

# Improving Patient Compliance in Antidepressant Therapy through Counselling

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## ABSTRACT

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Lack of knowledge on antidepressant medication and negative attitude are barrier of compliance. This study was conducted with the aims to improve patient compliance in antidepressant therapy through counselling and to study patient attitude and belief toward depression and antidepressant using antidepressant compliance questionnaires. In this study 65 patients with moderate depression attending Psychiatry OPD at Kathmandu university teaching hospital were included. Participants were interviewed using antidepressant compliance questionnaires (ADCQ). Baseline scores on attitude and belief was obtained using ADCQ. Participants were counselled verbally with aid of leaflet. Improvement in compliance was accessed by follow up score after 2 weeks. Correlation coefficient between scores obtained using SPSS 19 at 0.05 level of significance. During the study period, 70.6% of participants were found to be compliant and took their medication as prescribed after 2 weeks of counselling. 66.7% of participants felt little informed about antidepressant and 58.8% were willing to continue antidepressant treatment. The correlation coefficient between category 1 of ADCQ and follow up score found to be  $r = 0.219$ ;  $p = 0.122$  ( $p > 0.05$ ). The correlation coefficient between category 3 and follow up score  $r = 0.413$ ;  $p = 0.003$  ( $p < 0.01$ ),  $r = 0.315$ ;  $p = 0.024$  ( $p < 0.05$ ) between category 4 and follow up score. Likewise correlation coefficient between total ADCQ scores and follow up after 2 weeks was found to be  $r = 0.319$ ;  $p = 0.022$  ( $p < 0.05$ ). It was concluded that the participants lack information about depression and antidepressants. Hence, they are suspicious about need of medication resulting in high dropout rate. Two weeks after counselling adherence was significantly improved.

**Keywords:** Antidepressants, Antidepressant compliance questionnaires, Counselling, Depression.

## INTRODUCTION

Patient compliance is the extent to which a patient takes or uses his medicine in accordance with directions or follows the general health advice given by his doctor.<sup>1</sup> Depression is one of the public health issues and its life time prevalence is estimated to be 15%. It is estimated that by year 2020 major depression will be second leading cause of disability after ischemic heart disease. It will be the chronic condition with high relapse and recurrence rates.<sup>2</sup> In USA approximately 125,000 people with treatable ailments die each year because they do not take their medication properly. Sixty percent of all patients cannot identify their own medication and approximately one fourth of all nursing home admissions are related to improper self administration of medication. Hospital cost due to patient non compliance is estimated at 8.5 billion dollar annually in USA.<sup>3</sup> In case of depression barrier to adherence is found to be lack of knowledge in the nature of depression and antidepressant medication and also the negative attitude towards antidepressant.<sup>2</sup>

Observational studies found discontinuation rates of antidepressant is 28% at one month and 44% to 52% at three months.<sup>4</sup> Four of the Meta analyses have demonstrated that for tricyclic antidepressant and Serotonin reuptake inhibitors

dropout rate are in the range of 21-33% irrespective of class. The dropout rate is contributed by factors such as illness and patient's characteristics, side effect, time taken to improve and patient doctor relationship.<sup>5</sup> Study carried out by Demyttenaere et al on attitude and belief of patient toward depression and antidepressant concluded that lack of knowledge about affective disorder, its treatment and a critical attitude of patients on depression and antidepressant adds to adverse prognosis of depression and bipolar disorder. Hence, for the effective management of depression and bipolar disorder knowledge on depression and antidepressant is required.<sup>6</sup> Overall according to the health belief model it says that person will take health related action only when they feel negative health outcome can be avoided, have positive expectation by taking recommended action and such recommended action could be taken successfully.<sup>7</sup> Hence, it is important to assure patient that depression is curable and antidepressant are safe measures for them to improve adherence.

## METHOD

### Ethics committee approval

Kathmandu University School of Medical Sciences/Dhulikhel Hospital (IRC-KUSMS). Approval reference number 27/12.

