

## Frequency of Compliance with Antidepressants using Antidepressant Compliance Questionnaire

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### ABSTRACT

**Objective:** To find out the frequency of compliance of patients using anti-depressants prescribed at out-patient department.

**Study Design:** Descriptive cross sectional study.

**Place and Duration of Study:** This study was conducted in the out-patient department of Institute of Psychiatry, Benazir Bhutto Hospital, Rawalpindi from September 10, 2010 till May 10, 2011.

**Materials and Methods:** One hundred and sixteen patients aged 18 years and above, presenting with moderate depressive illness, able to understand and speak Urdu, taking treatment for at least 4 weeks and belonging to both genders were recruited from out-patient department using consecutive (non-probability) sampling technique. Patients having severe depressive illness with psychotic features and severe agitation were excluded. Antidepressant Compliance Questionnaire was translated and validated through a pilot study and then the Urdu translation was orally administered to each participant for the assessment of compliance with antidepressant medication.

**Results:** Among the participants 74.1% were compliant and 25.9% were non-compliant with anti-depressant medications.

**Conclusion:** This study found a high degree of patient compliance with anti-depressants. The results would help in early recognition of non-compliant patients, so that necessary changes could be made in the treatment plan to ensure better compliance.

**Key Words:** *Adherence, Antidepressants, Patient compliance*

### Introduction

Compliance can be defined as the coincidence of the patients' manners (in terms of taking medicines, following diets or bringing life-style changes) with health care providers' recommendations whereas the definition of adherence, according to WHO, is "the extent to which the patient follows medical instructions".<sup>1</sup> Patients' drug compliance and adherence to prescribed medicines play very important role in the outcome of treatment and prognosis of the disease. It is the most decisive variable for the treatment outcome. This may also have serious and detrimental effects on disease management.<sup>2</sup> Various studies have been conducted in the world in different diseases and different patient populations to

evaluate the impact of therapeutic non-compliance on clinical outcomes. The compliance rate for short-term therapies was found to be 70% to 80%, for long-term therapies 40% to 50%, whereas for lifestyle changes, it was only 20% 30%.<sup>3</sup>

Being the most common psychiatric disorder, depression faces the highest degree of non-compliance. Despite the fact that depression treatment guidelines recommend continuation of medication for at least 6-8 months after symptom remission, 50% to 83% of patients either discontinue their antidepressants prematurely or take it too inconsistently to obtain any clinical benefit, which increases the risks of relapse and recurrence.<sup>4</sup> The factors which predict medication adherence or non-adherence with antidepressants include perceptions about antidepressants, casual beliefs regarding depression,<sup>5</sup> necessity versus harmfulness and treatment attitudes.<sup>6,7</sup> A Pakistani study has identified unawareness of treatment benefits, non-

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affordability and physical side effects as the primary reasons for non-compliance.<sup>8</sup> A study conducted in Karachi found that on follow up 18% of psychiatric patients were non-compliant, major reasons being denial of the disease and non-affordability.<sup>9</sup> A similar study carried out in OPD of a tertiary care hospital in Karachi found that adherence in patients of depression was 61.53%, in patients of psychosis it was 58.82% while in the patients of bipolar disorder it was 73.91%. Reasons for non-adherence included sedation (30%), medication cost (22%), forgetfulness to take medication (36%); and inability of the physicians to explain timing and dose (92%) or benefit of medication (76%).<sup>10</sup> Majority of the patients of depression treated in primary care settings are non-adherent due to concerns about medication cost, lack of insurance, stigma and inadequate patient education while trust in physician, inclination for antidepressant medication, shared decision in treatment choice and belief in the effectiveness of medication have been linked with adequate adherence.<sup>11</sup>

In a review of non-adherence with antidepressant therapy, values between 40% and 70% have been found in developed countries.<sup>12</sup> In one study, it was found that 30% patients discontinue therapy within 30 days and 68% discontinue therapy within 90 days of initiation, mainly due to adverse events, thus leading to adverse clinical and economic outcomes. Fewer than 33% of those patients who continue to take their medications constantly take the antidepressant as prescribed.<sup>13</sup> In a large European study of 7525 patients, 56% patients abandoned treatment within 4 months.<sup>14</sup>

Bulloch and Patten found that the main reason for non-adherence was forgetting (74.5%), followed by 'felt better' (10.7%), whereas side effects were reported as the fourth reason (5.9%) and patients are more

non-adherent if they are unmarried, young adults, male, without a contact telephone number, belong to lower socioeconomic status and having a history of non adherence.<sup>15</sup>

The current study is aimed at determining the frequency of patient compliance with antidepressants at the OPD of the Institute of Psychiatry, Benazir Bhutto Hospital Rawalpindi, a tertiary care facility.

## Materials and Methods

This study was carried out in the out-patient department of the Institute of Psychiatry, Benazir Bhutto Hospital, Rawalpindi, which is a tertiary care hospital, from 10<sup>th</sup> September 2010 till 10<sup>th</sup> May 2011. It was a descriptive, cross-sectional study. A sample of 116 patients was selected. All the patients aged 18 years and above, presenting with moderate depressive illness, able to understand and speak Urdu, taking treatment for at least 4 weeks and belonging to both genders were recruited by using consecutive (non-probability) sampling technique. The patients with severe depressive illness with psychotic features and severe agitation were excluded. Informed written consent was taken from all the participants. Participants socio-demographic details were obtained by using a Proforma designed for this purpose. The diagnosis of depression in the participants was confirmed by using the ICD-10 Criteria for Depressive Illness. The Anti-depressant Compliance Questionnaire was translated into Urdu by second author and it was validated through a pilot study. Then it was verbally administered to the patients. This questionnaire was developed by Keon Demyttenaere, a psychiatrist in Belgium.<sup>7</sup> It is a 33 item, 4 point Likert type standard scale. It has a score range of 33-132, with a cut-off score of 83 such that score less than 83 signify non-compliance and a score of 83 or more signifies compliance. It also aims to

assess the patients' attitudes and beliefs on the diagnosis and etiology of his/ her depressive episode, on the treatment aspects and on doctor-patient relationship. The questionnaire has 4 components, each dealing with different factor. Component 1 deals with perceived doctor-patient relationship, component 2 deals with preserved autonomy, component 3 deals with positive beliefs on antidepressants and component 4 deals with partner agreement.

