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A Narrative Review: Risk Factors Involving Bipolar Disorder

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Abstract:
Patients with bipolar disorder, a severe to chronic illness, exhibit polarized behaviour throughout prolonged manic and depressed episodes, ranked sixth in the world, is a major source of disability. The outcome is mental, cognitive, and functional impairment. Numerous risk factors for bipolar patients are displayed in this review paper. where 1% of people on the planet are impacted. Furthermore, the essay highlights the complex nature of bipolar disease and the risk factors for severe depression and suicide that interfere with the patient's chances. And most likely the contributing factors, such as a developing cause, coexisting medical conditions (such cardiovascular disease), child maltreatment, drug addiction, and the interplay of psychosocial stressors with both inherited and environmental triggers. According to statistics, 37% of bipolar patients have attempted suicide at some time in their lives. Moreover, 15%–20% of suicide attempts succeed. Monitoring the patient with the condition is crucial; the primary objective is to distinguish it from other mental illnesses. An early diagnosis of the disorder is necessary for treatment, to improve the patient's quality of life, and to enable them to lead a normal life free from recurrent manic and depressive episodes.

Keywords **— bipolar disorder, cyclothymic, Psychotic disorder, DSM-5-TR™, depressive episodes, manic episodes, pregnancy in bipolar, risk factors in bipolar disorder.**

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I. INTRODUCTION

Bipolar disorder is a severe to chronic psychotic illness that is primarily responsible for manic and depressed interval that are based only on a syndrome and mental incapacity. [1] Bipolar disorder can affect people of any nationality, ethnicity, background, socioeconomic class, origin, or childhood trauma. [3] It can also cause cognitive and functional impairment.

Extreme melancholy and manic episodes are just two examples of the many distinct psychotic episodes that characterize this complicated and polarizing mental disorder.[2] Although there are many varieties of bipolar disorder, the general public is often affected by just two. ICD-11 (International Classification of Diseases) and DSM-5-TR™ (Diagnostic and Statistical Manual of Mental Disorders)(TR=Text revision) are the standard classification systems for bipolar disorder.[4] where the four primary categories are listed:

A. Types: -

1. Bipolar disorder-1: characterized by multiple depressed episodes interspersed with at least one manic episode.[2] Although an accurate diagnosis is frequently not necessary for this disorder, prompt detection can help patients avoid developing more severe episodes in the future.[5] identifying the patients in order to stop the mania from recurring and to get them ready for it.[6] In bipolar disorder 1, the ailment mostly afflicted 0.6% of the population.[1]

2. Bipolar disorder-2*:* This includes the patients having at least one hypomanic episode and experiencing just one depressive episodes.[7] It is characterized as a lifelong episodic sickness with a seasonal pattern, affecting mostly 0.4% of the population.[3] Patients in this area require an

immediate diagnosis in order to prevent any kind of future attacks that could lead to further significant episodes that could potentially change the direction of their lives.[4] Patients have hypomania for longer than four days.[9] where patients are observed engaging in dubious behaviour, such as self-harm and hysterical behaviour.[10] Women make up 1.7% of the population in the case of BD-2 patients.[7]

3. Cyclothymic disorder:- This includes the patients experiencing multiple periods of hypomanic episodes and several days to weeks of depression.[8] In many situations, depression episodes in patients with this illness can extend anywhere from months to almost two years, making close observation of the patient imperative.[5] Patients should start therapy and treatments as soon as possible.[4] This implies that incorrect and delayed diagnoses for patients are quite significant and have a significant impact on their ability to recover.[3]

4. Bipolar disorder unspecified:- Normal classification is carried out using DSM-5-TR™ and ICD-11.[10] This category is used to identify symptoms that do not meet the other particular criteria for bipolar disorder.[11] where a variety of characteristics can also be observed, including increased emotional liabilities, patient irritability, prolonged emotional instability, decreased sleep or insomnia, dysphoric mood, excessive guilt for perceived past or present transgressions, agitation, increased anxiety, restlessness, impulsiveness, psychomotor skills, and increased talkativeness.[4] Not every patient experience manic and depressed periods.[12] This category has a known suicide rate of between 0.2 and 0.4 per 100 people annually.[13] out of 15%–20% of the endeavours were accomplished.[17] Males with mixed nonspecific bipolar illness are more likely to die than females.[2]

II. EPIDEMIOLOGY:

The 12-month prevalence of DSM-5-TR™ bipolar disorder in the United States was 0.6%, and it is believed that 1% of the global population suffers from the illness.[4] The projected lifetime prevalence is 2.1%, and both men and women are affected in the same way.[3] The disease can strike at any stage of life, but its peak age of onset is between 15 and 19, or early adolescence or maturity.[8] Patients who are elderly may also experience bipolar symptoms. When a patient's family history is more than 60 years old, it is absolutely important.[17] The prevalence rate of bipolar disorder that is not specifically diagnosed ranges from 6.7% to 28%, with a potential increase to 66%.[15] Just 21% of patients with differential diagnoses were observed to be experiencing major depressive episodes, particularly those whose diagnoses were delayed by over five to ten years after the start of their illness.[11] Due to hereditary factors, the illness tends to run in families.[4] Other important factors included in the diagnosis process were childhood experiences or the family situations.[2]

