

## Adherence To Drug Therapy In Psychiatric Patients

K.T. Mahmood<sup>1</sup>, N. Khalid<sup>2</sup> and Z. Makhdum<sup>2</sup>

<sup>1</sup>Department of Pharmacy Lahore College For Women University, Lahore

<sup>2</sup>Pharmacist, DTL, Health Department, Government of Punjab.

### ABSTRACT

Adherence is very important issue in any drug therapy especially in psychiatric illnesses. Medicines do not work if not taken ,if taken in accordance with advice, provide maximum benefit in terms of positive clinical outcomes. Adherence is defined as the extent to which a patient's behaviour coincides with medical or prescribed health advice. The term adherence is preferred over compliance. Non-adherence is a major risk factor for unfavourable clinical outcomes in psychiatry patients. Observational study was carried out at special institute at Lahore, which were cattering patients from whole of Pakistan. A questionnaire was designed . Major reasons for non- adherence include inappropriate information given to patient (30%), worries about addiction to medicines (20%), worries about continuous long term use (10%) and others (40%), poor financial resources and non-availability of pharmacist etc. In conclusin adherence to medication regimen among patients with psychiatric disorders is poor. These findings suggest the need for new approaches for increasing patient compliance.

**Keywords:** Disability, Non-adherence, Psychiatric illness, Relapse

### INTRODUCTION

Adherence is better-suited term for psychiatric patient because it shifts responsibility of drug therapy on health care provider. Adherence is defined as the extent to which a patient's behaviour coincides with medical or prescribed health advice. Adherence is considered non-judgmental and is preferred over the term "compliance," which carries negative connotations and suggests blame for the patient [1]. Compliance usually means "the extent to which the patient takes the medications as prescribed." Instead of "compliance," it has been suggested that the term adherence be used, which puts more of a burden on the clinician to form a therapeutic alliance with the patient, which thereby increases behavioural compliance and possibly enhances the therapeutic effect of the medication administered [2]. Another term "concordance" is also used which is defined as the degree to which clinical advice and health behaviour agrees [3]. The issue of medication compliance is a multidimensional phenomenon that rests not only with the patient, but also with the interactions of caregivers . Reasons given by patients and nurses for medication noncompliance differed. Patients' responses were characterized by being more concrete and varied in nature than those of the nurse. [4] Medication non-adherence consistently exhibits an association with higher costs. Further important factors are patient needs

and the ability of the system to address them.[5]

To elucidate predictors of non-adherence among psychiatric patients presenting at a tertiary care hospital of Pakistan. Factors associated with non-adherence among psychiatric patients showed that out of 128 patients, those with co-morbidity (32.81%) were less adherent than those without comorbidity (p-value:0.002). Adherence among depressed was 61.53%; psychotic was 58.82%; bipolar disorder was 73.91%. Reasons for non-adherence included sedation (30%), medication cost (22%), forgot to take medication (36%); and inability of the physicians to explain timing and dose (92%) or benefit of medication (76%)[6]. The patient's social functioning, acceptance of dose, compliance or lack of compliance, and the relative benefits of medication are factors that contribute to treatment goals [7].

The issue of medication compliance is a multidimensional phenomenon that rests not only with the patient, but also with the interactions of caregivers. Study results revealed that nurses and patients generally perceive estimated frequency of medication compliance to be similar [8]

Compliance with antidepressant medication is important in order to achieve all the goals of antidepressant therapy. These goals include symptom resolution, restoration of normal functioning and prevention of relapse or recurrent episodes [9].

Poor adherence with prescribed therapy often results in decreased efficacy, annoying for patient both and physician. Negative health improvement adds extensive costs to the healthcare system [10].

