

Sociodemographic Correlates of Bipolar Disorder in Government Hospitals of Lahore: A Quantitative Study

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Abstract

Bipolar disorder, a severe and complicated psychological disorder, is one of the main causes of premature mortality globally (Biazus et al., 2024). The study was designed to identify the sociodemographic correlates of bipolar disorder in both inpatients and outpatients in psychiatric departments of the government hospitals of Lahore. Total 1722 cases were interviewed. Out of 210 diagnosed cases of bipolar disorder, 102 (48.5%) were men with mean age 33.65 years ($SD = 9.37$) while 108 (51.4%) were women with mean age 33.75 years ($SD = 9.55$). The severity of bipolar disorder was assessed using the Young mania rating scale (YMRS) for manic symptoms, the PHQ-9 for depressive symptoms, and the level of frustration tolerance (LFT) a scale of SCL-R for psychological distress. A demographic form was also administered to contextualize findings. The assessment measures demonstrated acceptable to excellent internal consistency, with Cronbach's alpha values of .73 for the PHQ-9, .69 for the YMRS, and .92 for the LFT scale. The findings of the study indicate that there is a significant relationship between nature of childhood experiences, marital status, nature of youth experiences, family's mental health history and the severity of bipolar symptoms. There is an insignificant relationship between age, education, income, no of earners, no of siblings and severity of bipolar disorder. Findings are useful for public health strategies because they can help make tailored policies and measures to deal with bipolar disorder in certain sociodemographic groups aimed at reducing the prevalence and impact of bipolar disorder.

Keywords: Bipolar disorder, sociodemographic correlates, sociodemographic characteristics, mania, bipolar, depression

Introduction

Bipolar disorder (BD) is a common psychological disorder characterized by fluctuating emotions, impacting around 2.4% of the adult population worldwide. It significantly disrupts everyday functioning and contributes to the overall burden of disease on a global scale (APA, 2013; 2022). Recurrent manic or depressed episodes are a hallmark of bipolar disorder (BD), a chronic mental condition. It took, on average, 5.7 years for people with BD to be recognized after their symptoms first appeared in research involving 30 European nations (Kessing et al., 2021). The prevalence of this disorder has been reported in many studies and surveys. It is reported that the life-time prevalence of BD ranges from 2.6% to 7.8%. Also, it was indicated in a different study that the annual occurrence of this disorder is less than 1% (Mohammadi et al., 2022). The prevalence of BD in Pakistan is estimated by the 2013 Global Burden of Disease Study (Ferrari et al., 2016, as cited in Xue et al., 2021) to be 0.8% among women and 0.6% among men, based on epidemiological data from 26 other

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countries. It is estimated that at least 1.2 million people in Pakistan suffer from BD. A study reveals that there is no significant difference in the prevalence of BD across gender (Ali et al., 2019). Bipolar disorder affects about the same number of men and women, according to past studies (Kessing, 2004). Family background and genetics play a big part in bipolar disorder. Maletic and Cutler (2022) reported that bipolar disorder is strongly linked to genes and that family history is an important part of both diagnosis and treatment. Estimates of bipolar disorder's heritability run from 60 to 80%, showing how important genes are. People with BD often have a lower quality of life than the general population because they have episodes that last a long time and cause ongoing problems (Michalak et al., 2010). Low socioeconomic status is significantly associated with BD (Shafique et al., 2024). Bipolar disorder I is one of a serious and long-lasting psychological disorders that can start in childhood. Studies in the past have shown that BD is being found more and more often in young people. Abuse in childhood, including physical, emotional, and sexual abuse, has been linked to bipolar disorder starting younger and getting worse (Etain et al., 2017). Furthermore, marital status has been linked to depressive symptoms (Nawaz et al., 2020). Marital instability, such as separation or divorce, is both a consequence and potential aggravator of the disorder. Marital problems, such as frequent disagreement and relationship dissatisfaction, can exacerbate the symptoms of bipolar disorder (Whisman et al., 2014).

