

Prevalence of Risk Factors and Pharmacoepidemiology of Bipolar Mood Disorder Therapy

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ABSTRACT

Background: Bipolar mood disorder is a mental disorder that is characterized by Highs (mania) and lows (depression) of mood. Bipolar mood disorder is affecting only 1% of the population worldwide. Aims of our study were to determine the prevalence of Bipolar mood disorder with reference to age, to observe various risk factors leading to Bipolar mood disorder, to study various side effects resulting from Bipolar mood disorder therapy and management and impact on compliance. **Methods:** And observational and cross sectional study was conducted for 2 months in different hospitals of Lahore. A detailed questionnaire was designed It was filled by 100 patients during face to face interviews. Data was collected and analysed and the results were presented in graphs and tables form. **Results:** The population most affected by bipolar disorder belonged to 41 – 50 years (55%) of age. Medications were the first line treatments. Most doctors prescribed anti-seizure (40%) medications like Valproic acid, anti-psychotic (20%), anti-depressants (10%) and mood stabilizers (30%) like Lithium. Most common side effects of these medications were weight gain, thirst, nausea and vomiting. Mostly weight gain was observed in 80% of patients. Electroconvulsive therapy was not prescribed at all. The patients showed little compliance with the medications because the patients were not in their good mental state. Most of the patients were hesitant towards taking their medicines (60%) because of their disturbed mental condition. Risk factors of this disease are genetic factors, family history, age and brain structure and functioning. Family history appeared to be a major risk factor in incidence of this disorder (55%). **Conclusion:** Pharmacological treatment was the most effective for Bipolar mood disorder.

Keywords: Prevalence age wise and gender wise, major risk factors, medications prescribed, side effects, patient compliance.

INRODUCTION

Bipolar disorder is a condition that is characterized by the extreme shifts in mood. The person suffers from the bipolar mood disorder experiences the alternating episodes of extreme mania and major depression. The episodes of mania and depression can be severe but the mood may be normal between the episodes of highs and lows of the mood. Major contributing risk factors are, family history, age, structure and function of the brain. Family history of bipolar disorder is the strongest predictor of developing bipolar disorder. The structure and function of brain is also altered in the patients having this disease, but it is unclear if these changes

occurred before or after clinical presentation of the disorder. Neurotransmitter imbalances appear to play a key role in bipolar mood disorder. [1] The pathophysiology of bipolar disorder is unknown, but the etiology is thought to involve biological, psychological, and social factors. [2]

The signs and symptoms of the bipolar mood disorder are severe. The symptoms of the bipolar mood disorder are feeling overly happy, irritable mood, talking very fast, restlessness, little or no sleep, behaving impulsively, suicidal behaviour, periods of feelings worried, feeling tired, dependence on sleeping pills, abuse of alcohol and drugs. [3] The prevalence of bipolar disorder is estimated to be relatively small. [4] The term life time prevalence (LTP) tells about the number of people within a population who are expected to develop a disorder at some time in their lives. For bipolar disorder, the LTP is 4%. The WHO states that across 60 million people worldwide have bipolar disorder. [5] Bipolar disorder converses the highest risk of suicide among major psychological disorders, it is associated with an increased rate of death by suicide which contributes to overall mortality rates. the risk of suicide in bipolar patients to be 20–30 times higher than that of the general population. [6]

Lithium carbonate is the most commonly used drug for the long-term treatment of the mania and depression. Lithium is used at least for 6 months. The first line medication is lithium. It reduces the bipolar mania and depression relapses and reduces the risk of suicidal attempts. It also reduces the reoccurrence of bipolar mood disorders. [7] Anticonvulsants are used for the treatment of manic episodes. Antipsychotics for example Aripiprazole, olanzapine, and risperidone are also used for the treatment of bipolar mood disorder. [1] Mood stabilizers and antidepressants are also used for the treatment. All these medications have side effects that may be serious. These side effects can be less disturbing after few weeks of therapy but don't stop taking medications. If you stop taking medications suddenly then the side effects or withdrawal effects may appear. [8] Electroconvulsive therapy may help if other treatments are not effective but it is not used mostly. The most common side effect of prescribed medication is weight gain. And other side effects are blurred vision, dry mouth, and drowsiness and muscle spasms. [9] Pharmacists have a role in promoting the importance of medication adherence and educating patients about how to recognize triggers for their mood episodes.

Pharmacists can use motivational interviewing techniques to help patients become comfortable with their diagnosis, educate them about the effectiveness and adverse effects of their medications, and them to take responsibility for managing their condition. Reviewing optimal administration times and potential side effects with the patients will help pharmacists improve adherence in patients and reduce the number of hospital visits. [10]

AIMS AND OBJECTIVES:

In the light of above discussion, following aims and objectives are set forth for this study.

