

## A Study Assessing Factors Associated with Anti-Depressant Medication Adherence in Women: An Observational Study

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Conflict of interest: Nil

### Abstract

**Aim:** The aim of the present study was to assess the factors associated with anti-depressant medication adherence in women attending an out-patient psychiatry department.

**Methods:** The present study was conducted at department of Psychiatry we proceeded by selecting 200 patients who were diagnosed with Depression. They attended the Psychiatry Out Patient Department.

**Results:** Of the 200 subjects, 90 (45%) had mild depression, 94 (47%) had moderate depression and 16 (8%) had severe depression. The mean age of subjects on medication was  $38.42 \pm 3.16$  and mean age of subjects not on medication was  $32.28 \pm 4.36$ . The mean difference between two groups was statistically significant (P value < 0.001). There was no difference between these groups on any of the parameters, especially the severity of depression. Among the 150 patients who were on not taking medications regularly, 83.34% people had a low education about the nature and course of the illness, 80% people experienced some kind of side effects due to the antidepressant they were taking and 90% people had a poor family support.

**Conclusion:** In this study, severity of depression was not associated with medication non adherence, married status and paid work status are factors associated with adherence to antidepressants. Stated reasons for nonadherence of medications include less education about the nature and outcome of depression, side effect profile and poor family support. Psychoeducation of patients & caregivers, carefully monitoring of medication adherence an ongoing follow-up are crucial to enhance adherence.

**Keywords:** Depression, medication adherence, compliance

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### Introduction

Depression is a prevalent and disabling mental disorder projected to become the leading source of disease burden globally by 2030. [1] Depressive episodes often evolve into chronic or recurring depressive disorders, with detrimental consequences over the entire life span. [2,3] In general, psychotropic medications work as effectively as medications in other fields of medicine. [4] All antidepressants are more efficacious than placebo for adults with major depressive disorder, with clinical response to treatment usually defined as a reduction of X 50% in the total score on a standardized observer rated scale for depression. [5] This large body of evidence is consistent with recommendations from an international Task Force of the World Federation of Societies of Biological Psychiatry (WFSBP), which indicates that many different antidepressants are available for effective acute, continuation, and maintenance treatment of unipolar depressive disorders in adults. [6] It should be noted, however, that “newer” antidepressants, such as selective serotonin reuptake inhibitors (SSRIs), and vortioxetine, have

variable efficacy/tolerability profiles in adults compared to the older tricyclic antidepressants (TCA). [6-8]

Despite the availability of many effective antidepressants, 50% patients do not achieve a complete cure of symptoms and even experience recurrence. [9,10] Therefore, in many patients, depression becomes a chronic disorder and may require lifelong antidepressant treatment. For the desired treatment outcome, adherence to antidepressant medication plays a crucial role, and nonadherence is the key problem associated with antidepressant treatment. Adherence has been defined as “the extent to which a person’s behavior regarding taking medication, following a diet, or executing a lifestyle (change) corresponds with recommendations from a healthcare provider”. [11]

According to contemporary data attained over the past few years, about 50 percent of psychiatric patients and 50 percent of primary care patients prematurely discontinue antidepressant therapy (i.e., are non-adherent when assessed at 6 months after the initiation of treatment). [12] Treatment

adherence and illness is not related only by the severity of the illness but by so many other factors which impact on seeking and continuing treatment.

The aim of the present study was to assess the factors associated with anti-depressant medication adherence in women attending an out-patient psychiatry department.

**Materials and Methods**

The present study was conducted at department of Psychiatry, Jay Prabha Medanta Hospital, Patna, Bihar, India for six months . we proceeded by selecting 200 patients who were diagnosed with Depression. They attended the Psychiatry Out Patient Department.

**Participants**

We included those female patients attending the psychiatric OPD at Jay Prabha Medanta Hospital, Patna, Bihar, India. who are diagnosed with Depression (Mild, Moderate or Severe) as per ICD-10 guidelines and provided written informed consent.

Those excluded include patients with co-morbid psychiatric illnesses and patients unwilling to take part in our study.

**Questionnaires**

The questionnaires included general information of each participant. Mini International Neuropsychiatric interview (M.I.N.I) was given to rule out psychopathology other than depression. The severity of depression was assessed by using the Hamilton Depression Rating Scale (HAM-D). Medication adherence was assessed by questioning about the drug taking and hospital attending behaviour. No formal questionnaire was used. Participants were asked to review and follow-up weekly and their informants were also questioned regarding their adherence to medications.

**Statistical Analysis:**

Statistical analysis was done by SPSS (version 22) software. Chi square test and t-test were used to analyse the data.