According to cognitive-behavioral theories, bipolar disorder starts and stays with people when they have unhealthy ways of thinking and acting. Beck (2019) suggested that negative cognitive schemas and dysfunctional assumptions can cause depressed episodes and beliefs that are too upbeat or inflated can cause manic episodes. Psychodynamic theories say that unresolved unconscious conflicts and problems with bonding in childhood can lead to bipolar disorder. Freud says that mania is a way for people to protect themselves from depressed states by avoiding painful feelings. Modern psychodynamic methods look into these unconscious processes and help people become more emotionally aware (Blatt & Luyten, 2009). Although bipolar disorder (BD) is a well acknowledged mental health disorder, little is known about its sociodemographic trends in low- and middle-income nations like Pakistan. The way that BD is presented and managed may differ from Western settings due to cultural stigma, a lack of mental health resources, and particular family and gender dynamics. Given these considerations, it is crucial to look into the connection between sociodemographic traits and BD in the Pakistani community in order to guide local clinical procedures and support cross-cultural psychiatric research. The present study aims to investigate the sociodemographic correlates of bipolar disorder in government hospitals of Lahore to fill in the gap by giving in-depth information on how various sociodemographic characteristics affect the course and severity of bipolar disorder.

Objectives

- To identify the sociodemographic correlates of bipolar disorder in both inpatients and outpatients in psychiatric departments of the government hospitals of Lahore.
- To determine the relationship between various sociodemographic correlates and the severity of bipolar disorder.

Hypotheses

H1: Sociodemographic correlates (such as age, gender, early life experiences, quality of youth experiences, marital status, and family history of mental health issues) are likely to be related to severity of bipolar symptoms.

Method

Research Design

Cross-sectional survey method was used to assess the sociodemographic correlates of bipolar disorder in outpatient settings at various government hospitals in Lahore city.

Purposive Sampling Strategy

The study employed a non-probability technique called purposive sampling, in which individuals are specifically chosen according to predetermined inclusion criteria. Total cases were 14511 out of which 1755 were interviewed by the research team including trained clinical psychologists under the supervision of senior clinical psychologists. All team members were trained in the administration of the assessment tools used in the study to assess the severity of the symptoms as well to give a clear diagnosis.

Inclusion Criteria

- All participants were clinically diagnosed patients with bipolar disorder attending outpatient or inpatient psychiatric units in government hospitals in Lahore. There was no fixed minimum duration of inpatient stay required for inclusion. However, for inpatients, only those who had been admitted for at least 3 days were considered eligible, to ensure that symptom severity could be adequately evaluated. They ranged in age from 18 to 65 years.
- Outpatients with Bipolar Disorder, having comorbidities with bipolar disorder who attended the government hospital (Evaluation was done using SCL-R in conjunction with DSM-5 diagnostic criteria to identify any potential comorbidities).

Exclusion Criteria

- Outpatients with other psychological disorders and their comorbidities.
- Outpatients with severe cognitive impairment i.e. not in a position to understand the details of the study procedure were excluded based on documented diagnosis.

Assessment Measures

The following instruments were used.

Demographic Form

The demographic form was developed by the researcher specifically for this research. It assessed age, gender, education level, income, marital status, relationship status, family system, home environment family history of psychiatric or mental illness, occupational status, number of children and siblings and significant life experiences.

Patient Health Questionnaire ([PHQ-9]; Kroenke, et al., 2001)

Patient Health Questionnaire originally developed by Spitzer, Williams and Kroenke (1999) was used to screen the psychiatric patients along with demographic form. PHQ-9 Urdu version was used (available in open access). It consists of 9 questions that measure the presence and severity of depressive symptoms. Higher scores indicate more severe depression. The total score can vary from 0 to 27.

Symptom Checklist-Revised ([SCL-R]; Rahman, et al., 2009)

Symptom Checklist-Revised is an Indigenous tool developed by Rahman and Sitwat (1990) and later it was revised by Rahman et al. (2009). It has 148 items total, divided into six subscales: level of frustration tolerance (LFT) (24 items), depression (24 items), somatoform symptoms (34 items), anxiety (29 items), obsessive-compulsive disorder (OCD) (15 items), and schizophrenia (15 items). Each participant's symptom was rated on a Likert scale from 0 to 3 on every symptom. LFT (SCL-V) was used in this research to assess the Frustration level of Bipolar patients.

Young Mania Rating Scale ([YMRS]; Young et al., 1978)

Young mania rating scale was developed by Young et al. (1978). The scale has 11 items and is based on the patient's subjective report and is limited to past 48- hours. There are 4 items that are graded on 0 to 8 scale while the remaining items are graded on 0 to 4 scale. The scale was translated in Urdu and used in the study. According to Cronbach's alpha value, the YRM has a relatively high internal consistency, usually falling between 0.70 and 0.90.