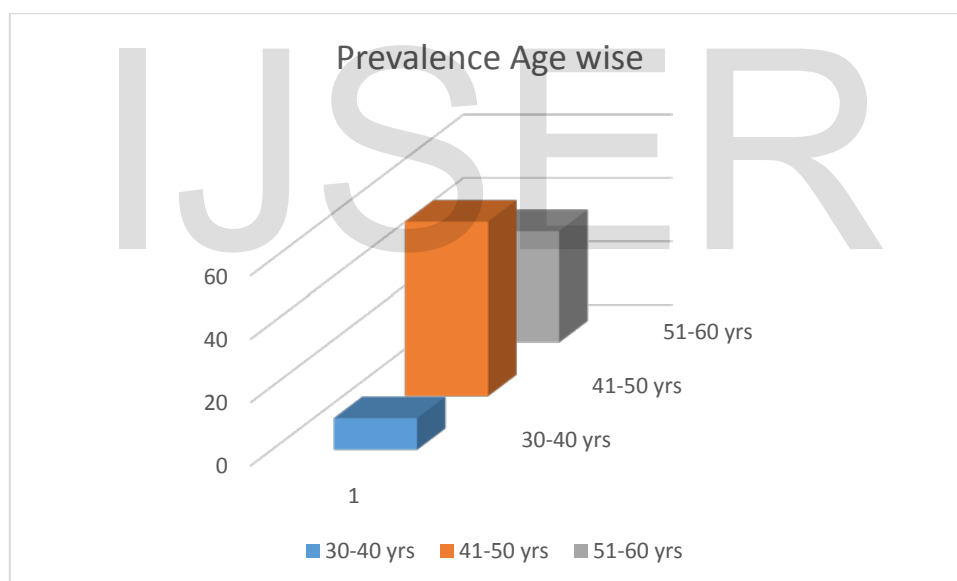
1. To determine prevalence of bipolar mood disorder with reference to age.
2. To observe various risk factors leading to bipolar mood disorder.
3. To study various side effects resulting from bipolar mood disorder therapy and management and impact on compliance.

MATERIAL AND METHOD

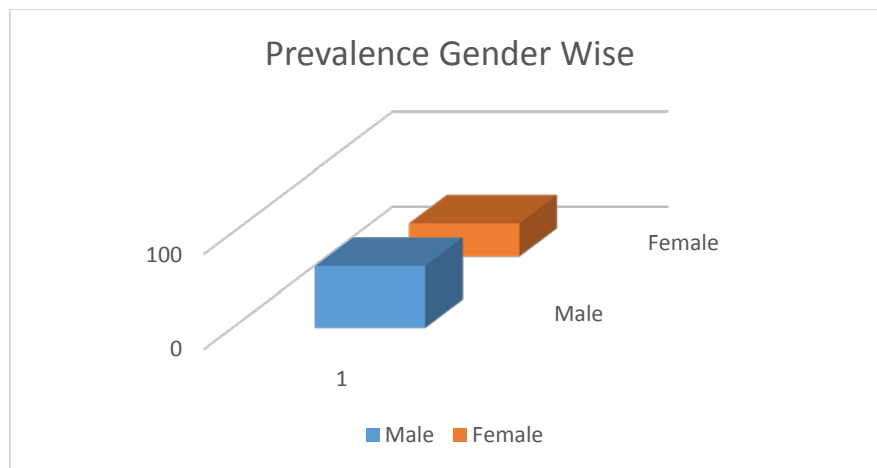
An observational and cross sectional study was conducted at different private and public sectors hospitals of Lahore, Pakistan. The duration of the study was 2 months and 100 patients of bipolar mood disorder were selected randomly. A detailed questionnaire was designed related to prevalence of Bipolar mood disorder with reference to age, various risk factors leading to Bipolar mood disorder and various side effects resulting from Bipolar mood disorder therapy and management and impact on compliance. These questionnaires were filled in various public and private sector hospitals of Lahore during face to face interviews with the patients. The collected data was then analysed statistically and results were shown in the forms of graphs.