III. POLARIZED BEHAVIOUR:

A. ***Depressive episodes:-*** Depression is one of the polarized episodes of bipolar disorder, where people experience emptiness, a persistent sense of melancholy and hopelessness, and lack of energy to get out of bed in the morning or perform daily tasks.[16] Loss of interest in job and personal life, break connections with friends and family or any social groups.[11] Patients may also exhibit altered eating and sleep habits, feelings of worthlessness and guilt, psychomotor agitation or retardation, bodily aches and pains, and, finally, suicidal thoughts. Only 20% of bipolar patients statistically experience depression; these episodes can also result in substance misuse, ADHD, anxiety attacks & other complicated conditions.[9] Additionally, it causes patients to develop suicidal impulses; 37% of patients attempt suicide more than once, with 15% to 20% of those attempts ending in suicide.[7] Over 50% of patients have attempted suicide at least once in their lifetime. Relapse rates for bipolar disorder were as high as 36% in the first year of treatment and as high as 73% in the following five years. [20] Dysfunction of the hippocampus and prefrontal cortex, which affects the life of the person and increases the risk of depression. [12]

B. ***Manic episodes:-*** Bipolar disorder is typified by manic episodes, which are marked by intensely

elevated moods, increased energy, and increased activity levels.[19] Ten-episode episodes are characterized by increased, intense rage that manifests as yelling and self-harm attempts, dyspnea, panic attacks, racing thoughts, decreased appetite, and difficulty falling asleep.[16] According to statistics, 1%–2% of persons have the illness, with 0.6%–1% of that group estimated to experience manic episodes.[8] Manic episodes can strike at any age or gender, but they can begin quite early in life, from adolescent to young adulthood. Each person experiences attacks differently; some may only have one or two episodes in their lives.[11] In other situations, the attacks could happen more regularly.[21] Women are more vulnerable than men when it comes to manic episodes.[10]

IV. RISK FACTORS:

A. ***Genetic pre-disposition***:- A patient's family history is crucial in determining when their disease first manifests, where there has been sexual, physical, and mental abuse of children.[19] Additionally, a youngster who has a family history of psychosis may play a significant role as a risk factor for the disorder's genesis.[3] Child malnutrition that is followed by similar food and a place the child may live might also be a contributing factor in the issue.[16] Approximately 51% of bipolar patients had experienced maltreatment as children; of them, 24% were victims of abuse as children, and of those 21%, one was a victim of sexual assault. This issue affects children 37% of the time who have experienced childhood neglect from their parents or primary caregiver.[21] Suicide and other difficulties in the family past can make a person more susceptible to BD symptoms.[2] Since the condition has a hereditary component, accurate patient data collection is essential for disorder identification or diagnosis.[6]

B. ***Neurobiological abnormality***:- Bipolar disorder may also be impacted by anomalies in the structure and function of the brain.[4] Neurotransmitter system alterations as well as changes in other brain regions have been linked to the illness in individuals.[10] Recent research has revealed that specific brain regions are enlarged, which may be linked to mood swings and dysregulations in the neurotransmitter systems that control serotonin, dopamine, and norepinephrine.[12] Additionally, some research has demonstrated that bipolar patients' amygdalae are larger than those of normal, healthy subjects.[15]

C. ***Environmental factors***:- Stressful life events combined with traumatic life experiences from the past or present might potentially act as a trigger point for the patient.[9] Additionally, a number of other factors, such as malnutrition during childhood, interpersonal relationships, relationships at work, significant life changes like losing a loved one or dealing with other delicate issues, abuse of any kind, and psychological stressors like financial strain, can contribute to the onset of illness as well as relapses.[3] An irregular sleep pattern brought on by an overwhelming workload at work or insufficient sleep is another trigger point in the patient's life.[22] According to some recent research, the primary caregiver for a patient with bipolar illness, another psychotic disorder, or Alzheimer's disease may experience psychotic distress.[10] linked to their patient's unfavourable outcomes or their deaths from tragic incidents like suicide can also serve as a trigger point for the illness's emergence.[23]

E. ***Comorbidities***:- Bipolar disorder patients frequently co-occur with other medical conditions, such as thyroid issues, multiple sclerosis, cardiovascular problems, etc.[16] They may become depressed due to the medicine needed to treat their illness and the uncertainty around any connected conditions.[11] Bipolar disorder vulnerability may be increased by certain personality traits such as impulsivity or high sensitivity to stress, in addition to conditions like ADHD (attention deficit hyperactivity disorder),

substance abuse disorder, borderline personality disorder, schizophrenia, major depressive disorder, anxiety disorder, first-degree family history of suicide or suicide attempts, binge eating disorder, migraine, etc.[8]