## Results

The mean age of the sample was 36.36 (S.D±12.50), with a range of 18-59 years. Among the participants, 67(57.8%) were males and 49 (42.2%) females. Twenty eight (24.1%) had no formal education, 23 (19.8%) were educated till class 5<sup>th</sup>, 18 (15.5%) educated till class 8<sup>th</sup>, 19 (16.4%) till matriculate, 15 (12.9%) had done graduation and 13 (11.2%) had done post graduation. (Table-I) Among the participants, 38(32.8%) were single, 53 (45.7%) were married, 16 (13.8%) separated, 05 (4.3%) divorced and 04 (3.5%) were widow/ widower. (Table-II) Thirty nine (37.6%) had a monthly income of less than 5000 rupees, 40(34.5%) had an income of 5,000-10,000 rupees, 24 (20.7%) had an income of 10,000-25,000 rupees and 13(11.2%) had an income of more than 25,000 rupees. Among the participants, 86 (74.1%) were compliant and 30 (25.9%) were non-compliant with anti-depressant medications. (Table-III)The mean compliance score on Anti-depressant compliance questionnaire was 91.23 (S.D±23.61) with a range of 34-129.

## Discussion

The study revealed that among the participants, 86 (74.1%) were compliant and 30 (25.9%) were non-compliant with antidepressant medication, depicting a high degree of compliance with antidepressants. (Table-III) This finding is significant and can

**Table I: The educational status of the participants (N=116)**

Educational Status	Frequency	Percentage
No formal Education	28	24.1
Up till Class 5 <sup>th</sup>	23	19.8
Up till Class 8 <sup>th</sup>	18	15.5
Up till Matric	19	16.4
Bachelor	15	12.9
Masters	13	11.2

**Table II: The marital status of the participants (N=116)**

Marital Status	Frequency	Percentage
Single	38	32.8
Married	53	45.7
Separated	16	13.8
Divorced	05	4.3
Widow/ Widower	04	3.5

**Table III: The number of compliant and non-compliant participants (N=116)**

Patients Compliant with Antidepressants	Frequency	Percentage
Compliant	86	74.1
Non-compliant	30	25.9

be compared with other national and international studies.

A recent study from Pakistan was carried out in OPD of a tertiary care hospital in Karachi found that adherence among depressed patients was 61.53%.<sup>10</sup> Another study conducted in Karachi revealed that 18% of patients on follow up were non-compliant and 82 % were compliant with treatment<sup>9</sup> which is almost concordant with 74.1% compliance of our study. Another cross-sectional study conducted at the OPD of Psychiatry Department of Pakistan Institute of Medical Sciences, Islamabad

revealed that the frequency of non-adherent patients in major depressive disorder was (31.5%)<sup>7</sup> which is higher than our finding of 25.9%. This study also found that the commonest reasons for non-compliance were unawareness of the benefits of treatment (43%), non-affordability of drugs (33.5%), physical side effects (28.5%), no awareness given by the doctor (03%) and unfriendly attitude of doctors (02%).

Clinical practice guidelines recommend that treatment should last for at least 3 to 9 months into the continuation phase. However it has been found that approximately 30% of patients discontinue therapy within the first month of initiation of treatment and over 40% discontinue therapy within 90 days of initiation, primarily due to adverse events, thus leading to adverse clinical and economic outcomes.<sup>13</sup> This can be compared with our study finding of 74.1% compliance and 25.9% non-compliance with anti-depressant medications. However our study has assessed patients after 01 month of anti-depressant medications and could have easily missed noncompliance that could be there in the later months of anti-depressant treatment thus revealing higher compliance with treatment.

In a previous study, it was found that among primary care patients of depressive illness taking Tricyclic antidepressants, 21% discontinued medication within 2 weeks of initiating treatment and additional 3% to 10% discontinued every 2 weeks, until only about one half took the medication for 4 months. This is an interesting finding and can be compared with 25.9% non-compliance reported in our study. Though, in our study, patients have been assessed for their compliance with anti-depressants at 1 month of treatment and have not been monitored beyond that time period in contrast with this study where the patient compliance and adherence has been

monitored until at least 4 months.

In a community survey, it was found that the 10% who indicated taking their antidepressant medication "some of the time" or less during the past 4 weeks (non-adherent) were compared to the 86% who indicated taking their medication "all" or "most of the time" (adherent).<sup>3</sup> So the findings of this study are close to those of our study. In previous studies it has been reported that up to 68% of patients diagnosed with depression discontinue their antidepressants by 3 months, while of those patients who continue to take their medications, fewer than 33% consistently take the antidepressant as prescribed.<sup>8</sup> This finding can be compared with our research finding and we can see that our study shows a much higher compliance i.e., 74.1% which is inconsistent with the aforementioned research findings of a much higher non-compliance and treatment discontinuation rate.

## Conclusion

This study found a high degree of patient compliance with anti-depressants. Antidepressant compliance questionnaire is an efficient and effective tool for measuring patient compliance that probes into various aspects of patient compliance. The results of current study would help in early recognition of non-compliant patients, so that necessary changes could be made in the treatment plan ensuring better compliance.

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