



BIPOLAR DISORDER IN RURAL POPULATION

Dr. Hemant Belsare

Assistant Professor Dept. of Psychiatry Vedanta Institute of Medical Sciences Palghar Dahanu, Maharashtra-401606

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Corresponding author: Dr. Hemant Belsare

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Abstract

Introduction: Mental disabilities were the second leading cause of disease burden in terms of years lived with disability (YLDs) and the sixth major cause of disability-adjusted life-years (DALYs) in the world in 2017, creating a great challenge to health systems, especially in lower- and medium income nations. This study was carried out with an aim to evaluate the bipolar disorder course in rural area. Data on the progression of bipolar disorder were collected in a group of patients previously diagnosed of bipolar disorder.

Material and Methods: Cases of bipolar disorder were diagnosed with a psychiatric condition, using the ICD-10 system. The bipolar disorder (previously manic-depressive psychosis, manic or circular) requirement is fulfilled by 24 patients. A follow-up assessment of these patients was performed at their place of residence over a span of 6 months. Frequent travel to rural areas was included in this study. Written informed consent was obtained from all the participants. The Schedule for Affective Disorders and Schizophrenia-Lifetime variant (SADS-L) and the Longitudinal Interval Follow-up Tests (LIFE) were used to assess cases.

Results: A total of 24 patients who met the criteria were included in the study. No death was observed in the follow up visits. direct interview was carried out in 24 cases. There were 10 male and 14 females included in the study. Mean age of onset of bipolar disorder was 29 ± 13.45 years. Duration of illness was observed as 11.6 ± 7.58 years. Number of episodes during study was 5.4 ± 3.8 . Manic episodes (weeks) were 12.4 ± 11.9 . Depressive episodes (weeks) were 18.5 ± 17.6 and Mixed episodes (weeks) were 9.8 ± 12.9 . Three (12.5%) patients were having single lifetime episode, 13(54.17%) experienced 2-9 episodes and 4 (16.67%) cases had >10 episodes. Rapid cycling was observed in 4 (6.67%). 13 (54.17%) were hospitalised at least once in their lifetime and 3 (12.5%) of the cases were never taken any treatment.

Conclusion: This disorder started predominantly with mania, and study indicates that mood at the outset of the study may forecast the polarity of potential recurrence.

Keywords: mania, bipolar disorder, Depressive episodes, Manic episodes and Mixed episodes

Introduction

Mental disabilities were the second leading cause of disease burden in terms of years lived with disability (YLDs) and the sixth major cause of disability-adjusted life-years (DALYs) in the world in 2017, creating a great challenge to health systems, especially in lower- and medium income nationsⁱ. Several longitudinal studies indicate that regular recurrences and multiple depressive symptoms characterise bipolar disorder^{ii, iii}. In developed countries, only a few longitudinal evaluations of bipolar patients have been carried out^{iv} and there is a higher indication of manic episodes.

This study was carried out with an aim to evaluate the bipolar disorder course in rural area. Data on the progression of bipolar disorder were collected in a group of patients previously diagnosed of bipolar disorder.

Material and Methods:

Cases of bipolar disorder were diagnosed with a psychiatric condition, using the ICD-10 system^v. Usually, at around 6-month intervals, patients underwent home visits from staff members and were given psychotropic drugs as their particular psychiatric disorder required. They were free to accept or reject care, even where they were at risk of damage from their actions, where they might be committed to management involuntarily. The bipolar disorder (previously manic-depressive psychosis, manic or circular) requirement is fulfilled by 24 patients. A follow-up assessment of these patients was performed at their place of residence over a span of 6 months. Frequent travel to rural areas was included in this study. Written informed consent was obtained from all the participants.

The Schedule for Affective Disorders and Schizophrenia-Lifetime variant (SADS-L)^{vi} and the Longitudinal Interval Follow-up Tests (LIFE)^{vii} were used to assess cases. When we were able to successfully perform a direct face-to-face

interview with the patient and at least one other family member who had witnessed the patient for a considerable time during the follow-up period, the assessment was deemed complete. The SADS-L interview was administered cautiously to monitor for missing depressive signs or episodes. The final data was used to construct a longitudinal course of the disease of the patient using the Life Chart System.

Statistical analysis was done by using the SPSS version 21 software and data was analysed. Means and standard deviations for continuous variables and frequencies for categorical variables have been used in descriptive studies. In a tabular type, the findings are summarised. Data were also evaluated to classify possible life-course correlates which included a logistic regression study using the occurrence of fast cycling as the dichotomous dependent variable and the administration as the predictive variable of every psychopharmacological care.

