 01 Mar 2014 Revised and Accepted: 15 Mar 2014

ABSTRACT

Objective: The aim of this study was to predict levels of non-adherence and to report the factors associated with the medication non-adherence.

Methods: A prospective observational study was conducted for a period of three months in a tertiary care hospital in Andhra Pradesh. A total of 100 patients using medications in the psychiatry department entered the study. The volunteers are allowed to fill their informed consent to be a part of the study. The self prepared questionnaire was distributed to all the volunteers included in the study, which includes questions on their medication taking behaviour, compliance to medications and the knowledge on medication use and its side effects. The response was then analyzed to assess the risk factors associated with the non-adherence among the patients using the anti-psychotics.

Results :Most reported Reasons for non-adherence included adverse effects (70%), medication cost (42%), forgot to take medication (18%),increased number of medications (24%),unavailability and forgottance by the patient representatives (23%), inability of the physicians to explain basic information on the medications (84%),and 67% of the patients lack the knowledge on the benefit of medication.

Conclusion: This study found that much more knowledge to be needed to the healthcare professionals to reduce the incidence of non-adherence and it is the responsibility of the pharmacist to increase the patient insight of their illness in order to improve adherence and minimize the consequences of relapse.

Keywords: Patients, Psychiatric disorders, Non- adherence, Psychiatrist, survey.

INTRODUCTION

Non-adherence is common among patients with psychiatric illness, although the rates vary according to means of assessment and patient population. Failure to adhere to medication can have a major impact on the course of illness and treatment outcomes, including increasing the risk of relapse and re-hospitalization. Understanding psychiatrists' perception of the causes and consequences of non-adherence is crucial to addressing adherence problems effectively.

[1] The definition of non-adherence includes failure to enter a treatment programme, premature termination of therapy and incomplete implementation of instructions (including prescriptions).

[2] Ensuring patients continue with their medication over the long term is a considerable challenge in psychiatry. There is a range of often overlapping patient-, treatment-, environment-, and physician-related factors that contribute to partial or non-adherence to medication. These factors include patients' lack of insight, attitudes toward and previous experiences of medication, co-morbidity and symptom severity, the level of social and family support, and the strength of the therapeutic alliance between patient and physician [6,7]. Partial or non-adherence to medication can have a major impact on the course of illness and treatment outcomes and is associated with an increased risk of relapse, persistence of symptoms, functional impairments, and increased hospitalization. [3,4] Understanding determinants of antipsychotic medication adherence is critical as non-adherence plays a significant role in psychotic relapse and each relapse contributes to accrued social toxicity and disability. "Insight" or lack thereof and a negative medication attitude are critical variables that have repeatedly been shown to be risk factors for non-adherence. [5].

Predictors of treatment concordance problems

➤ **General**

Duration and complexity of regimen

Lack of informal support

➤ **Patient (intentional)**

Concerns about the side-effects

Few perceived benefits

Stigma of taking medication

Adjustment to suit daily routine

Concerns about cost

Concerns about availability

Concerns about dependency

➤ **Patient (non-intentional)**

Slips and lapses

External distractors

Misunderstanding instructions

➤ **Clinician**

Poor doctor-patient relationship

Poor empathy

Poor explanation/communication

Inadequate follow-up

➤ **Illness**

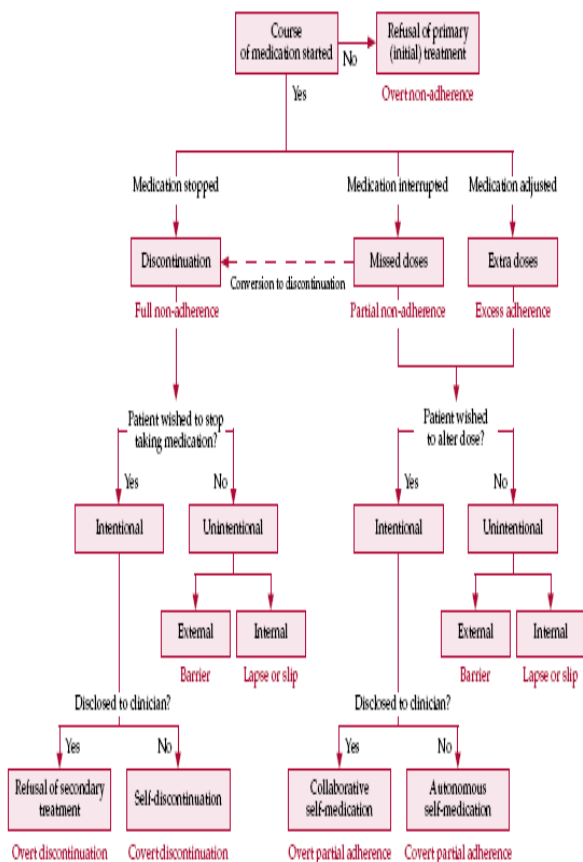
Severe illness

Depression or distress

Psychosis

Cognitive impairment

Nosology of adherence behaviour



Objective

To elucidate predictors of non-adherence among psychiatric patients presenting at a tertiary care hospital in Guntur, for follow-up with consultant psychiatrist

