



PRESCRIPTION PATTERN IN PATIENTS OF BIPOLAR AFFECTIVE DISORDER

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ABSTRACT

Background: Bipolar affective disorder (BPAD) is one of the commonest psychiatric disorder which is characterized by repeated episodes in which the patient's activity and mood levels are significantly disturbed. Mood stabilizers are the drugs which are primarily used to steady or balance the mood.

Aims: To find out prescription pattern in patients of bipolar affective disorder.

Materials & Methods: The present observational cross-sectional study was conducted in the outpatient department (OPD) of Government Psychiatric Diseases Hospital, Jammu, involved 130 prescriptions of patients suffering from bipolar affective disorder. Data like age of patient, sex, number & name of mood stabilizers, other prescribed psychotropic drugs and combination of psychotropic medications were collected.

Results: Maximum i.e. 36.9% patients were in the age group of 21 to 40 years followed by 23.1% below 20 years. There were 63.1% males and 36.9% females. A single mood stabilizer was used in 71.5% patients whereas combination of mood stabilizers were used in 28.5% patients. About 40% patients received the combination of mood stabilizer, antipsychotics and benzodiazepines. Moreover antipsychotics were the most common comedications which were prescribed along with mood stabilizers to 68.5% patients followed by benzodiazepines in 59.2% patients.

Conclusion: From present study, it has been concluded that combination of mood stabilizers along with antipsychotics and benzodiazepines were preferred for better management of bipolar affective disorder patients. Hence use of polytherapy in cases of acute mania is recommended.

KEYWORDS : Antipsychotics, Benzodiazepines, Mania.

INTRODUCTION:

Bipolar affective disorder (BPAD) is the sixth leading cause of disability worldwide with a lifetime prevalence of about 3% in the general population. It is one of the commonest psychiatric disorder which is characterized by repeated episodes in which the patient's activity and mood levels are significantly disturbed. This disturbance consists on some occasions of an elevation of mood, activity, euphoria and increased energy (mania or hypomania) and on other occasions of a lowering of mood, with activity and decreased energy (depression).¹ Many patients bipolar affective disorder experience occupational and psychosocial difficulties, marital failure, financial problems, neuropsychological deficits, substance abuse and suicide.² Soon after hospitalization recovery may be achieved but it is difficult to achieve fully functional recovery.¹

Mood stabilizers are the drugs which are primarily used to steady or balance the mood. These drugs are used as the first line of treatment of bipolar disorder both for acute management as well as for prophylaxis. Most mood stabilizers has anti manic properties and were primarily used for the treatment of manic episodes with the exception of lithium and lamotrigine which has well established evidences of their efficiency in depressive phase and hence can be used in depressive phase of bipolar affective disorder. Mood stabilizers are also used to control impulsivity and aggression in various other psychiatric disorders which include borderline personality disorders, attention deficit hyperactivity disorder (ADHD) and conduct disorders. Variations in prescription pattern of mood stabilizers varies

from psychiatrist to psychiatrist, culture to culture and country to country with respect to availability of mood stabilizers and severity of the mood symptoms.³ Hence the present study was conducted with the objective to find the prescription pattern in patients of bipolar affective disorder.

METHODOLOGY:

The present observational cross-sectional study was conducted in the outpatient department (OPD) of Government Psychiatric Diseases Hospital, Jammu involved 130 prescriptions of patients suffering from bipolar affective disorder. Selected patients were first diagnosed according to DSM 5 criteria⁴ by the consultant psychiatrist. The first 5 alternate patients who were diagnosed as suffering from bipolar affective disorder with or with psychotic features on alternate OPD were selected for the study. Data like age of patient, sex, number & name of mood stabilizers, other prescribed psychotropic drugs and combination of psychotropic medications were collected.

Statistical analysis:

Analysis of data was done using statistical software MS Excel / SPSS version 17.0 for windows. Data presented as percentage (%) as discussed appropriate for quantitative and qualitative variables.

