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GENDER DIFFERENCE IN CLINICAL PRESENTATION AND SOCIO-DEMOGRAPHIC VARIABLES OF PATIENTS WITH BIPOLAR AFFECTIVE DISORDER

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ABSTRACT **Background:** Previous studies have demonstrated that bipolar patients may differ in several features according to gender, but a number of the differences found remain controversial. The aim and objective of the current study is to compare the differences in clinical presentation and influence of key variables of patients with bipolar affective disorder in regard to gender. **Materials & Methods:** Patients with diagnosis of first episode mania and BPAD currently mania episode (F30 & F31 ICD-10) were interviewed, diagnosis according to ICD10 from the Outpatient department of Psychiatry in Athma Hospital Trichy, Chennai, Tamil Nadu, Indian. Then socio-demographic data sheet a semi-structured performa was applied followed by Young Mania rating scale (YMRS). **Results:** There was no gender difference in the clinical symptoms when patients presented with first episode mania. whereas substance use disorders are more common in men. Subsequent episode of mania, males presented with psychomotor agitation, increased appetite and increased sexual drive. Mania severity as measured by YMRS is significantly more in male patients. **Conclusion:** The study shows that there is a pressing need to identify the gender difference in severity of mania symptoms and associated factors. From the current study 1st episode mania presents similar in both genders, but subsequent episodes appear more severe in male than female. It helps the mental health` professionals so that has better results in terms of achieved faster and accelerated recovery.

INTRODUCTION

Bipolar affective disorder (BPAD) is one of the potentially disabling illnesses, significantly affecting person's ability to function in work and social situations[1]. Gender in unipolar mood disorder has shown enough evidence that depression is approximately two times as common in women than in men[2].. While as in bipolar disorder, no important gender distinctions are perceived and there is equal rate of prevalence among both genders [3]. In bipolar disorder we see a wide range of clinical features and it has been seen that presenting features vary among both genders in first or subsequent episodes. Also Clinical course and outcome of BPAD individuals when compared on gender has shown specific differences[4]. Early (pre-teen) age of onset of first mania, substance use disorders and legal problems, were reported to be more common in men[5], Women are more prone to develop depressive/mixed episodes, vulnerable during pregnancy/postpartum period. Women may have a higher risk of developing rapid-cycling bipolar disorder and dysphoric or mixed mania with seasonal pattern of the mood [6][7].

There has been limited epidemiological studies conducted about BPAD that has led to increased prevalence and it can be due to, better diagnostic instruments, especially with the implementation of DSM-IV diagnostic criteria[8]. On the other hand, these studies did not evaluate the gender composition of recruited samples, and did not emphasised on the initial presenting symptoms of both the genders leaving question unanswered which could had led to the better understanding of the disease and lead to an improvement in its recognition of symptoms in male and female gender, which could have helped in early diagnosis and understanding the course and outcome of the illness. In this regard, our results could lead the way for national or international epidemiological studies with the aim of more accurately assessing gender-specific clinical features of BPAD.

Material And Methods
Aims and objectives

To compare the differences in clinical presentation and influence of key variables of patients with bipolar affective disorder in regard to gender.

Sample

A Sample of 96 patients was taken into a hospital based study from Athma Hospital Trichy, Chennai, Tamil Nadu, Indian. After rapport building and consent seeking the sample, out of 96 patients, 6 patients did not give consent. Later 90 patients were taken into study. The current study was taken on purposive basis with the age ranged from 15-70 years.

Measures

1. Socio-demographic Data Sheet: It was developed to collect information on socio-demographic profile which are relevant in the context of such patients. It includes variables of gender (male & female), age, residence (rural & urban), education level, occupation, marital status (married, unmarried, divorce, widow) and Socio economic status.

2. Young Mania rating scale (YMRS): It is one of the most frequently utilized rating scales to assess manic symptoms. The scale has 11 items and is based on the patient's subjective report of his or her clinical condition over the previous 48 hours. The YMRS is a rating scale used to evaluate manic symptoms at baseline and over time in individuals with mania. The scale is generally done by a clinician or other trained rater with expertise with manic patients and takes 15–30 minutes to complete.

Procedure

The patients visiting the Outpatient department of Psychiatry in Athma Hospital Trichy were taken for the current study. The written informed consent was taken from each patient. Those patients who were not willing to give consent were left from the study. Later the consented patients were screened for Bipolar affective disorder. Patients with diagnosis of first episode mania and BPAD currently mania episode (F30 & F31 ICD-10)[9] were interviewed, diagnosis according to ICD10. Then socio-demographic data sheet a semi-structured performa was applied followed by Young Mania rating scale (YMRS).

Statistical Analyses

Descriptive statistics like frequency, percentages, mean and SD were used to find the distribution of various socio-demographic variables across gender (male & female). Data was analysed using the software package SPSS version 21.

RESULTS
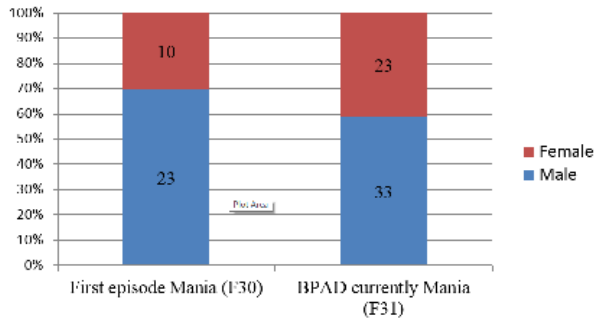
Graph 1: Frequency of patient's diagnosis with first episode mania and BPAD currently mania episode.