Procedure

The topic was formally presented to the department doctoral program committee (DDPC) for approval. Upon receiving the approval, permissions of the tools were taken and letters were signed by the Head of the Department (HOD) for permission to collect data. All ethical considerations were strictly adhered to throughout the study. After presenting the study's topic and description, approval was obtained from the Institutional Review Board (IRB) of the affiliated institution for data collection. Data was collected from several institutions: Mayo Hospital, Punjab Institute of Mental Health, Gulab Devi Hospital, Ganga Ram Hospital, Jinnah Hospital and General Hospital for 45 days. Participants provided informed consent before participating. They were briefed about the study's objectives, assured of confidentiality and anonymity, and informed of their right to withdraw at any time without consequences. Consent of research was taken verbally and a consent sheet was attached with demographics. A demographic form, patient health questionnaire (PHQ-9), level of frustration tolerance (LFT) scale of symptoms checklist-revised (SCL-R) and young mania rating scale were administered. The administration of the questionnaires took approximately 20–25 minutes per participant. During the process, care was taken to ensure a quiet and private environment. Minor issues included participant fatigue or distractions in clinical settings, which were mitigated by offering breaks and ensuring the presence of a facilitator to maintain focus. No significant procedural barriers were encountered.

Ethical Considerations

- First of all, permission from all the relevant authors of the questionnaires was taken.
- Permission was also taken from the International Review Board (IRB) committee.
- Participants were explained briefly about the purpose of the study before administering the questionnaire in Urdu.
- Consent of participants was taken before administration through informed consent
- Participants were informed of all their rights before administration.
- Participants were informed that they were free to opt out of the study at any point.
- Participants were informed that their information will be kept confidential.
- Participants were assured that their identities will remain anonymous.

Results

The study included a total of 210 patients, with 102 (48.5%) being men and 108 (51.4%) being women. The mean age of the participants in the research was 33.2 years ($SD = 12.5$) years. Total cases were 14511, out of which 12756 were not interviewed and 1755 were interviewed to assess the severity of the symptoms as well to give a clear diagnosis. 210 participants were diagnosed with bipolar disorder.

Table 1
Psychometric Properties of the Assessment Measures

Measures	<i>M</i>	<i>SD</i>	Range	α
Patient Health Questionnaire	15.05	6.14	1-27	.73
Young Mania Rating Scale	33.54	9.46	6-54	.69
LFT Scale of SCL-R	48.82	18.47	7-72	.92

Table 1 shows the psychometric properties of the assessment measures. The PHQ-9 has a moderate reliability coefficient (α) of .73, suggesting a high degree of internal consistency. The YMRS exhibits a somewhat reliable coefficient of .69. The LFT scale demonstrated a high reliability coefficient of .92, suggesting a strong level of internal consistency.

Table 2
Distribution of Data according to Hospital and Diagnosis

	<i>n</i>	%
Hospitals		
Punjab Institute of Mental Health	112	53.3
Mayo Hospital	4	1.9
General Hospital	12	5.7
Ganga Ram Hospital	57	27.1
Gulab Devi Hospital	14	6.7
Jinnah Hospital	11	5.2
Diagnosis		
Bipolar	190	90.5
Schizophrenia and Bipolar	8	3.8
Panic and Bipolar	4	1.9
Substance Use and Bipolar	1	.5
OCD and Bipolar	6	2.9
OCD, Panic and Bipolar	1	.5

Table 2 shows distribution of data according to hospital and diagnosis ($n=210$). It was found that most cases of bipolar disorder were present in Punjab Institute of Mental Health and Ganga Ram Hospital. Out of 210 participants of the sample 90.5% ($n=190$), were diagnosed with bipolar disorder and 9.5% ($n=20$) were diagnosed with comorbidities.

Table 3
Sociodemographic Characteristics of the Patients

Sample Characteristics	<i>n</i>	%
Gender		
Men	102	48.5
Women	108	51.4
Education		
Uneducated	46	21.9
Minimally educated	78	37.1
Educated	54	25.7
Highly educated	32	15.2
Profession		
Unskilled	13	6.2
Skilled	14	6.7
Private Job	5	2.3
Govt. Job	14	6.7
Business	6	2.9
Unemployed	158	75.2
Religion		
Islam	207	98.6
Christianity	3	1.4
Family System		
Joint	89	42.4
Nuclear	121	57.6
Residence		
Lahore city	116	55.2
Other Areas of Lahore City	29	13.8
Other Cities	65	3
No of Family Members		
1-5	77	36.7
6-10	100	47.6
10 above	33	15.7
No of Siblings		
1-5	145	69
6-10	60	28.6
No siblings	5	2.4
No of Earners in House		
1	110	52.4
2	56	26.7
3	28	13.3
4 or more	16	7.61
Marital Status		