**Study type:** Prospective interventional study

**Sample frame:** 65 patients attending outpatient department with moderate depression.

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## Recruitment methods:

### Inclusion criteria

- Outpatient from department of Psychiatry with confirmed diagnosis of mild to moderate depression.
- Patient aged 18 years and above will be included.
- Patient with antidepressant prescription irrespective of therapeutic class.
- Pregnant women
- Patient having antidepressant more than 3 months

### Exclusion criteria

- Patients with other mental illness except depression will be excluded from study.
- Patient with other types of depression like Acute depression, Postpartum depression, Psychotic depression, Atypical depression, Bipolar depression

### Data collection

The enrolment of patients was done as per the inclusion criteria. All the demographic variables were noted in patient's profile form. Patient who had confirmed diagnosis of mild to moderate depression from psychiatric outpatient department (OPD) were given ADCQ to get the baseline score on attitude and belief on depression and antidepressant. Then they were given another questionnaire to assess cause of their depression. Patients were then counselled through educational leaflet. Two weeks after leaving psychiatric OPD they were called to assess compliance and scored accordingly as per their response.

### Data Analysis

Descriptive statistic was applied to assess mean score on the attitude and belief from antidepressant compliance questionnaires. Correlation coefficient was used to assess whether counselling improves the compliance or not. P value less than 0.05 was considered as significant at 95% confidence interval. All the analysis was carried by using SPSS 19.

## RESULTS

Among 65 patients who participated in study, 14 could not be followed up in the study and hence dropped out. Out of 51 patients 49% were male and 51% were female. Majority of patients 54.9% were from age group 18 to 38 years. 35.3% of homemakers were found to have depression followed by farmer, service providers, unemployed, students and businessman. Patients were given questionnaires to mark the appropriate cause for their depression or what they considered the cause of their depression. Family dispute was found to be major cause of depression followed by fear, co-morbid

diseases and low economic condition (figure 1). The mean scores obtained in ADCQ mentioned in (Table No. 1).