MATERIALS AND METHODS

A convenient sample of psychiatric patients from government general Hospital was enrolled between November and January, 2013-2014. An interviewer assisted, self-prepared questionnaire was used for data collection. The patients (in some cases the patient care givers) are allowed to fill their informed consent to be a part of the study. The questionnaire was distributed to them who are all included in the study, which includes questions on their medication taking behaviour, compliance to medications and the knowledge on medication use and its side effects. The response was then analyzed to assess the knowledge on medication use. The surveys were completed anonymously and responses were based on patients. Individual patient information was collected. The survey comprised a 12-item questionnaire taking approximately 10-15 minutes to complete. The survey was conducted among the patients with psychiatric disorders. Hundred copies of the survey were prepared for distribution to patients in psychiatry ward in a tertiary care hospital. No further follow-up was made in order to obtain responses from recipients of the survey. Interpretation of the results reported here is based on qualitative comparison of the responses obtained. The survey contained questions relating directly to the issue of non-adherence to medication in patients with psychiatric disorders. Although estimates of non-adherence vary widely depending on the sample, stage of illness, methodology used to assess adherence, and duration of follow-up.

Inclusion Criteria

The patients (100 members) suffering with psychiatric disorders and using the antipsychotic medications in the psychiatry department were included in the study.

Exclusion criteria

Patients with cognitive deficit and those presenting for the first time were not included in the study.

Structured Questionnaire Relating To The Non-Adherence

1. Do you consult the physician for your condition frequently? (yes/no)
2. Do you follow your prescription as directed by the physician? (Yes/No)
3. Do you complete your course of medication in determined period? (Yes/No)
4. Do you refill your prescription from your physician? (Yes/No)
5. Do you skip your dose often? (Yes/No)
- If yes,reason :
6. How do you take your medicine?
 - a) Of your own
 - b) From your representatives.
7. Do you have a basic knowledge on your medicines and its benefits? (Yes/No)
8. Do you know your medication may cause severe effects if not /wrongly used? (Yes/No)
9. What is the average number of medicines do you consume per day?
10. Did the physicians providing the information about the medication use? (yes/No)
11. You are skipping the doses because of severe adverse effects you are experiencing? (Yes/No)
12. Is the reason for you not taking the medication is your inability to afford the medication cost?(yes/No)

RESULTS

Out of 100 patients, 63% of the patients are consulting the physicians regularly and 57% of the patients are following the prescription as directed by the physicians. Only 32% of the patients are completing the course of medication in determined period and 23% of the patients are refilling the prescription and 18% of patients are skipping the dose because of forgotten and in some cases due to unavailability and forgotten by the care taker. 58% of the patients are taking the medications on their own and most of the patients with psychiatric diseases depend on care takers. In this study, 42% of the patients are depending on their care takers. Among 100 patients 67% of the patients don't have a basic

knowledge on their medicines and its benefits. 78% of the patients do not know that their medications may cause severe adverse effects.

Most of these patients are consuming 5-8 medications per day. 24% of the patients became non-adherent because of increased number of medications. 84% of the patients are saying that their physicians are not providing the basic information regarding the medications. 70% of the patients stop the medications because of adverse drug reactions that they are experiencing, among them, 87% of patients stop because of sedation, 19% because of weight gain, constipation (33%), tremors (48%), sexual dysfunction (14%), blurred vision (5%), restlessness (21%). 42% of the patients because of inability to afford the medication cost.

DISCUSSION

The impact of lack of insight on adherence is highlighted in the current survey since, it was the most important reason for patients discontinuing medication. Rates of non-adherence with psychotropic medication are difficult to summarise because they vary by setting, diagnosis and type of adherence difficulty.