Scientifically, compliance can be expressed as the ratio between an observed treatment behaviour and given treatment standards [11]. Compliance with medication regimens among patients with psychiatric disorders may be lower than among patients with physical disorders. However, the difference may be largely attributable to the methods used for estimating compliance[12]

Logistic regression modeled adherence as a function of perceived barriers, including cost burden, access, binge drinking, poor therapeutic alliance, and medication beliefs. Nearly half the cohort experienced adherence difficulty, averaging 2.8 barriers. Total barriers were significantly associated with worse adherence (OR = 1.24 per barrier), notably poor medication beliefs, binge drinking, and difficulty accessing psychiatric specialists (ORs of 2.41, 1.95 and 1.73, respectively)[13].

It is important to assess patients' attitudes toward medication and their relationship with proxies. Strategies for facilitating medication adherence in patients with dementia include prescribing as few medicines as possible[14]. The basic objective of the study was to determine compliance level of the psychiatric patients, causes, severity of non-compliance, major factors contributing to non compliance, how physician-patient, nurse-patient, attendant -patient relationship effect compliance and to develop basic strategies to determine how pharmaceutical care approach can established to improve compliance in these psychiatric patient.

#### MATERIAL AND METHODS

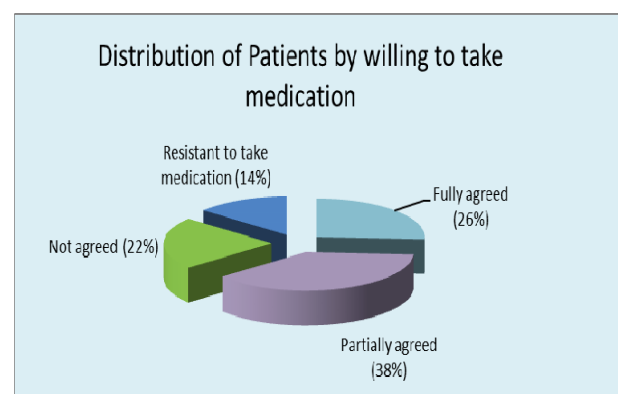
Recruitment to study started in June 2009 within a time period of three month at Punjab institute of mental health (PIMH). Patients were selected randomly from indoor and outdoor department of hospital. It was an observational study and patients involved in it were mostly adult and geriatric. Data collected with help of questionnaire. Data analysis was performed using SPSS version 16.0. Cross tabulation was used in the form of

frequencies and Chi-square test was used. Generally the comparison was made at 5% level of significance.

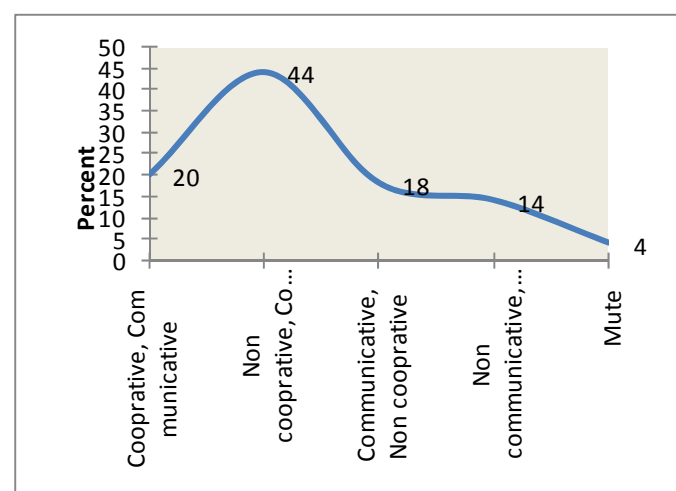
#### RESULTS AND DISCUSSION:

Patient with psychiatric disorder at PIMH were mostly with continuous course of illness. Major reasons for non-adherence were due to only (26%) patients were fully agreed to take their medication, (38%) were partially agreed, (22%) were not agreed and (14%) showed resistance while taking medicine (Fig; 1).