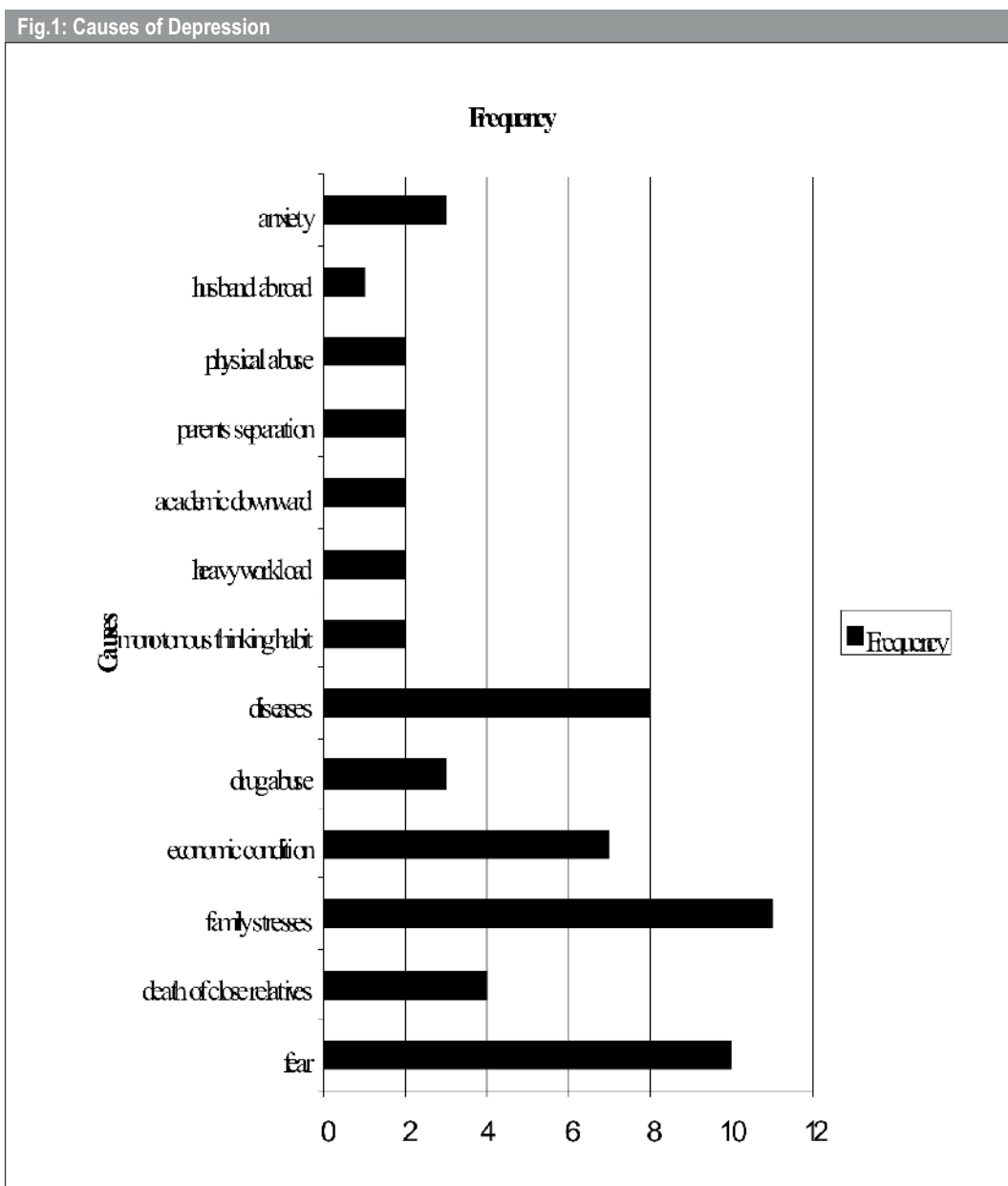
The mean score of "Patient doctor relationship" was 2.66 that shows the patients rather agree on this. These results showed that patients are satisfied with the doctor. The mean score of "Perceived autonomy" is 2.50 that shows the patients rather disagree on this. The mean score of "positive belief on depression and antidepressant" is 2.27. The mean score of "Partner's agreement" is 2.85.

### Correlation

Patient doctor relationship (Category 1 of ADCQ) have positive correlation with follow up ( $r=0.219$ ,  $p=0.122$ ). The correlation isn't significant at  $p=0.05$ . Correlation between positive belief on antidepressant (Category 3 of ADCQ) and follow up scores after counseling ( $r=0.413$ ,  $p=0.003$ ) which is significant at  $p=0.01$ . Correlation between partner's agreement (Category 4 of ADCQ) and follow up scores after counseling ( $r=0.315$ ,  $p=0.024$ ) which is significant at  $p=0.05$ . Positive correlation between total scores on ADCQ questionnaires and follow up scores two weeks after counseling ( $r=0.319$ ,  $p=0.022$ ), which is significant at  $p=0.05$ .

## DISCUSSION

The mean score of "Patient doctor relationship" is 2.66 that shows the patients rather agree on this. These results showed that patients are satisfied with the doctor. 60.8% of patients agreed doctors gave sufficient time to listen and discuss their problems, similar is the result of study by Chakraborty et al, 92% agreed that doctor gave sufficient time to listen to their problem, felt confident that antidepressants are suitable treatment of their depression.<sup>8</sup> Generally, patients were very satisfied with their physician, which was commonly considered to have a positive effect on adherence.<sup>9</sup> The only reason for dissatisfaction with the doctor we could identify with the ADCQ, was that patients reported they were not given enough information about how antidepressants work and about possible side-effects, causes of depression and explanation of depression. Bull et al. also focused on the communication between patient and physician. The rate of non-compliance increased three times for patients who answered that they were not given information to take the medication for at least six months. Notably, if possible side-effects of the medication were discussed between patient and physician; patients were more likely to continue therapy.<sup>10</sup> These results clearly highlighted the importance of the relationship between the doctor and patient. Chakraborty et al demonstrated that 88% of patients believed that antidepressants can alter a patient's personality; 58% of patients thought that an individual could develop immunity to antidepressants; 36% of patients believed that a patient can



