



# BIPOLAR AFFECTIVE DISORDER; TO DETERMINE THE ASSOCIATION OF DIFFERENT PSYCHOSOCIAL RISK FACTORS FOR RELAPSE IN PATIENTS WITH BIPOLAR AFFECTIVE DISORDER.

1. MBBS, FCPS  
Assistant Professor  
Isra University Karachi Campus.  
(Al-Tibry Medical College and  
Hospital, Karachi, Pakistan.
2. MBBS  
Department of Psychiatry and  
Behavioral Sciences  
JPMC (Jinnah Postgraduate Medical  
Centre) Karachi, Pakistan.
3. MBBS  
Department of Psychiatry and  
Behavioral Sciences  
JPMC (Jinnah Postgraduate Medical  
Centre) Karachi, Pakistan.
4. MBBS  
Department of Psychiatry and  
Behavioral Sciences  
JPMC (Jinnah Postgraduate Medical  
Centre) Karachi, Pakistan.

**Correspondence Address:**  
Dr. Muhammad Ilyas Jat  
Department of Medicine and Allied  
Isra University Karachi Campus  
Al-Tibry Medical College and Hospital,  
Karachi, Pakistan  
ilyas.jat84@gmail.com

**Article received on:**  
23/05/2017  
**Accepted for publication:**  
15/11/2018  
**Received after proof reading:**  
31/01/2019

**Muhammad Ilyas Jat<sup>1</sup>, Anoop Kumar<sup>2</sup>, Ghulam Rasool<sup>3</sup>, Ajay Kumar<sup>4</sup>**

**ABSTRACT... Introduction:** Bipolar Affective Disorder is a chronic, recurring illness. There is evidenced relationship between life events (particularly adverse interpersonal events) and the onset of bipolar episodes. **Objective:** To determine the association of different Psychosocial risk factors for relapse in patients with Bipolar Affective Disorder. **Study Design:** Descriptive cross-sectional study. **Setting:** Psychiatry Outpatient Department (OPD) of Jinnah Post Graduate Medical Centre (JPMC), Karachi. **Period:** January 2016 to July 2016). **Subjects and Method:** Total 146 patients of both genders aged between 18 to 60 years were enrolled in study. Diagnosis of Bipolar Affective Disorder was based on diagnostic criteria of International Classification of Diseases 10<sup>th</sup> version [ICD-10]. For the identification of psychosocial factors Holmes and Rahe stress scale was used. **Results:** A total of 146 patients of both genders with average age of 31.44 ± 10.40 years. Among 146 cases, 97 (66.40%) were males and 49(33.60%) were females. Out of 146, 79(54.10%) were married, 61(41.80) were single. Among 146 patients the psychosocial factors were identified individually. The death of spouse, recent marriage, marital separation and death of close family member or friend, pregnancy were the psychosocial factors associated with relapse with p-value of less than 0.05. **Conclusion:** The psychosocial factors or adverse life events do trigger the course of Bipolar Affective Disorder. The major negative life events such as death of spouse or close family member or friend, the marital issues are predominant.

**Key words:** Bipolar Affective Disorder, Holmes and Rahe, Psychosocial Factors, Relapse.

**Article Citation:** Jat MI, Kumar A, Rasool G, Kumar A. Bipolar affective disorder; to determine the association of different psychosocial risk factors for relapse in patients with bipolar affective disorder. Professional Med J 2019; 26(2):186-190.  
**DOI:** 10.29309/TPMJ/2019.26.02.3077

## INTRODUCTION

Bipolar Affective Disorder alludes to a gathering of affective disorders, which together are described by depressive and manic or hypomanic episodes.<sup>1</sup> It is a chronic, recurring illness and is a significant cause of disability worldwide.<sup>2</sup> The advancement and course of the illness can fluctuate broadly among people. Nevertheless, an every now and again observed angle is trouble in straightening out legitimately to the social condition. This happens as a result of the adverse effects bipolar turmoil has on the general working of the individual, incorporating inconveniences in the working environment, low life fulfillment and trouble in relational connections.<sup>3</sup> Regardless of the utilization of satisfactory medication, commonly the course of Bipolar disorder is described by high rates of relapse, recurrence and re-hospitalizations. After the intense stage,

in spite of the fact that the individual may recuperate considerably, achieving a condition of symptomatically reduction, the patient still experiences the negative effect of the sickness, giving intellectual brokenness and misfortunes in social and work circles with resulting misfortune in personal satisfaction.<sup>4</sup> Since the patient's follow-up should not be limited to indication assessment alone, but rather the doctor should, also, go for comprehension and measuring the turmoil's effect on the psychosocial parameters of the patient.<sup>5</sup>

## Psychosocial Factors/Life Events

The term 'life events' depicts any generous changes in individual surroundings, bringing about individual and social outcomes.