RESULTS AND OBSERVATIONS:

Table 1 shows that 36.9% patients were in the age group of 21 to 40 years followed by 23.1% below 20 years and 21.5% above 60 years. The least number of patients i.e. 18.5% were in the

age group of 41 to 60 years. There were 63.1 % males and 36.9% females.

Table 2 shows that a single mood stabilizer was used in 71.5% patients whereas combinations of mood stabilizers were used in 28.5% patients. Divalproex sodium was the most common mood stabilizer which was used in 84.6% patients followed by lithium in 40.7% patients and carbamazepine in 11.5% patients. Moreover antipsychotics were the most common comedications which were prescribed along with mood stabilizers to 68.5% patients followed by benzodiazepines in 59.2% patients. Similarly antidepressants and propranolol were prescribed to 3.8 and 9.2% patients respectively. The other psychotropic drugs were prescribed to 12.3% patients.

Table 3 shows that the most common combination was of mood stabilizers with antipsychotics & benzodiazepines and was prescribed in about 40% patients followed by other combinations of drugs.

DISCUSSION:

There were about 36.9% patients between 21 to 40 years followed by 23.1% below 20 years, 21.5% above 60 years and 18.5% between 41 to 60 years. The age of onset of bipolar affective disorder is as early as 5 years to 50 years or even more⁵ and it tends to affect the economically productive section of the society.⁷ Our finding is in accordance with Gania AM et al who found 26% patients of BPAD were age group of 21- 30 years.¹ Similarly Trivedi JK et al had also observed that 30% patients of BPAD were between 21 to 30 years.³ Similar results were also observed by other studies.⁶

63.1% patients in our study were males whereas 36.9% were females. In Indian setup, most of the times males are the only bread winner of the family and their illness is always taken seriously³ compared to females which may be due to gender bias. Our finding is consistent with Chakrabarti S and Gill S who observed that 68% of the bipolar patients were males.⁷ Similarly Nehra et al had also found that 64% bipolar patients were males.⁸ Our finding can be supported by Trivedi JK et al who observed that there were more males than females among bipolar patients.³ Similar results were also observed by other studies.^{2,9,10}

In the present study 71.5% patients were on single mood stabilizers and 28.5% were on combination of mood stabilizers. Majority of the patients coming to the OPD's of our hospital were from rural & far flung peripheral areas and were of lower and middle socioeconomic status and adding another mood stabilizer will add more cost to the total treatment resulting in poor follow ups and less compliance to the treatment.³ Moreover a single mood stabilizer should be started at the initiation of treatment, should be increased to full dose before shifting or augmenting with another agent.⁵ Our finding is in accordance with Trivedi JK et al who also observed use of single mood stabilizers in 79% patients.³

About 84.6% patients had received divalproex sodium as mood stabilizer whereas lithium and carbamazepine were used in 40.7% and 11.5% patients respectively. Majority of the patients in the present study were cases of acute mania and divalproex sodium is used more in these cases as it had rapid onset of action compared to lithium.⁵ Most of the times due to disruptive nature of manic episodes, depressive symptoms were likely to be missed by the attendants resulting in continuation of the mood stabilizer during subsequent visits which was initially started for the treatment of acute mania.³ Our finding is in agreement with Shaktibala D et al who observed that 82.6% patients were receiving valproate/divalproex sodium compared to lithium in 10.5%.¹¹ Finding similar to our study was also observed by Goyal V et al.¹² However Trivedi JK et al had observed that lithium was used as

mood stabilizer in 57% patients whereas valproate in only in 43% patients.³

In the present study mood stabilizers like oxcarbamazepine were not prescribed to patients. The efficacy of carbamazepine is almost similar to oxcarbamazepine.¹³ As most of the patients in our study were financially not sound we prefer those drugs which has high efficacy and low cost so that better compliance of medications can be maintained. Similarly lamotrigine was also not represented in this study due to multiple reasons like slow titration of doses in order to reach effective therapeutic dose which necessitates multiple OPD visits and fear of adverse reactions like rash and stevens johnson syndrome.⁵ Our finding is consistent with Trivedi JK et al who also observed similar results.