Unmarried	92	43.8
Married	106	50.5
Separated/ Divorced	10	4.7
Widow/ Widower	2	1.0
Nature of Marital Relationship		
Satisfactory	84	79.2
Unsatisfactory	22	20.7
Nature of Childhood		
Satisfactory	90	42.8
Unsatisfactory	120	57.1
Youth Experiences		
Satisfactory	145	69.0
Unsatisfactory	65	30.1
General Home Atmosphere		
Satisfactory 167	167	79.5
Unsatisfactory 43	43	20.4
History any Mental Illness in Family		
Yes	171	81.4
No	39	18.6
Sudden changes in the mood		
Very much	85	40.5
Very often	62	29.5
Absolutely not	63	30

Table 3 shows the sociodemographic characteristics of the participants. The mean age of the participants was 33.20 years ($SD=12.40$) and the median score of monthly income is Rs. 50,000/-. Most of the population were Muslims, married, educated, currently unemployed and were residents of Lahore city. Most participants had a history of mental illness in the family.

Table 4
Descriptive Statistics and Correlations

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Age	33.20	12.44	-						
2. Monthly	14500.00	32131.40	.06	-					
Income of person									
3. No of Earners	1.81	1.09	.01	.13	-				
in house									
4. No of Sibling	4.50	2.15	.21**	-.02	.07	-			
5. YRMS	33.71	9.44	.01	-.02	-.11	.06	-		
6. LFT	48.83	18.47	.00	-.02	-.05	.07	.13	-	
7. PHQ-9	15.06	.54	.00	-.15*	-.16*	.08	.26***	.27***	-

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4 shows descriptive statistics the results of Pearson product-moment correlation coefficient analysis. Analysis showed that there was no significant correlation of age, monthly income of person, no. of earner and no. of siblings with YRMS and LFT. Both personal income and number of earners in a household were negatively related to PHQ-9. YRMS scores were positively related to PHQ-9 scores, indicating that high severity of bipolar symptoms was associated with more depressive symptoms. Also, there was a significant positive relationship between LFT and PHQ-9 scores.

Table 5

Independent Sample t- test showing analysis of Gender and YRMS Scores

Variable	Men (n=102)		Women (n=108)		<i>t</i> (210)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
YRMS Score	33.66	9.37	33.76	9.55	-.08	.938	.01

Note. Men (n=102), Women (n=108)

Table 5 shows the results of independent sample t- test analysis for gender differences in YRMS Scores. The data in table suggest that there is no significant difference in scores across genders on YRM as $t(208) = -.08, p > .05$. This suggest that the YRMS scores did not differ significantly across genders.

Table 6

Chi Square Analysis of Education and Severity of YRMS

Education	Moderate		Severe		$\chi^2(3)$
	<i>n</i>	%	<i>n</i>	%	
Uneducated (n=46)	8	17.4	38	82.6	0.22
Minimally educated (n=78)	16	20.5	62	79.5	
Educated (n=54)	11	20.4	43	79.6	
Highly Educated (n=32)	6	18.8	26	81.3	

Table 6 shows the chi square analysis of education level of the participants and the severity of YRMS symptoms. The results in the table show that there is no significant relationship between education level of participants and severity of bipolar symptoms, $\chi^2(3) = 0.22, p = .975$. Participants across all education levels showed approximately similar proportions of moderate and severe YRMS symptoms.

Table 7

Chi Square Analysis of Marital Status and Severity of YRMS

Marital Status	Moderate		Severe		$\chi^2(1)$
	<i>n</i>	%	<i>n</i>	%	
Unmarried (n=92)	12	13.0	80	87.0	4.81*
Married (n= 106)	27	25.5	79	74.5	

Note. * $p < .05$.

Table 7 shows chi square analysis of marital status and severity of YRMS. The results show that there is a significant relationship between severity of bipolar symptoms and marital status, $\chi^2(1) = 4.81, p = .028$. The unmarried individuals are more likely to experience severe symptoms compared to married individuals.

Table 8

Chi Square Analysis of Nature of Marital Relationship and Severity of YRMS

Nature of Marital Relationship	Moderate		Severe		$\chi^2(1)$
	n	%	n	%	
Satisfactory (n=84)	23	27.4	61	72.6	0.77
Unsatisfactory (n=22)	4	18.2	18	81.8	

Table 8 shows chi square analysis of nature of marital status and severity of YRMS symptoms (n=106). The result show that there is no significant relationship between and severity of bipolar symptoms and nature of marital relationship, $\chi^2(1) = 0.77, p = .378$.