Life events may happen suddenly or in an expected

way.<sup>6</sup> Various researchers have demonstrated that specific life events impact the period of onset and the clinical course of bipolar illness.<sup>7</sup> The sorts of upsetting life events differ in triggering either mania or depression. The literature shows that positive life events and objective achievement are more likely to induce mania and others support the point of view that negative as well as positive life events are able to activate both depression and mania.<sup>8</sup> Bereavement is said to activate mania, while personal illness or injury more likely triggers depression.<sup>9</sup> Relational issues, budgetary emergencies, business related challenges, disappointment, and occupation misfortune were frequently found preceding mania.<sup>10</sup> Unemployment at onset is thought to be a hazard element of relapse and psychotic features.<sup>11</sup> In a study it is reported that events involving loss (e.g. divorce, death) and threat of separation are associated with depression or mania.<sup>12</sup> The incidence of depression or mania increased significantly in the month of occurrence of 13 stressful events. Four of the events termed “severe”—death of a close relative, assault, serious marital problems, and divorce/breakup—predicted the incidence of bipolar episodes.<sup>13</sup> The research regarding psychosocial factors responsible for relapse of Bipolar disorder is scarce in our part. The aim of this study is to determine the association of different psychosocial factors with relapse of bipolar affective disorder as they play an important role as precipitating factors so that strategies could be made and applied to prevent further episodes among bipolar individuals.

## METHODOLOGY

A descriptive cross-sectional study conducted at Out-patient Department (OPD) of Department of Psychiatry and Behavioral Sciences, Jinnah Post Graduate Medical Centre (JPMC), Karachi. The duration of study was from Jan 2016 to Jul 2016. Patients diagnosed by consultant psychiatrist as a case of Bipolar Affective Disorder having current relapse of duration more than one month or less than one month were taken. Psychosocial factors were assessed by Holmes and Rahe stress scale. Holmes and Rahe stress scale is a life events scale developed by psychiatrists Thomas Holmes and Richard Rahe in 1967.<sup>14</sup> Sample

size of 146 patients was calculated by using standardized formula.

## Inclusion Criteria

Both male and females patients of 18 to 60 years having relapsed Bipolar Affective Disorder were enrolled in study.

## Exclusion Criteria

Patients who were substance users (history based). Manic or depressive episode due to established medical condition or drug induced. Those of having Mixed Affective state were excluded from study.

A semi-structured proforma was used to denote demographic details of the patients. The psychosocial factors were recorded individually as per Holmes and Rahe stress scale. The data was analyzed on SPSS version 17.0. The frequency and percentage were calculated for qualitative variables like gender; Mean  $\pm$ SD were computed for quantitative variables like age.

Stratification with psychosocial factors was done with gender, score of Holmes and Rahe scale and duration of relapse of Bipolar Affective Disorder and p value of less than 0.05 taken as significant.

## RESULTS

A total of 146 patients diagnosed as Bipolar Affective Disorder were included in this study. Most of the patient's age was between 18 to 50 years. Age group statistics of the patients is presented in Table-I. The average age of the patients was  $31.44 \pm 10.40$  years. Out of 146 cases 97 (66.40%) were male and 49 (33.60%) were female as shown in Figure-1. Out of 146, 79 (54.10%) were married, 61 (41.80%) were single, 3 (2.10%) were widowed and 3 (2.10%) were divorced/separated. Majority of patients were literate up to middle and matric and were jobless currently and were referred here by family or friends as shown in Table-II. The association of Holmes and Rahe Psychosocial factors with relapse of Bipolar Affective Disorder is shown in Table-III. Death of spouse, Divorce, Pregnancy, Death of close family member, death of close friend, trouble with in-laws, trouble with boss, personal injury or illness and changes in

living conditions were responsible for relapse of Bipolar Affective Disorder having p value of less than 0.05.