become addicted to antidepressants; and 30% of patients believed that occasionally skipping medication prevents the development of immunity to antidepressants. Similarly in present study 86% of patients believed antidepressant can alter their personality with maximum mean score of 3.10, 43% of patients thought individual could develop immunity to antidepressant with mean score of 2.31, 61% of patients believed they can be addicted to antidepressant with mean score of 2.86 and 45% of patients believed occasional skipping a medicines prevents development of immunity to antidepressant. 72% of patients believed that fewer medication tablets could be taken on days that one feels better, and alternatively, 42% thought that extra tablets could be taken when one feels more depressed.<sup>8</sup> The result here in this

study is different. Only 12% patients believed fewer medications could be taken on days one feels better, 4% patients thought extra tablets could be taken when one feels more depressed. We can conclude from these results that patients have positive beliefs regarding antidepressant. positive correlation between positive belief on antidepressant (Category 3 of ADCQ) and follow up scores after counseling ( $r=0.413, p=0.003$ ) which is significant at  $p=0.01$ .

Also the study by Katharina found Positive believes on antidepressants (category 3) were significantly positive correlated with the total telephone interview score after counseling ( $r=0.470, p=0.018$ ).<sup>11</sup> Similar results were observed in this study.

Table 1: Antidepressant Compliance Questionnaires scores

Items	Mostly disagree	Rather disagree	Rather agree	Mostly disagree
<b>Patient doctor relationship</b>				
My doctor has explained depression sufficiently to me	24 47%	5 10%	15 29%	7 14%
I receive sufficient psychological support and encouragement from my doctor	2 4%	10 20%	31 61%	8 16%
My doctor takes sufficient time to listen to my problems		10 20%	31 61%	10 20%
My doctor takes sufficient time to discuss my emotional problems	3 6%	11 22%	31 61%	6 12%
My doctor has explained properly about antidepressants, their action and side-effects	25 49%	15 29%	8 16%	3 6%
My doctor listens properly to what I think about antidepressants	1 2%	14 28%	29 57%	7 14%
My doctor has explained the causes of my depression sufficiently	20 39%	16 31%	11 22%	4 8%
My doctor understands my feelings and thoughts in depression perfectly	3 6%	14 27%	28 55%	6 12%
My doctor listens properly when I tell him what it is to be depressed	4 8%	20 39%	22 43%	5 10%
My doctor is really interested in my problems	1 2%	15 29%	27 53%	8 16%
My doctor shows sufficient consideration for my views and feelings about this treatment with antidepressants	1 2%	18 35%	26 51%	6 12%
My doctor listens properly to what I consider to be the causes of my depression	3 6%	16 31%	27 53%	5 10%
My doctor has made me feel confident that antidepressants are the suitable treatment for my depression	11 22%	32 63%	8 16%	
My doctor fully understands my condition <sup>316248</sup>	6 6%	31 47%	47 77%	16 27%
My doctor strongly emphasizes that it is important to take the antidepressants regularly	3 6%	2 4%	19 37%	27 53%
<b>Perceived Autonomy</b>				
Your body can become addicted to antidepressants	10 20%	10 20%	8 16%	23 45%
When you have taken antidepressants over a long period of time it is difficult to stop taking them	5 10%	21 41%	11 22%	14 27%
Your body can become immune to antidepressants	11 22%	18 35%	17 33%	5 10%
Antidepressants can alter your personality	4 %	3 6%	28 55%	16 31%
When you take antidepressants you have less control over your thoughts and feelings	8 16%	28 55%	13 25%	2 4%
Skipping a day now and again prevents your body from becoming immune to the antidepressants	5 10%	23 45%	18 35%	5 10%

