

## Research Article

# Adherence to drug therapy in psychiatric patients in Nishtar Hospital, Multan (Pakistan)

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Adherence is very important issue in any drug therapy especially in psychiatric illnesses. Medicines do not work if not taken and 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 behavior coincides with medical or prescribed health advice. The term adherence is preferred over compliance. Non-adherence is a major risk factor for unfavorable clinical outcomes in psychiatry patients. Observational study was carried out at Nishtar Hospital, Multan; locate in Southern Punjab (Pakistan). A questionnaire was designed for this study "Adherence to drug therapy". Results had shown that relapses occur because of non-adherence. 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 conclusion adherence to medication regimen among patients with psychiatric disorders is poor. These findings suggest the need for new approaches for increasing patient compliance.

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

### 1. 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 (Juliu et al., 2009). 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 behavioral compliance and possibly enhances the therapeutic effect of the medication administered (Fawcett, 1995).

Another term "concordance" is also used which is defined as the degree to which clinical advice and health behaviour agrees (Alex J Mitchell and Thomas Selmes, 2007). Medication non-adherence can be intentional or unintentional. Some underlying factors for unintentional non-adherence include complex medication regimes, an inability to pay for medications, forgetfulness, and/or failure to understand instructions due to auditory, visual, psychological, or intellectual impairments, 70% of non-adherence cases are intentional (Lehne et al., 1994)

A number of interventions can promote and ensure adherence among patients with a psychiatric illness. These include: Insuring that the medication is actually swallowed and not "cheeked" or vomited, encouraging family members to oversee medication administration, providing patients with written and verbal

instructions on dosage and timing, informing patients and families that psychotropic medications need to be taken on a regular schedule to be effective, informing patients about side effects of treatment and teaching them how to minimize undesired responses, assuring patients that psychotropic medications, such as antidepressants, antipsychotics, and mood stabilizers do not cause addiction, establishing a therapeutic relationship with the patient and with family and/or significant others who are sources of support to the patient (Lehne et al, 1994; Napholz, 1997).

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 co-morbidity (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%) (Taj et al, 2008)

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 (Diamond, 1985). 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 (Lund and Frank, 1991).

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 (Demyttenaere and Haddad, 2000). 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 (Kohler and Maibach, 2001). Scientifically, compliance can be expressed as

the ratio between observed treatment behaviour and given treatment standards (Fleischhacker et al, 2003).

The basic objective of the study was to determine compliance level of the psychiatric patients, causes, severity of non-compliance, major factors contributing to noncompliance, 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.

## 2. METHODS

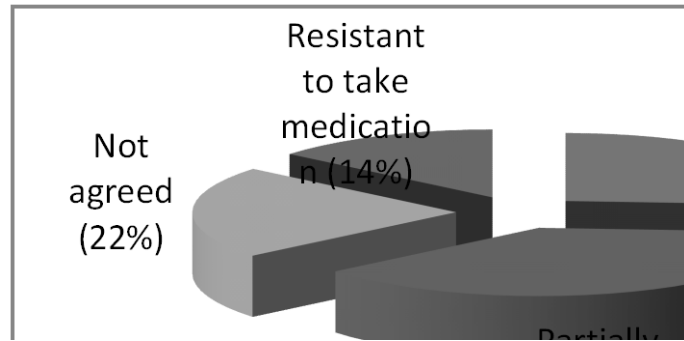
Recruitment to study started in June 2012 within a time period of three month at Nishtar Hospital Multan (Pakistan). Patients were selected randomly from indoor and outdoor department of hospital. It was an observational study and patients involved in it were mostly adult and geriatric. Data collected 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.

## 3. RESULTS

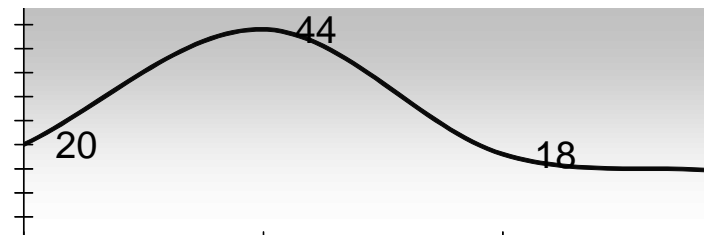
### 3.1 Phytochemical screening

Patient with psychiatric disorder at Nishtar Hospital Multan 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 (Figure 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 (Figure 2).

Reasons contributing to the failure of medication plan included cognitive disorientation (14%), failure by physician to explain (30%), and addiction to medication (20%), continuous long term use (10 %) and other reasons (26 %) as shown in (Table 3).



**Figure 1:** Patients willing to take medication



**Figure 2:** Behavior of patient contributing to non-compliance

**Table 1:** Risks of relapses in psychiatric patients

Risk of Relapse	Frequency	Percentage
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				
	A	B	C	D	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

Pearson Chi-Square = 26.49      P-Value = 0.089

Where, A = no longer feel ill, B = dislike the idea of indefinite intake, C = not waiting their mood to be controlled by medicine, D = In hope of improving mood by stooping medication.

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.

**Table 3:** Reasons of not following up medication plans

Reasons of not following up medication plans	Percent
Cognitive disorientation	14
Failure by physician to explain	30
Addiction to medication	20
Continuous long term use	10
Others	26

#### 4. DISCUSSION

Our study sample was predominantly from Nishtar Hospital Multan. Non-compliance was a major risk factor in patients with psychiatric disorder. Majority of patient were non-compliant and because of discontinuation of treatment (20%) patients were admitted to hospital due to relapse. Approximately (44%) patients were non-cooperative although they were communicative.

Even medicines were used to improve their quality of life but only (26%) patients were fully agreed to take medication, (38%) partially agreed and (22%) were not agreed. The result indicated that patients were reluctant to adhere the medication plan because (22%) patients complained that medicines were of bad taste. and (44%) large number of doses and (8%) patient perception. Because of such attitude (52%) patients were partially compliant and (24%) showed non-compliance. In NMC substance abuse was a major issue in compliance (12%) patient were involve in

substance abuse. Physician also contributed to non-adherence about (30%) physician failed to explain properly about positive aspect of treatment that was a major contributing factor to non-adherence. As Pakistan is an under developed countries, so most of patients admitted in Nishtar Hospital, Multan (23%). So it becomes difficult to say that adherence was only limited to patients follow up medication but it involves many factors. Non-adherence put an extra financial burden on patient as well as on health care system in terms of wasted resources.

## 5. RECOMMENDATIONS

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 Nishtar Hospital Multan 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 patient's 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.

### Conflict of Interests

Authors declared no competitive interests for the presented work.

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