Table 9

Chi Square Analysis of Nature of Childhood and Severity of YRMS

Nature of Childhood	Moderate		Severe		$\chi^2(1)$
	n	%	n	%	
Satisfactory (n=90)	24	26.6	66	73.3	5.02*
Unsatisfactory (n=120)	17	14.1	103	85.8	

Note. **p<.01.

Table 9 shows the chi square analysis of nature of childhood experiences and severity of YRMS. The results show that there is a significant relationship between and severity of bipolar symptoms and nature of childhood experiences. $\chi^2(1) = 5.02, p = .002$. The results indicate that, level of dissatisfaction with childhood experiences greatly affects the severity of disorder.

Table 10

Chi Square Analysis of Nature of Youth and Severity of YRMS

Nature of Youth	Moderate		Severe		$\chi^2(1)$
	n	%	N	%	
Satisfactory (n=145)	36	24.8	109	75.2	8.39*
Unsatisfactory (n=65)	5	7.7	60	92.3	

Note. **p<.01.

Table 10 shows the chi square analysis of nature of youth and severity of YRMS. The result show that the value of Pearson chi square is $\chi^2(1) = 8.39, p = .004$ showing that there is a significant relationship between nature of youth and severity of bipolar disorder.

Participants with an unsatisfactory youth are more likely to have severe YRMS symptoms compared to those with a satisfactory youth experience.

Table 11

Chi Square Analysis of Family Mental Health History and Severity of YRMS

Family Mental Health History	Moderate		Severe		$\chi^2(1)$
	n	%	n	%	
Yes (n=171)	39	22.8	132	77.2	6.32*
No (n=39)	2	5.1	37	94.9	

Note. * $p < .05$.

Table 11 shows chi square analysis of family mental health history and severity of YRMS. The results show that the value of Pearson chi square is $\chi^2(1) = 6.32$, $p = .012$, showing that there is a significant relationship between history of mental illness and severity of bipolar disorder.

Table 12

Chi Square Analysis of General Home Atmosphere and Severity of YRMS

General Home Atmosphere	Moderate		Severe		$\chi^2(1)$
	n	%	n	%	
Satisfactory (n=167)	32	19.2	135	80.8	0.07
Unsatisfactory (n=43)	9	20.9	34	79.1	

Table 12 shows chi square analysis of general home atmosphere and severity of YRMS. The results show that there is no significant relationship between severity of bipolar disorder and whether the general home atmosphere is satisfactory or not, $\chi^2(1) = 0.07$, $p = .794$.

Discussion

The findings of the study indicate that there is a significant relationship between nature of the childhood, marital status, nature of youth, family's mental health history and the severity of Bipolar symptoms. There is an insignificant relationship between age, education, income, no of earners, no of siblings and severity of Bipolar symptoms. Field (2018) discusses how the number of items in a scale can affect the reliability coefficient, indicating that smaller scales may still be considered reliable with Cronbach's alpha values in the 0.5 to 0.7 range. The YMRS exhibits a somewhat reliable coefficient of .69 as indicated in Table 1. The statistics on comorbidities among participants diagnosed with bipolar disorder showed that 90.5% (190 people) had bipolar disorder as a single diagnosis; remaining 9.5% (20 people) had comorbidities as indicated in Table 2. The severity of bipolar symptoms was evaluated using the Young mania rating scale (YMRS), with scores of 13–19 indicating moderate and ≥ 20 indicating severe mania (Young et al., 1978). Depressive symptoms were assessed using the PHQ-9 (Kroenke et al., 2001). The LFT subscale of the SCL-R was also used to assess overall psychological distress, with higher scores indicating greater severity.