RESULTS

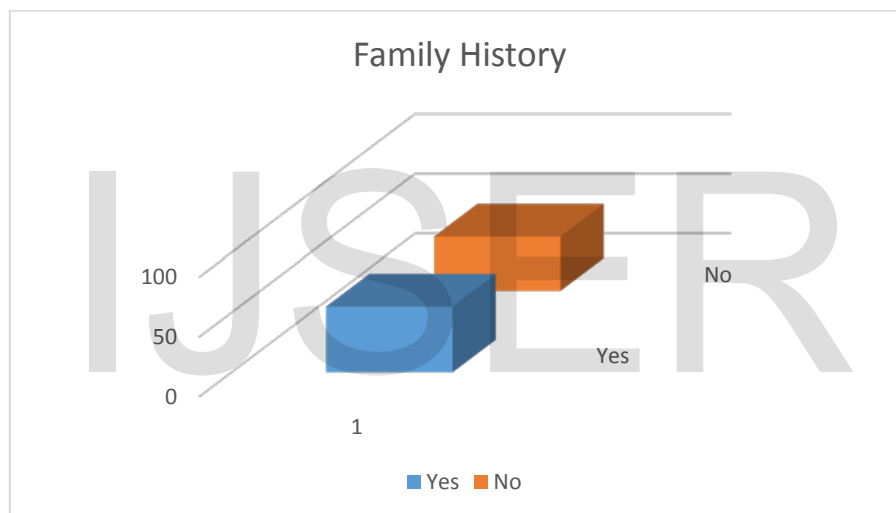
Graph No.1: Prevalence of Bipolar Disorder according to age. The age group most affected by this disorder was of 41-50 years (55%) and the people with age group of 30-40 years (10%) were least affected.



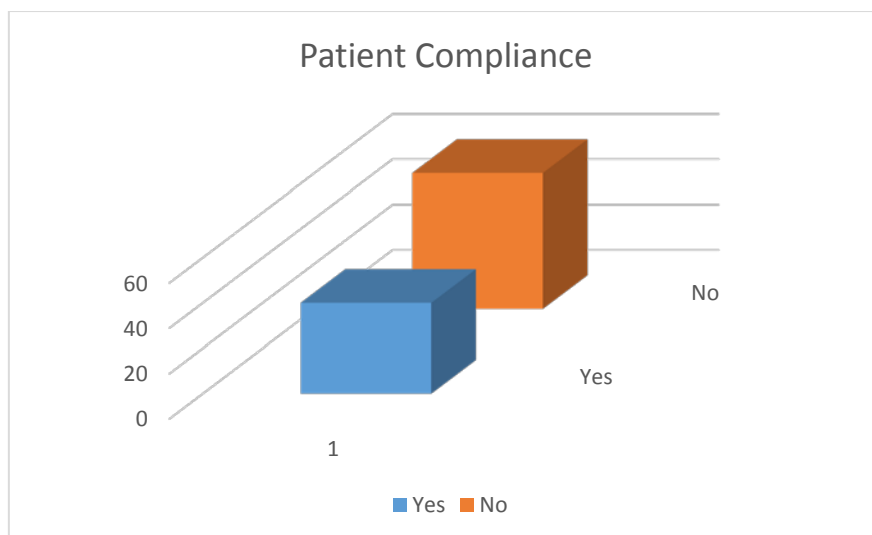
Graph No.2: Prevalence according to gender. Bipolar mood disorder prevailed most commonly in males. Out of 100 patients 65% males and 35% females were affected by this disease.



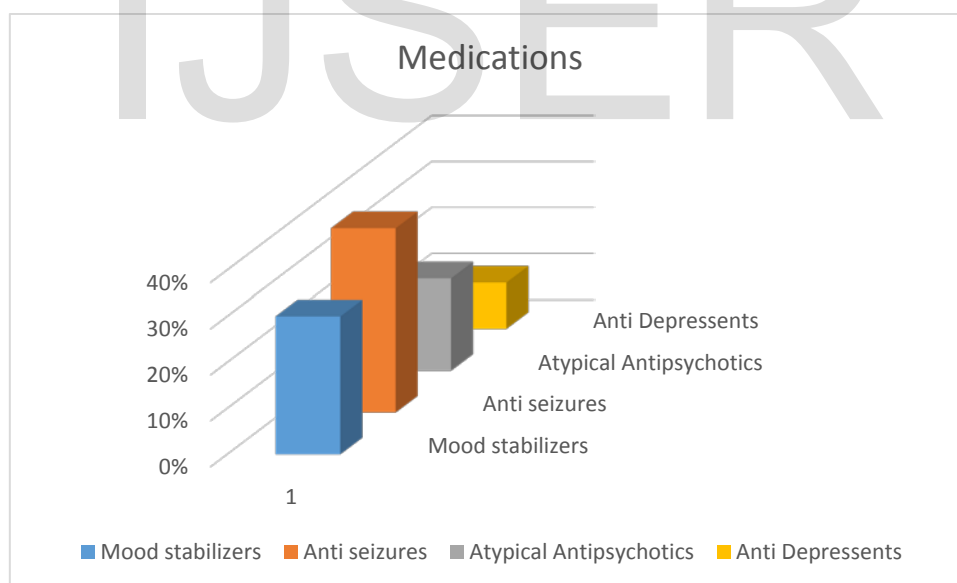
Graph No.3: Major Risk Factor Family history appeared to be a major risk factor in incidence of this disorder (55%).