Gender	N (%)	Mean Age (S.D.)
Male	97 (66.40)	30.53 (8.046)
Female	49 (33.60)	31.96 (8.916)
Total	146 (100.00)	31.44 (10.403)

Table-I. Age group statistics

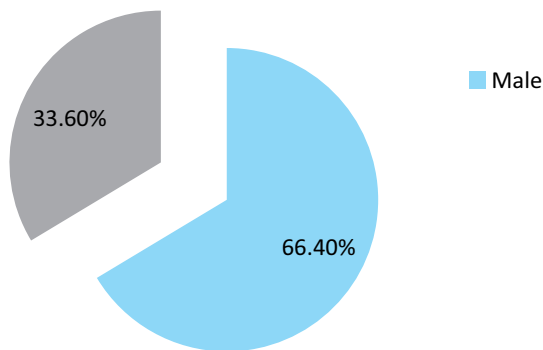


Figure-1. Graphical presentation of gender

Demographic Characteristics	N (%)
<b>Marital Status</b>	
Single	61 (41.80)
Married	79 (54.10)
Widow	3 (2.10)
Separated/divorced	3 (2.10)
<b>Education Status</b>	
Preliterate	18 (12.30)
Deeni Taleem	11 (7.50)
Primary	21 (14.40)
Middle	15 (10.30)
Matric	38 (26.00)
Intermediate	24 (16.40)
Graduate	17 (11.60)
Postgraduate	2 (1.40)
<b>Occupation Status</b>	
Jobless	33 (22.60)
Student	19 (13.00)
Household	28 (19.20)
Professional	34 (23.30)
Shopkeeper	32 (21.90)
<b>Mode of Referral</b>	
Self	45 (30.80)
Family	89 (61.00)
Friend	12 (8.20)

Table-II. Demographic characteristics

Psychosocial Factor	Relapse of Bipolar No		Relapse of Bipolar Yes		P-Value
	Male	Females	Male	Females	
Death of Spouse	87	45	10	04	0.017
Divorce	87	44	09	05	0.053
Marital Separation	91	44	06	05	1.774
Death of close family member	74	37	23	12	0.011
Pregnancy	97	43	00	06	0.000
Change in finance status	59	33	38	16	0.594
Death of close friend	89	45	08	04	0.000
Loan	80	45	17	04	0.128
Change in Responsibility	77	37	20	12	0.285
Trouble with in-laws	89	34	08	15	0.001
Trouble with boss	74	45	23	04	0.022
Change in living condition	58	29	39	20	0.005
Change in Residence	80	31	17	18	0.101
Change in working hours	89	45	24	09	0.384
Change in health of family member	78	36	19	13	0.917
Fired at work	76	44	21	05	0.088
Sex difficulty	89	46	08	03	0.646
Marriage	89	41	08	08	0.140
Personal Injury or illness	69	43	28	06	0.025

Table-III. Psychosocial factors, association with gender and relapse of bipolar affective disorder

**DISCUSSION**

In this study of 146 patients having Bipolar Affective Disorder were enrolled, the average age of the patients was 31.60 ± 10.40 years,

with predominant male. Males were more to have relapse of Bipolar Affective Disorder. The psychosocial factors were as per Holmes and Rahe scale and in this study we have found

that bipolar patient were having almost of all the factors at some time but there relationship with acute relapse was more associated with some factors such as death of spouse, divorce, marital separation, pregnancy or death of close family member or close friend as also evidenced by many previous studies regarding life events in bipolar individuals. The majority of these have concentrated on the part of serious negative life events. The all the more methodologically cautious reviews have reliably reported a powerful impact of negative life events on the course of bipolar disorder.<sup>15</sup> For instance, extreme contrary life events have been observed to be related with more than four times the danger of relapse<sup>16</sup> and a triple increment in the time until recuperation and have been found even to anticipate onset of disorder people with bipolar disorder.<sup>17</sup> In recent years, researchers have started to consider the impact of psychosocial factors on depression and mania independently. Severe negative life events, for example, real misfortunes, passing of mate, close relative or dear companion appear to explicitly foresee the course of bipolar disorder.<sup>18</sup> In this study the total no of relapsed cases were 146 but the strength of psychosocial or life events were different and the response of individual toward those events were also differently.