**Results**

**Table 1: Severity of depression of study groups**

Severity of depression	N%
Mild	90 (45)
Moderate	94 (47)
Severe	16 (8)

Of the 200 subjects, 90 (45%) had mild depression, 94 (47%) had moderate depression and 16 (8%) had severe depression.

**Table 2: Comparison of demographic and other clinical characteristics between study groups based on medication use**

Characteristic	Medication group (N = 50)		Not on medication group (N =150)		P Value
	n	Mean ±SD	n	Mean ±SD	
Age		38.42 ±3.16		32.28 ± 4.36	<0.001
Education					0.185
Primary	6		10		
Secondary	5		42		
Graduate	36		84		
Post graduate	3		4		
Marital status					0.002
Single	0		30		
Married	43		115		
Divorced	5		5		
Widow	2		0		
Work status					0.020
Paid work	25		45		
Others	25		105		
Severity of depression					0.310
Mild depression	25		52		
Moderate depression	20		80		
Severe depression	5		8		
HAM-D total score		12.48 ±3.80		13.27 ±3.43	0.430

The mean age of subjects on medication was 38.42 ±3.16 and mean age of subjects not on medication was 32.28

$\pm 4.36$ . The mean difference between two groups was statistically significant ( $P$  value  $< 0.001$ ). There was no difference between these groups on any of the parameters, especially the severity of depression.

**Table 3: Stated reasons for non-adherence to anti-depressants**

Reasons cited for non-adherence to medications	Proportion (%)
Low education about nature of depression and course of illness	125 (83.34%)
Side effects of antidepressants	120 (80%)
Poor family support	135 (90%)

Among the 150 patients who were on not taking medications regularly, 83.34% people had a low education about the nature and course of the illness, 80% people experienced some kind of side effects due to the antidepressant they were taking and 90% people had a poor family support.

### Discussion

All antidepressants are more efficacious than placebo for adults with major depressive disorder, with clinical response to treatment usually defined as a reduction of  $\geq 50\%$  in the total score on a standardized observer rated scale for depression. [13] This large body of evidence is consistent with recommendations from an international Task Force of the World Federation of Societies of Biological Psychiatry (WFSBP), which indicates that many different antidepressants are available for effective acute, continuation, and maintenance treatment of unipolar depressive disorders in adults. [14] Regarding safety, a recent large synthesis of the evidence including around 1,000 individual observational studies concluded that overall antidepressants are safe in adults. Most of the purported serious adverse events; that have been attributed to antidepressants, including abortion, autism in offspring, and malformations during pregnancy, as well as a higher risk of suicide attempts in adolescents, are not supported by convincing evidence, and are probably driven by confounding by indication. [15,16]

Of the 200 subjects, 90 (45%) had mild depression, 94 (47%) had moderate depression and 16 (8%) had severe depression. The mean age of subjects on medication was  $38.42 \pm 3.16$  and mean age of subjects not on medication was  $32.28 \pm 4.36$ . The mean difference between two groups was statistically significant ( $P$  value  $< 0.001$ ). There was no difference between these groups on any of the parameters, especially the severity of depression. Among the 150 patients who were on not taking medications regularly, 83.34% people had a low education about the nature and course of the illness, 80% people experienced some kind of side effects due to the antidepressant they were taking and 90% people had a poor family support. Lucca et al in their study of non-adherence in psychiatric patients also have noted that low level of education is one of the factors associated with non-adherence. [17] In our study, the mean HAM-D score is not statistically significantly different

from the drug adherent group. If the group is divided on the basis of scores in the HAM-D scale, it shows that the moderate depressives are represented more in the non-adherent group. Non-adherence in this group appears to be more related to social and individual factors rather than disease related factors. In contrast with our outcomes Rieckmann et al [18] have noted that severity of depression was associated with medication non adherence in their study.

Due to multiple prescribers, problems communicating with physicians, frequent follow-up, long waiting times in hospitals, repeated medication refills, and unavailability of prescribed medications, [19] many patients choose to discontinue their medications. [20,21] Patients lose confidence in their physician when there are multiple prescribers, which ultimately affects their medication-taking behavior. Some patients alter/stop their medication without informing their physician, as they find it difficult to communicate with them. To avoid long wait times, patients skip their appointments, leading to an insufficient supply of medication at home. [21]

### Conclusion

In this study, severity of depression was not associated with medication non adherence, married status and paid work status are factors associated with adherence to antidepressants. Stated reasons for nonadherence of medications include less education about the nature and outcome of depression, side effect profile and poor family support. Psychoeducation of patients & caregivers, carefully monitoring of medication adherence an ongoing follow-up are crucial to enhance adherence.

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