Pearson product-moment correlation coefficient analysis showed that there was no significant correlation between age and bipolar symptoms (see Table 4). People with bipolar disorder usually have their first episode between the ages of 17 and 21. The onset age is usually between late teens and early adulthood (Jupe et al., 2023). An insignificant correlation

was found between the number of earners and number of siblings to the scales. There is a literature gap for such results. Furthermore, the results indicate that no significant difference in YRMS scores across genders as shown in Table 5. Bipolar disorder is present almost equally in both men and women. There's no significant difference in the prevalence on the basis of gender (Ali et al., 2019). Another study claims that the rate of BD is about the same for men and women (Fellinger et al., 2018). The results of the present study also show that there is no significant relationship between education level of participants and severity of Bipolar symptoms. In our study, most people were minimally educated, however there was no significant association between education level of participants and severity of BD as shown in Table 6. A study discovered the different physical conditions and risk factors connected to bipolar disorder, with a focus on how low education is a major factor in the disorder's frequency (Girolamo et al., 2024). Another study reveals that the prevalence of BD is higher in unemployed individuals (Zahoor et al., 2024).

The results of the present study showed a significant relationship between marital status and severity of bipolar symptoms. Unmarried individuals are more likely to show severe symptoms as compared to married individuals (see Table 7). This could suggest that being married may offer some protective benefits. However, the findings may be interpreted with caution. The current findings also indicate that a person's level of satisfaction or dissatisfaction of marital relationship has no relationship with the severity of symptoms as shown in Table 8. Due to cultural norms around marriage or social desirability bias, individuals may have underreported relational dissatisfaction. Additionally, most participants reported relationships that were generally satisfactory, which would have reduced the effects that could be seen. Other confounding variables should also be considered. Clinical relapses are linked to reduced global functioning and cognitive deficits, as well as a history of rapid cycling, more severe past episodes, an earlier age of beginning, and familial and personal psychiatric history. Additionally, linked to a higher frequency of episodes are adverse life events, unemployment, low educational attainment, and poorer social adjustment (Giménez-Palomo et al., 2024).

Furthermore, it was found that there is a significant relationship between nature of childhood and bipolar course and severity (see Table 9). Life stresses and traumatic events play a big role in both triggering and worsening bipolar disorder. The diathesis-stress model says that people with a genetic predisposition to mood disorders are more vulnerable to environmental stressors (Monroe & Harkness, 2011). Similarly, the analysis revealed a significant relationship between youth dissatisfaction and bipolar severity (Table 10). Individuals who reported unsatisfactory youth experiences were significantly more likely to exhibit severe symptoms. This reinforces the idea that stress, trauma, and socio-environmental pressures in formative years can influence the course of the disorder. Research indicates that stressful life events and a lack of social support can trigger or worsen symptoms of bipolar disorder in individuals predisposed to the condition (APA, 2013). Furthermore, a significant association was found between family history of psychiatric disorders and higher risk of BD. The risk of bipolar disorder is ten times greater in first-degree relatives of BD sufferers than in the general population (Zhang et al., 2020). The findings of the study are consistent with literature as significant association was found

between family psychiatric health history and course of bipolar and its severity as shown in Table 11. The findings indicate that there is no significant relationship between severity of BD and general home atmosphere as shown in Table 12. People with bipolar disorder can be greatly affected by their family setting, including the way their family is structured. Studies have shown that people with bipolar disorder who have a lot of social support, which can be easier to find in joint family systems, do better at controlling their disorder. For example, people with bipolar disorder who live with supportive families are less likely to have frequent relapses and tend to have better mental health generally (Frank et al., 2005).

Conclusion

This study highlights the influence of both personal and social factors on the experience and severity of bipolar disorder. The results revealed that variables, such as marital status, early life experiences, family history of mental illness, all play a role in shaping the course of the disorder. These findings show that mental health does not exist in isolation, it is closely connected to the environment in which individuals are raised and live. By understanding these interrelationships, more compassionate, informed, and effective strategies can be developed to support individuals living with BD and to help reduce its impact on individuals, families, and communities.

Limitations

The following limitations were observed while collecting data for this clinical research on bipolar disorder in Pakistani hospitals. A strike lasting approximately 5-6 days occurred in some government hospitals, which impacted the delivery of care, participants' enrollment as well as data acquisition. Bipolar disorder is a heterogeneous condition with varied symptoms and courses, As a result, it is difficult to generalize findings. Furthermore, the sample size also limits the generalizability of the results. In Pakistan, limited research has been conducted on bipolar disorder, indicating a gap in the literature and the need for further in-depth exploration.

Implications

Research can contribute to the development and improvement of prevention programs for individuals who are at risk of developing bipolar disorder. Strategies for early intervention can be developed based on age, gender, socioeconomic status etc. Understanding the differences in the prevalence and treatment of bipolar disorder based on sociodemographic factors can help address existing disparities in care. The findings of this study have a potential to inform the development of evidence-based interventions aimed at reducing the prevalence and impact of bipolar disorder.

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