Only (20%) patients were cooperative as well as communicative, (44%) non-cooperative but communicative, patients were communicate but not willing to cooperate (18%), patient who neither communicate nor cooperate (14%), While (4%) patients were mute (Fig;2).



**Figure 1:** Patient willingness



**Figure 2:** Behaviour of patient contributing to non-Compliance

**Table 1: Risk of Relapses in Psychiatric Patients**

RISK OF RELAPSE	FREQUENCY	%
Poor compliance	12	24.0
Non compliance	12	24.0
Partial compliance	26	52.0
Total	50	100.0

**Table 2: Association Between Reasons For Discontinuation of Treatment and Patient's Vulnerability to Different Conditions**

NONCOMPLIANT PATIENT VULNERABLE TO * REASONS FOR DISCONTINUATION OF TREATMENT CROSS TABULATION	No longer feel ill	Dislike the idea of indefinite intake	Not waiting theirs moods to be controlled by medicine	In hope of improving mood by stopping medication	Total
Homelessness	0	1	2	0	3
Housing instability	3	4	6	2	15
Victimization	1	3	1	0	5
Poor nutrition	0	0	1	0	1
Inadequate financial resources	9	10	3	1	23
All	0	0	1	1	2
Other	0	0	0	1	1
Total	13	18	14	5	50

(a)Pearson Chi-Square = 26.49

(b) P-Value = 0.089

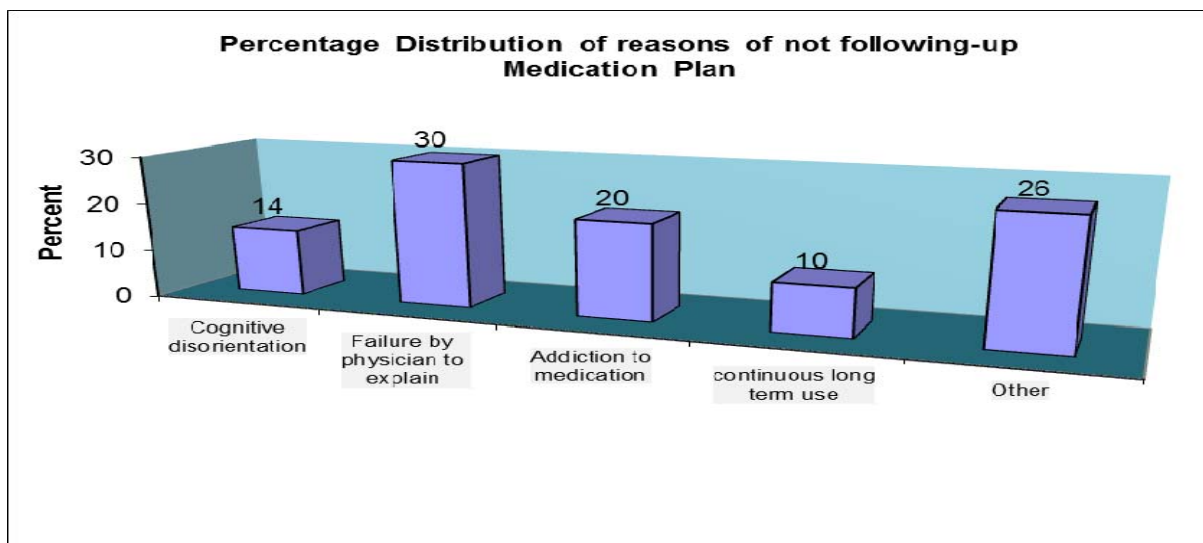


Figure 3: Reasons for not following up medication plans

(a)Partial compliance (52%) is a major contributing factor for non-adherence. (Table 2). Relapses also occurred due to poor compliance (24%), which was same due to non-compliance.

The Value of chi-Square indicates insignificant results, So both Non-complaint patient vulnerable to homelessness, housing instability etc. and reasons of discontinuation

of treatments are independent at 5% level of significance.