As long as you are taking antidepressants you do not really know if they are actually necessary	12 4%	32 63%	6 12%	1 2%
<b>Positive belief on depression and antidepressant</b>				
My emotional problems are solved by the antidepressants	3 6%	9 18%	26 51%	13 25%
You may take more tablets than prescribed on days when you feel more depressed	39 76%	8 16%	4 8%	
I think my depression is only due to factors associated with my personality	7 14%	19 37%	18 35%	7 14%
With antidepressants the causes of my depression disappear	3 6%	13 25%	25 49%	10 20%
Antidepressants make me stronger so I will be able to deal more efficiently with my problems	4 8%	13 25%	26 51%	7 14%
Antidepressants help me to worry less about my problems	2 4%	6 12%	35 69%	8 16%
You may take fewer tablets than prescribed on days when you feel better	34 67%	1 2%	10 20%	6 12%
If you forget to take the antidepressants on a certain day, it is better to take an additional dose the following day	42 82%	7 14%	2 4%	
<b>Partner's agreement</b>				
My partner agrees that antidepressants are a suitable treatment for my condition	2 4%	13 25%	22 43%	14 27%
My partner agrees that depression is the correct diagnosis of my condition	2 4%	11 22%	26 51%	12 24%
Antidepressants correct the changes that occurred in my brain due to stress or problems	2 4%	17 33%	28 55%	4 8%

**Table 2: Mean Follow up score 2 weeks after counselling**

Items	N	Mean
Do you take the antidepressant as prescribed	51	3.67
Have you forgotten to take the antidepressant	51	3.47
Will you continue the drug therapy	51	3.47
Are you willing to proceed antidepressant therapy	51	3.39
Do you think antidepressant helped you	51	3.14
How do you feel at the moment	51	3.00
Do you feel well informed about the antidepressant you received	51	2.94

## LIMITATIONS

Some of the limitations in this study are mentioned below. The study had a small sample size and only few number of factors were researched. For example, the question of whether gender plays a role in adherence could not be answered sufficiently, because the ratio between men and women was unbalanced. Similarly patients were assessed soon after 2 weeks which is very short duration. Improvement in

adherence might be because of this short duration as well. As its been discussed earlier that with long duration patient tends to be non adherent. Adherence seems to drop significantly after a longer period of time.<sup>12</sup> The conclusion of Demyttenaere was that the overall adherence rate of patients dropped 2.5% each month.<sup>13</sup> According to the studies, social support patients received or perceived was a significant factor for their adherence.<sup>14</sup> In the present study we collected information about social support on two questions of the ADCQ category 4 "partner agreement". The information we could generate from these questions gave us only a weak estimate of the actual amount of social support. More information, for example marital status, relation to their partners etc could have improved the completeness of this study. Furthermore, the method in which adherence was assessed in this study is limited. First, there was no control over the actual amount of medication taken by the patients. The question could be raised on how reliable their answers were when obtained during follow up interview. For future studies it would be of crucial importance to consider these factors.

## CONCLUSION

From this study we can conclude that pharmacist intervention can improve patient compliance in patients with depression and anxiety. Correlation between positive belief on antidepressant and follow up scores after counselling  $r=0.413$ ,  $p=0.003$  which is significant at  $p=0.01$  and positive correlation  $r=0.319$  between total scores on ADCQ questionnaires and follow up scores two weeks after counselling concludes that pharmacist's counselling could improve compliance in antidepressant therapy. Furthermore patients still lack knowledge about depression and doubt the need of their medication. Further investigations are needed to verify the actual use of psycho-education for better adherence as well as to improve compliance.

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