The acute relapse or recurrence was associated with death of spouse, death of close friend or family member or inter marital issues whether recent marriage or separation. There are numerous such distributed case reports of insanity happening after the passing's of close ties. Here in our study more episodes observed were of manic, hypomanic episode rather than depressive episode despite of having negative life events and it is also evidenced in previous studies that negative life events may be precipitating factors of manic symptoms.<sup>19</sup> Important findings of this study are that males were more commonly presented and mode of presentation was almost mania or hypomania and females were almost having depressive episodes. In spite of the fact that a developing number of studies has utilized cautious life events and side effect meetings to look at the part of stressors in bipolar disorder, the current study is distinguished from most

published studies of life events in bipolar disorder by the fact that most of patients of this study are of young population i-e 31 +/- 10 years, clear cut association with stressor and more of patients population were male despite of the fact that prevalence of bipolar affective disorder is equal in both gender.

## CONCLUSION

The psychosocial factors or adverse life events do trigger the course of Bipolar Affective Disorder. The major negative life events such as death of spouse or close family member or friend, the marital issues are predominant.

## Acknowledgments

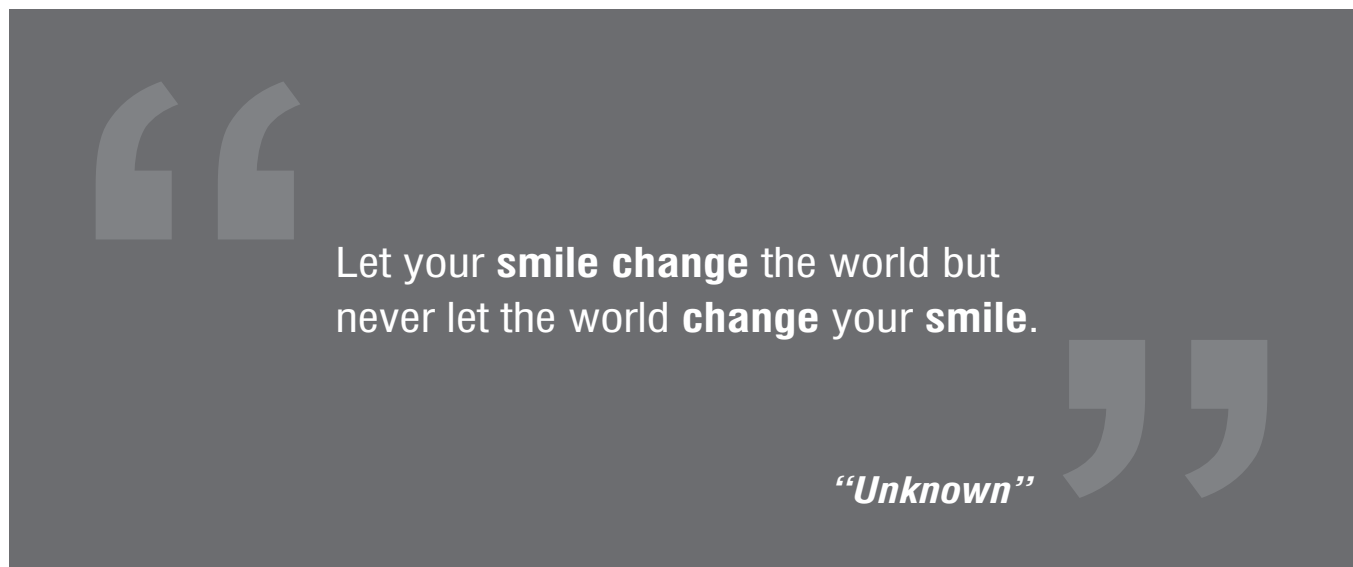
We are very thankful to the team of Department of Psychiatry and Behavioral Sciences, JPMC, for there nice support.

Copyright© 15 Nov, 2018.