Fig; 3: Explains the reasons contributing to failure of medication plan which included cognitive disorientation (14%), failure by physician to explain (30%), addiction to medication (20%), continuous long (26%). Because of such attitude (52%)patients were partially compliant and (24%) showed non-compliance.

**CONCLUSIONS:**

Study sample was predominantly from PIMH. Non-adherence was a major risk factor and majority of patient were non-adherent due to discontinuation of treatment , bad taste, large number of doses and substance abuse etc. Physician also contributed to non-adherence as they failed to explain properly about positive aspect of treatment. Patients and physicians were not able to identify adherence. The inability of physicians to accurately identify adherent individuals is likely to have important consequences for prescribing behavior, health care costs, and patient outcomes.[15]. In Under developing countries like Pakistan, It become difficult to say that adherence was only limited to patients follow up medication but it involves multiple factors. Non-adherence put an extra financial burden on patient as well as on health care system in terms of wasted resources.

**RECOMMENDATIONS:**

- 1) As psychiatric illnesses are long lasting so computer based data collection system should present to avoid loss of data and hence relapse.
- 2) Under Pakistani scenario join family systems are very strong so provide information about drug therapy to patient's attendants
- 3) To reduce predisposing factors like wrong belief, knowledge and perception about the disease conduct seminars and other reinforcing activities.
- 4) To provide better pharmaceutical care presence of pharmacist is important and in PIMH number of pharmacist are disproportional and are not in accordance with government policy so number of pharmacist should be increased to improve patient quality of life and to provide best drug therapy.
- 5) The on hospital faculty with collaboration of government must make such policies in which rehabilitative activates should be performed industrial scale.
- 6) To avoid relapses in patients physician must explain about duration of treatment. and patients must not discontinue their treatment of their own.

7) Supports are important health activity, although supports room was present but these should be performed at national level.

8) There should be a strong physician-patient relationship to improve adherence.

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**REFERENCES:**

- [1]. Julius, R.J., Novitsky,M.A Jr., and Dubin W.R., *J Psyc. Pract.*,2009, *15(1)*,34-44.
- [2]. Fawcett, J., *Clin Psychiatry*.1995, *56*, 4-8.
- [3]. Alex, J. M and Thomas, S., *Adv. in Psyc. Treat*.2007,*13*, 336–346.
- [4]. Lund ,V.E.,Frank ,D.I.,*J Psych. Nurs. Ment Health. Serv*. 1991, *29(7)*,6-9.
- [5]. Martin, K., *The British J. of Psych*.2004 ,*184*.,509-516
- [6]. Taj,F., Tanwir, M., and Aly,Z.,*J Pak Med Assoc*.2008,*58(8)*, 432-6.
- [7]. Diamond ,R., *J. Clin., Psych*. 1985 ,*46*,29-35.
- [8]. Lund, V.E., and Frank, D.I., *J. Psych. Nurs. Ment. Health Serv*.1991 *29(7)*,6-9.
- [9]. Demyttenaere, K., and Haddad, P., *Acta. Psych.Scand Suppl*.2000 *403*,50-6.
- [10]. Koehler, A.M., and Maibach, H.I., *Am. J. Clin. Dermatol*.2001 *2(1)*7-12.
- [11]. Fleischhacker, W.W., Oehl, M.A., and Hummer, M.. *J. Clin. Psych*.2003, *64*,10-3.
- [12]. Joyce, A., Cramer, B.S., and Robert Rosenheck, M.D., *Psychiatr. Serv* .1998 ,*49*,196-201.
- [13]. Zeber, J.E., Miller, A.L., et al,*Adm. Policy. Ment. Health*. 2010, *12*.
- [14]. Arlt,S. Lindner.,R.,Rösler et al.,*Drugs Aging*.2008, *25*,1033-47.
- [15]. Dawn, I. V. Mei ,W.et al, *Psychiatr Serv*. 2007 *58*,1187-1192.