Antipsychotics were the most common drugs prescribed along with mood stabilizers in 68.5%. Majority of the patients of mania were impulsive and preoccupied with persecutory ideas which may evolve into complex delusional system for which antipsychotics can be used.⁵ Our finding is consistent with Trivedi JK et al who found that antipsychotics as comedications were prescribed along with mood stabilizers in 52% patients.³ The second most common comedication prescribed in our study were benzodiazepines and were prescribed in 59.2% patients. Our finding is in contrast with Trivedi JK et al who observed that benzodiazepines were the most common comedications prescribed alongwith mood stabilizers.³ The reason for less prescription of benzodiazepines in our study was that once the acute manic episode subsides we taper off benzodiazepines on subsequent follow ups due to benzodiazepine dependency related issues. The other comedications which were used along with mood stabilizers were antidepressants (3.8%), propranolol (16.9%) and other drugs (12.3%).

In the present study 83.1% patients were using combination whereas only 16.9% patients were using single mood stabilizer. The reason for this could be that the patients coming to OPD's of our hospital may have treated outside with antipsychotics / mood stabilizers and yet has not shown any improvement. Also a large number of patients relapses even with an adequate dose of single mood stabilizer indicating the need for augmentation with another mood stabilizer.³ Our finding is in agreement with Levine J et al who observed that 20% patients of BPAD were receiving monotherapy and 80% patients were receiving polytherapy.¹⁴ Finding of ours can further be supported by Trivedi JK et al who also observed that majority of the bipolar patients were receiving polytherapy.³

About 40% patients received a combination of mood stabilizers, antipsychotics and benzodiazepines followed by other combinations. Patients of acute mania are usually unmanageable when their attendants brought them to the hospital. There presenting complaints include excessive talking, high thinking, delusion of grandiosity & persecution, impaired sleep etc.⁵ Hence initial symptomatic management according to presenting complaints should be given which includes mood stabilizers for excessive talking & grandiosity, antipsychotics for aggression and benzodiazepines for disturbed sleep and comorbid anxiety.³ Our finding is in agreement with Trivedi JK et al who observed combination of mood stabilizer, antipsychotics and benzodiazepines were the most frequent ones prescribed to the patients of BPAD.³

CONCLUSION:

From present study, it has been concluded that at present divalproex sodium is the mood stabilizer which is mostly commonly prescribed among the patients of the bipolar affective disorder. Also combination of mood stabilizers along with antipsychotics and benzodiazepines were preferred for better management of these patients. Hence use of polytherapy in cases of acute mania is recommended.

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DECLARATION:

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Table 1 shows age and sex of the studied patients

	Number of patients	Percentage
Age (in years)		
Below 20	30	23.1
21-40	48	36.9
41-60	24	18.5
Above 60	28	21.5
Sex		
Male	82	63.1
Female	48	36.9

Table 2 shows number, name of the mood stabilizer and the name of the comedication prescribed

	Number of patients	Percentage
Number of mood stabilizer		
Single	93	71.5
Combination	37	28.5
Name of the mood stabilizer		
Divalproex sodium	110	84.6
Lithium	53	40.7
Carbamazepine	15	11.5
Name of the co medication		
Antipsychotics	89	68.5
Benzodiazepines	77	59.2
Antidepressants	5	3.8
Propranolol	12	9.2
Others	16	12.3

Table 3 shows combinations of the psychotropic medication prescribed

Combinations	Number of patients	Percent age
Only mood stabilizer	22	16.9
Mood stabilizer + antipsychotics	16	12.3
Mood stabilizers + antipsychotics + benzodiazepines	52	40
Mood stabilizers + antidepressant + antipsychotic + benzodiazepines	4	3.1
Mood stabilizers + antidepressant + benzodiazepine	1	.7
Mood stabilizers + benzodiazepines	7	5.4
Mood stabilizers + antipsychotics + benzodiazepines + propranolol	8	6.2
Mood stabilizers + antipsychotics + propranolol	4	3.1
Mood stabilizers + antipsychotics + benzodiazepines + others	5	3.8
Mood stabilizers + others	11	8.5

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