Out of 100 patients, 63% of the patients are consulting the physicians regularly and 57% of the patients are following the prescription as directed by the physicians. Only 32% of the patients are completing the course of medication in determined period and 23% of the patients are refilling the prescription and 18% of patients are skipping the dose because of forgotten and even in some cases because of forgotten by the care takers, this percentage is less than that of the results given in Taj F et al; 2008 (36%). Fifty eight percent of the patients are taking the medications on their own and most of the patients with psychiatric diseases depend on care takers. In this study, 42 % of the patients are depending on their care takers. Among 100 patients 67% of the patients became non-adherent because of lack of knowledge about the medicines and their benefits. Taj F et al; 2008 also shown that 76% of patients were non-adhere because of the same reason. 78% of the patients does not know that their medications may cause severe adverse effects. Most of these patients are consuming 5 to 8 medications per day. 24% of the patients became non-adherent because of increased number of medications. 84% of the patients are saying that their physicians are not providing the basic information regarding the medications. The same reason was found in 92% of patients in a study conducted by Taj F et al; 2008. 70% of the patients stopped the medications because of adverse drug reactions that they are experiencing. The percentage of non adherence due to experienced adverse drug reactions was higher than the study conducted by Mark Olfson et al; 2000, it was found to be 42.8%. In our study, among 70%, eighty seven percent of the patients discontinued their medication because of sedation, (30% in Taj F et al; 2008 & 25.1% in Matthew Macaluso; 2013), 19% because of weight gain (25.8% in Matthew Macaluso; 2013), constipation 33% (16.2% in Matthew Macaluso 2013), tremors-48% (13.1% in Matthew Macaluso; 2013), sexual dysfunction-14% (12.6% in Matthew Macaluso; 2013), blurred vision (5%), restlessness-21% (28.2% in Matthew Macaluso; 2013). Our results shows that 42% of the patients discontinued their medications because of inability to afford the medication cost. The same reason was observed in the Taj F et al; 2008 study and was found to be 22%. The reason for increased percentage in our study may be due to the lower socio-economic status of the study population.

CONCLUSION

Non-adherence is a common and important issue. Treatment cost and co-morbidity should be reviewed in order to keep the medication regimen affordable and comprehensible. It is the responsibility of the pharmacist to increase the patient insight of their illness in order to improve adherence and minimize the consequences of relapse. Strategies focused on raising awareness of the importance of adherence are also warranted, with the aim of improving patient outcomes in psychiatric diseases. Newer approaches, specifically directly-observed-therapy (DOT) have some

promise in increasing adherence to antipsychotics. It is suggested that all patients receive universal prevention in the form of psycho education and general systems-based interventions. Selective intervention, a higher level of care (e.g. implementing pill organizers, enlisting families in medication supervision), is indicated for patients who are judged to be at high risk for non-adherence.

ACKNOWLEDGEMENT

The authors are very thankful to our principal Prof. Rama Rao Nadendla and the management of Chalapathi Institute of Pharmaceutical science for their constant support and encouragement. The authors are very thankful to the physicians who are encouraging and help us to assess the non-adherence.

CONFLICTS OF INTEREST: None

REFERENCES

1. José Manuel Olivares, Köksal Alptekin, Jean-Michel Azorin, Fernando Cañas, Vincent Dubois; Psychiatrists' awareness of adherence to antipsychotic medication in patients with schizophrenia: results from a survey conducted across Europe, the Middle East, and Africa; *Patient Preference and Adherence* 2013;7:121-132.
2. Michela nose, corrado barbui, Richard gray and Michele tansell; Clinical interventions for treatment non-adherence in psychosis: meta-analysis ; *british journal of psychiatry*(2003),183,197-200.
3. Velligan DI, Weiden PJ, Sajatovic M, et al; Expert Consensus Panel on Adherence Problems in Serious and Persistent Mental Illness; *J Clin Psychiatry*. 2009;70(Suppl 4):1-46.
4. Novick D, Haro JM, Suarez D, Perez V, Dittmann RW, Haddad PM; Predictors and clinical consequences of non-adherence with antipsychotic medication in the outpatient treatment of schizophrenia; *Psychiatry Res*. 2010;176:109-113.
5. Oliver freudenreich, Corinne cather; antipsychotic medication nonadherence: risk factors and remedies; *focus* 2012;10:124-129.
6. Kane JM. Review of treatments that can ameliorate non-adherence in patients with schizophrenia. *J Clin Psychiatry*. 2006;67(Suppl 5): 9-14.
7. Llorca PM. Partial compliance in schizophrenia and the impact on patient outcomes. *Psychiatry Res*. 2008;161:235-247.
8. Overcoming medication nonadherence in schizophrenia: strategies that can reduce harm ; Dosing strategies, direct inquiry, psychoeducation can improve outcomes; *Current Psychiatry* 2013 November;12(11):14-20.
9. Taj F, Tanwir M, Aly Z, Khowajah AA, Tariq A, Syed FK, Waqar F, Shahzada K; Factors associated with non-adherence among psychiatric patients at a tertiary care hospital, Karachi, Pakistan: a questionnaire based cross-sectional study; *J Pak Med Assoc*. 2008 Aug;58(8):432-6.
10. Mark Olfson, David Mechanic, Stephen Hansell, Carol A. Boyer, James Walkup, Peter J. Weiden; Predicting Medication Noncompliance After Hospital Discharge Among Patients With Schizophrenia; *Psychiatric Services* 51:216-222, 2000.
11. Alex J. Mitchell & Thomas Selmes; Why don't patients take their medicine? Reasons and solutions in psychiatry; *Advances in Psychiatric Treatment* (2007), vol. 13, 336-346.