F. ***Pregnancy:*** - Bipolar disorder is largely genetic. Pregnancy related to bipolar disorder can be very challenging at times because patients with bipolar disorders are highly likely to self-harm and cannot take most anti-psychotic medications.[17] Instead, they must rely entirely on support groups, therapy, and patient monitoring during the entire term of their pregnancy.[10] When there is a 30% chance that infants born to mothers with bipolar disorder will inherit the genetic material.[4] On the other side, though, in certain instances the patients have exhibited reduced mood swings, leading to fewer manic episodes; conversely, the moms are experiencing severe cases of sadness.[24] Genes encoding the serotonin pathway (SERT & 5-HT2A, 5-HT2C) have been demonstrated in recent investigations.[14] serious and unique elements include manic and psychotic episodes, such as postpartum psychosis.[7] Abrupt manic and depressive episodes have been reported in about 1-2 cases out of every 1000 births; these episodes are dangerous for both the unborn child and the mother carrying it.[23] Existing birth mothers carefully weigh the possible risks of medication against any effects on the expectant mother or the newborn even after delivery during a manic episode.[5]

G. ***Suicide:*** **-** More than any other psychotic condition, bipolar disorder is the primary risk factor for suicide. [3] Where 50% of suffering patients make at least one suicide attempt in their lifetime. People with bipolar disorder (BD) reported a lifetime risk of suicide, with bipolar disorder currently ranking sixth globally in terms of disability.[10] According to statistics, 15%–20% of individuals have committed suicide, a rate that is significantly higher than that of the general population or any other mental illness.[20] In the case of BD, suicide cases are particularly increased during depressive episodes, and patients may feel so hopeless and alone that they take drastic measures.[21] Men statistically complete more suicides than women, while young adults aged 16 to 19 are the demographic most likely to attempt suicide.[5] The primary goal of lowering the number of attempts is also to make an effort to comprehend the patients, their motivations for taking the step, the factors that led to this mindset, and how to support them through this time.[22] identifying the warning indicators, which include the patient talking about dying, giving up possessions, expressing dejection and emptiness, going through a depressive episode, and withdrawing from social events and activities.[2]

H. ***Delayed diagnosis/misdiagnosis:-*** Bipolar disorder diagnosed by manual followed by DSM-5-TR™ Guidelines and to meet the criteria the personal needs to experience one or more manic episode in their lifetime, but this manic attacks involves hallucinations, restless, extreme behavioural changes, impulsiveness which is also the symptoms for others disorder like schizophrenia, borderline personality disorders and major depressive disorders, anxiety and ADHD.[25] Which means in order to diagnose the patients only with the symptoms based is difficult, due to symptoms overlapping with other disorder and similarity between the behaviour in the patients delayed the diagnosis or sometimes misdiagnosis which means proper necessary treatment is difficult which leading to the worsening of the condition and can be harmful to the patients taking other medication sin the body.[9] in some case patients tries to hide the symptoms or they are regarding their symptoms differently to appear healthy.[18] Sometimes, patients cannot recall all the details during their depressive and manic episodes, which limits doctors' ability to accurately diagnose them..[19]

Since every single patient's manic and depressive patterns are different from one another, frequency and severity of the condition are seem different and can have different output to the patients.[19] If a physician hasn't witnessed or experienced all potential phases of a condition, diagnosing accurately and initiating prompt treatment becomes challenging. Variations in resources and societal perceptions of mental disorders—where symptoms may resemble personality traits, cultural norms, gender expressions, or social status-can also delay a patient's diagnosis. [23]

V. CONCLUSIONS

The information provided throughout the article demonstrates the various forms, variations, and traits of polarized behaviour in BD patients. Additionally, it includes a number of risk factors related to bipolar disorders, which aids in our comprehension of the need of prompt diagnosis as well as the possibility of patient misdiagnosis. Delayed diagnosis can also lead to the patient not receiving the appropriate treatment, which exacerbates the disease. Currently, only 21% of patients receive the essential primary care. Evaluate the group every two years to track their progress and tally the patients' number of assaults. Other objectives include regular patient check-ups to prevent needless risk factors, patient independence, and reducing the stigma and societal taboo associated with mental illness. Assist the patient in changing their lifestyle and improving their quality of life by providing social support. In order to give patient the best possible care, it is important to distinguish between various medical conditions in order to prevent confusing BD with conditions like ADHD or anxiety disorders. Reduce the number of patients who commit suicide in order to encourage them not to go to such drastic measures and to be there for them anytime they need assistance in any situation.

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