The graph 1 shows that most of the patients 56 patients with BPAD currently mania episode (F31) were 33 male and 23 female patients. Moreover 33 patients with first episode mania (F30) were 23 male and 10 female. Total of 56 (62%) were males and 33 (38%) were females.

Table 1: Socio demographic profile and frequency among gender of patients with BPAD currently mania episode.

Characteristics		Male	Female
Marital Status	Married	28	26
	Unmarried	27	7
	Divorce	2	3
	Widow	0	2
Education Level	Illiterate	4	5
	Primary	26	15
	Secondary	10	4
	Graduate	15	9
Occupation	Unemployed	18	27
	Semi-skilled worker	28	2
	Skilled worker	10	4
Socio-economic Status	Less than 5000	11	10
	5000-10000	30	18
	Greater than 10000	15	5
Residence	Rural	31	27
	Urban	18	14

Table 1 shows the demographic details of the sample. Majority of the sample in male 28 patients and in female 26 patients belong to married marital status. In education level the majority of the patients, 26 patients in male and 15 patients in female were found primary level of education. Most of the patients found to be males with 28 patients with occupation of semi-skilled workers, however in female 27 patients were found to be unemployed. Most of the patients belong to male with 30 patients had Rs 5000-10000 socio-economic status and 18 patients belong to females with same socio-economic status. Moreover majority of patients had rural background with 31 patients male and 27 patients female.
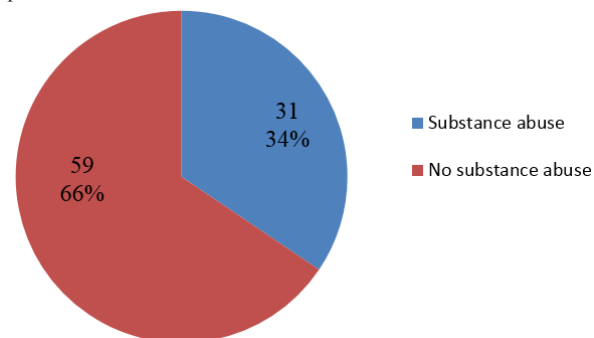
Graph 2: Frequency and Percentage of people with or without substance abuse.

From the graph 2, it is evident that the 31 (34%) from the sample reported substance abuse however 59 (66%) sample did not report any kind of substance abuse. Moreover out of 31 substance abusers 29 are found to be males and rest 2 found to be female population.

Table 2: Summary results showing the difference between of clinical features in patients among gender.

Clinical Features	Male	Female	p value
Elevated Mood	57	33	.173
Psychomotor Agitation	41	12	.003
Pressured Speech	57	33	.325
Formal Thought Disorder	27	15	.121
Social Disinhibition	35	13	.788
Decreased Need For Sleep	57	33	.146
Grandiosity	37	16	.795
Disorganised Behaviour	23	13	.427
Excessive Spending	26	14	.419
Increased Appetite	25	7	.015
Increased Sexual Drive	22	2	.001

A perusal of the table 2 shows that there was a significant difference between male and female on psychomotor agitation, increased appetite at the 0.05 significance level and on increased sexual drive at the 0.001 significance level that means male and female are deferent in reporting the clinical features of psychomotor agitation, increased appetite and increased sexual drive.

Table 3: Mean and standard deviation of gender on YMRS in 1st mania episode.

1st Mania Episode	N	Mean	SD	p value
Male	22	23.7	5.7	.432
Female	10	21.1	3.2	

The table 3 shows that there was a no significant difference in expression of manic symptoms while having 1st mania episode, that means male and female express the same clinical symptoms/features with 1st mania episode.

Table 4: Mean and standard deviation of gender on YMRS in BPAD currently mania episode.

BPAD with current mania episode	N	Mean	SD	p value
Male	34	24.6	6.1	.008**
Female	23	20.9	4.1	

** Significant at the 0.01 level.

The table 4 shows that there was a significant difference between male and female in expression of manic symptoms with BPAD currently in mania episode (p<.01). The male patients with BPAD currently in mania episode express more manic symptoms (M=24.6) as compare to female patients with BPAD currently in mania episode (M=20.9).

DISCUSSION

Psychiatric disorders are one of the major public health issues in the world. Previous studies have demonstrated that bipolar patients may differ in several features according to gender, but a number of the differences found remain controversial. In our study it was found that out of 90 patients with BPAD currently mania episode and with first episode mania were 56 (62%) male and 33 (38%) female that correlates with the similar study conducted by Goldney RD, Fisher LJ, Grande ED, et al.[10] founds that males are more likely to develop BPAD than females. In our current study it was found that majority of patients are married had primary level of education with semi-skilled workers and belongs to rural background with middle socio economic status that correlates with the similar study conducted by Nisha, Sathesh, Varghese, Punnoose and Joseph Varghese[11] in his study of comparative study on psycho-socio-demographic and clinical profile of patients with bipolar versus unipolar depression. In our study, it was found that substance use disorders are more common in men as compared to female counter part similar finding were reported by Arnold[12] in his study Gender differences in bipolar disorder. From the current study 1st episode mania presents similar in both genders, but subsequent episodes appear more severe in male than female that correlates with the study conducted by Hendrick et al.[13] Suppes et al.[14] Altshuler et al.[15] reported hypomania, and consequently BPAD type II, has been more frequently associated with female gender.

CONCLUSION

The study shows that there is a pressing need to identify the gender

difference in severity of mania symptoms and associated factors. From the current study 1st episode mania presents similar in both genders, but subsequent episodes appear more severe in male than female. It helps the mental health` professionals so that has better results in terms of achieved faster and accelerated recovery. Prospective longitudinal studies are required to find the gender difference in the long term outcome.

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