## REFERENCES

1. Phillips ML, Kupfer DJ. **Bipolar disorder diagnosis: Challenges and future directions.** *The Lancet.* 2013; 17;381(9878):1663-71.
2. Vos T, Flaxman AD, Naghavi M. **Years lived with disability (YLDs) for 1160 sequelae of 289 diseases and injuries 1990–2010: A systematic analysis for the Global Burden of Disease Study 2010.** *Lancet,* 2012; 380(9859):2163–96.
3. Geddes JR, Millkowitz DJ. **Treatment of bipolar disorder.** *Lancet.* 2013; 381(9878):1672-82.
4. Cakir S, Ozerdem A. **Psychotherapeutic and psychosocial approaches in bipolar disorder: A systematic literature review.** *Turk Psikiyatri Derg;* 2010,21(2)43-54.
5. Miller CJ, Abraham KM, Bajor LA, Lai Z, Kim HM, Nord KM, et al. **Quality of life among patients with bipolar disorder in primary care versus community mental health settings.** *J Affect Disord;* 2013,146(1)100-5.
6. Gruber J, Miklowitz DJ, Harvey AG et al. **Sleep matters: Sleep functioning and course of illness in bipolar disorder.** *J. Affect. Disord.* 2011; 134: 416–420.
7. Hosang GM, Korszun A, Jones L. **Adverse life event reporting and worst illness episodes in unipolar and bipolar affective disorders: Measuring environmental risk for genetic research.** *Psychol. Med.* 2010; 40: 1829–1837.

8. Koenders MA, Giltay EJ, Spijker AT, Hoencamp E, Spinhoven P, Elzinga BM. **Stressful life events in bipolar I and II disorder: Cause or consequence of mood symptoms?** *J. Affect. Disord.* 2014; 161: 55–64.
9. Kessing LV, Andersen PK. **Predictive effects of previous episodes on the risk of recurrence in depressive and bipolar disorders.** *Curr. Psychiatry Rep.* 2005; 7: 413–420.
10. Hosang GM, Korszun A, Jones L, Jones I, McGuffin P, Farmer AE. **Life-event specificity: Bipolar disorder compared with unipolar depression.** *Br. J. Psychiatry* 2012; 201: 458–465.
11. Maciukiewicz M, Pawlak J, Kapelski P. **Can psychological, social and demographical factors predict clinical characteristics symptomatology of bipolar affective disorder and schizophrenia?** *Psychiatr. Q.* 2016; 87: 501–513.
12. John SL, Robert JE. **Life events and bipolar disorder: Implications from biological theories.** *Psycholo Bullet*, 1995, 117(3):434-49.
13. Ellicott A, Hammen C, Gitlin M, Brown G, Jamison K. **Life events and the course of bipolar disorder.** *Am J Psychiatry.*1990; 147(9):1194-8.
14. Holmes TH, Rahe RH. **“The Social Readjustment Rating Scale”.** *J Psychosom Res*, 1967,11(2):213–8.
15. Hillegers MH, Burger H, Wals M, Reichart CG, Verhulst FC, Nolen WA. **Impact of stressful life events, familial loading and their interaction on the onset of mood disorders: study in a high-risk cohort of adolescent offspring of parents with bipolar disorder.** *Br J Psychiatry.* 2004; 185:97-01.
16. Johnson SL, Winett CA, Meyer B, Greenhouse WJ, Miller I. **Social support and the course of bipolar disorder.** *J Abnorm Psychol.* 1999; 108(4):558-66.
17. Barbini B, Colombo C, Benedetti F, Campori E, Bellodi L, Smeraldi E. **The unipolar-bipolar dichotomy and the response to sleep deprivation.** *Psychiatry Res*, 1998, 2;79(1):43-50.
18. Malkoff-Schwartz S, Frank E, Anderson B, Sherrill JT, Siegel L, Patterson D. **Stressful life events and social rhythm disruption in the onset of manic and depressive bipolar episodes: a preliminary investigation.** *Arch Gen Psych*, 1998; 55(8):702-7.
19. Depue RA, Iacono WG. **Neurobehavioral aspects of affective disorders.** *Annu Rev Psychol*, 1989; 40:457-92.



**AUTHORSHIP AND CONTRIBUTION DECLARATION**

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
1	Muhammad Ilyas Jat	Concept, Design, Statistical analysis & editing of manuscript.	
2	Anoop Kumar	Data collection and manuscript writing.	
3	Ghulam Rasool	Review and final approval of manuscript.	
4	Ajay Kumar	Data collection, discussion writing	