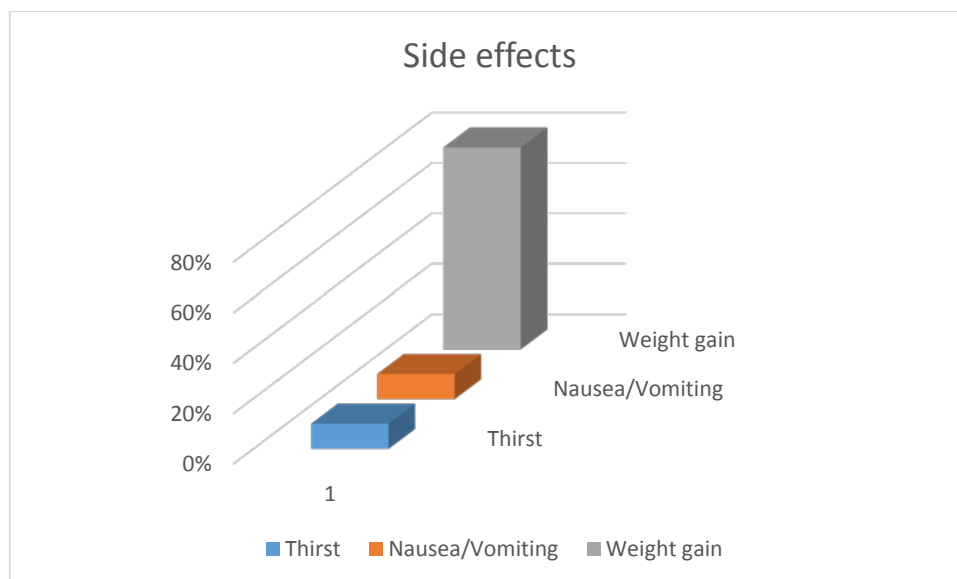
Graph No.4: Patient Compliance. The patients showed little compliance with the medications because the patients were not in their stable mental state. Most of the patients were hesitant towards taking their medicines (60%).



Graph No.5: Medications Prescribed. Most doctors prescribed anti-seizure (40%) like Valproic acid, anti-psychotic (20%), anti-depressants (10%) and mood stabilizers (30%) like Lithium.



Graph No.6: Side Effects. After this therapy patients experienced side effects. Most common side effects were weight gain, thirst, nausea and vomiting. Mostly weight gain was observed in 80% of patients, thirst was present in 10% of patients and nausea/vomiting was also present in 10% patients.



DISCUSSION

After the survey conducted, it was found that the total percentage effected mostly by bipolar maniac disorder belongs to the age group of 41-50 years of age (55%) and the most effected gender was males (65%). Risk factors most commonly contributing to the disease was family history. 55% of the patients had a family history of bipolar mood disorder. Patient non-compliance was a major set-back towards the treatment, because of mental instability. 60% of the patients were non-compliant towards the therapy provided. Most commonly prescribed medications included anti-seizure medications (45%) like valproic acid. Some physicians prescribed mood stabilizers (30%), while prescribed anti-psychotics (20%) and anti-depressants (10%). Side effects associated with these medications most commonly included weight gain (80%), whereas the less common side effects include nausea/vomiting (10%) and thirst (10%).

CONCLUSION

Bipolar Mood Disorder being a mental disorder is characterized by constantly changing moods between depression and mania. Symptoms of the disease are rapid speech, irritability, weight loss, excessive worry, hallucinations difficulty in sleeping. This disease was more prevalent in men and in elderly people. Risk factors included genetics, family history, age and brain structure and functioning. Commonly observed side effects included weight gain and thirst. Most of the physicians prescribed the medications as per current treatment guidelines. Pharmacological treatment is the first choice for Bipolar disorder. Need of hour is to improve patient quality of life through Pharmacist involvement in health care system.

RECOMMENDATIONS

- All treatment decisions need to be made in consultation with the patient or family members

- Pharmacist must be available to improve quality of life of patients.
- Proper counselling sessions should be arranged by physician/pharmacist.
- Awareness campaigns regarding the prevalence of risk factors should be arranged at government level.

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