Results:

A total of 24 patients who met the criteria were included in the study. No death was observed in the follow-up visits. Direct interview was carried out in 24 cases. There were 10 male and 14 females included in the study

Table 1: Variables in cases with bipolar disorder

Variables	Mean \pm (SD)
Age of onset of bipolar disorder (in years)	29 \pm 13.45
Duration of illness (in years)	11.6 \pm 7.58
Number of episodes	5.4 \pm 3.8
Manic episodes (weeks)	12.4 \pm 11.9
Depressive episodes (weeks)	18.5 \pm 17.6
Mixed episodes (weeks)	9.8 \pm 12.9

Mean age of onset of bipolar disorder was 29 \pm 13.45 years. Duration of illness was observed as 11.6 \pm 7.58 years. Number of episodes during study was 5.4 \pm 3.8. Manic episodes (weeks) were 12.4 \pm 11.9. Depressive episodes (weeks) were 18.5 \pm 17.6 and Mixed episodes (weeks) were 9.8 \pm 12.9.

Table 2: Illness characteristics of course and onset of bipolar disorder.

Illness characteristics	Number (percentage)
Lifetime episodes	
Single episode	3 (12.5%)
episodes	13(54.17%)
>10 episodes	4 (16.67%)
Rapid cycling	4 (6.67%)
Hospitalised	13 (54.17%)
Never treated before	3 (12.50%)

3 (12.5%) patients were having single lifetime episode, 13(54.17%) experienced 2-9 episodes and 4 (16.67%) cases had >10 episodes. Rapid cycling was observed in 4 (6.67%). 13 (54.17%) were hospitalised at least once in their lifetime and 3 (12.5%) of the cases were never taken any treatment.

Alcohol dependence was observed in 8 (33.3%) cases and all were male.

DISCUSSION AND CONCLUSION:

As a circumscribed disorder entity, Kraepelin identified 'manic-depressive psychoses' in 1896. Since then in the Indian opinion, manic depressive syndrome, or the present word used nosologically as 'bipolar' personality disorder, has been researched. Although there seems to be no orderliness in the study of understanding this condition in the Indian context, one gets an idea that from the Indian context, all things such as nosology, psychiatric syndromes, course, pharmacological and special communities were attempted to be looked at^{viii}.

R Kumar et al^{ix}. 2000 at Ranchi's has researched genetic imprinting in bipolar affective disorder. Central Institute of Psychiatry (CIP); bipolar affective disorder was diagnosed in the first episode. The findings of this analysis did not create a phenomenon of imprinting in non-mendelian patterns of inheritance out of 79 conservative first-degree cases, leading the authors to believe that bipolar disorder is heterogeneous. A very limited sampling size may have made it impossible for the findings to be reported on. In 30 patients with bipolar disorder and 30 matched controls for age, ethnicity, and schooling with no past, current or family history of mental disease, M Taj and Padmavathi R measured neuro-psychological-neuro-cognitive disability. This research reports that people with bipolar disorder had decreased memory of concentration and executive skills in remission and maintenance stages of mood stabilisers^x.

In this study Mean age of onset of bipolar disorder was 29 \pm 13.45 years. Duration of illness was observed as 11.6 \pm 7.58 years. Number of episodes during study was 5.4 \pm 3.8. Manic episodes (weeks) were 12.4 \pm 11.9. Depressive episodes (weeks) were 18.5 \pm 17.6 and Mixed episodes (weeks) were 9.8 \pm 12.9. It has been observed that 3 (12.5%) patients were having single lifetime episode, 13(54.17%) experienced 2-9 episodes and 4 (16.67%) cases had >10 episodes. Rapid cycling was observed in 4 (6.67%). 13 (54.17%) were hospitalised at least once in their lifetime and 3 (12.5%) of the cases were never taken any treatment.

Similar results were observed in other studies for mean number of episodes/year^{xi}. US trials also found that 19-28 percent of participants stay relapse-free over a span of 4-5 years, and 11 percent of subjects have not relapsed during

another 10-year follow-up review^{xii}. Only 3 patients in this study had single manic episode.

Indian literature published a few case studies of comorbid, other psychiatric illnesses of bipolar mood disorders. Sengupta et al. identified dysmorphia as a comorbid condition arising in both depressive symptoms and manic episodes in the case of bipolar depression disorder^{xiii}. A case of bipolar affective disorder with obsessive compulsive disorder as a comorbidity in the manic period of the disorder was addressed by H Kalra et al^{xiv}. The coping problems were discussed. In this study 8 cases were alcohol dependant as a comorbid condition. Over-representation of mania was recorded mainly from the tropical regions among bipolar patients^{xv, xvi}.

Limitation of this study was the small no of sample size and hence structured evaluation cannot be performed in this study. In this study it was observed that this disorder started predominantly with mania, and study indicates that mood at the outset of the study may forecast the polarity of potential recurrence.

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