An Updated Overview of Bipolar Depression: Review Article

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ABSTRACT
Background: People with major depressive disorder (MDD) experience many different symptoms, including feeling guilty, low self-esteem with unhappiness as well as decreased capacity to enjoy life's simple pleasures. They may also experience changes in their sleep and appetite patterns, as well as feelings of hopelessness and suicidal thoughts. Depression and bipolar disorder (BD) are two of the most frequent mental diseases that lead to disability globally.
Objective: To give an updated overview about bipolar depression.
Methods: Bipolar depression and people with major depressive disorder were all looked for in PubMed, Google scholar, and Science direct. References from relevant literature were also evaluated by the authors, but only the most recent or complete study from January 2000 to May 2021 was included. Due to the lack of sources for translation, documents in languages other than English have been ruled out. Papers that did not fall under the purview of major scientific investigations, such as unpublished manuscripts, oral presentations, conference abstracts, and dissertations, were omitted.
Conclusion: Researchers are performing numerous neuroanatomical and neuroimaging investigations to learn more about bipolar disorder. Bipolar disease is associated with impairments in neurocognitive processing abilities, which can be seen in a variety of neuropsychological domains such as psychomotor speed, attention, memory, executive function, as well as learning.
Keywords: Bipolar depression, People with major depressive disorder.

INTRODUCTION

The symptoms of major depressive illness include unhappiness, guilt, low self-esteem, decreased capacity for pleasure or enjoyment, sleep and eating disorders, low energy and focus, and thoughts of suicide or self-harm. It is not uncommon to discover a wide range of estimates for the prevalence of MDD in different nations and cultures, with more consistent findings on other descriptive epidemiological measures. Major depressive disorder has a severe influence on both psychosocial functioning and health-related quality of life [1].

Biological, genetic, environmental, and psychological factors are thought to play a role in the development of major depressive disorder. Serotonin, norepinephrine and dopamine were once thought to be the primary neurotransmitter disorders that underlie MDD. Serotonin-norepinephrine antidepressant inhibitors, dopamine antidepressant inhibitors, and selective serotonin receptor inhibitors are all antidepressants that have been utilised for depression treatment. Those who had suicidal thoughts exhibited lower levels of serotonin metabolites in their bodies. Neuroregulatory mechanisms and neural circuits, however, may be more complex, leading in secondary neurotransmitter system disturbances [2].

Bipolar depression presents a unique set of challenges when it comes to treating the patient. Morbidity and death from co-occurring general medical conditions are both associated to depression in BD, as well as a significant risk of suicide. People with bipolar disorder (BD) have death rates related with diabetes, metabolic syndrome, and cardiovascular illnesses that are several times greater than those in the general population or those with other mental disorders. In comparison to the general population, the suicide rate for those suffering from bipolar disorder is 20 times greater. Death by suicide is closely linked to the mixed (agitated-dysphoric) and depressive stages of bipolar disorder. In terms of long-term prevention, treatment for bipolar depression is substantially less fully explored than treatment for unipolar depression. Whether or not antidepressants are useful short-term in treating bipolar depression is still debatable, and they carry a significant risk of clinical deterioration, particularly in individuals with mixed states or rapid cycling [3].

One of the most difficult clinical challenges is the difficult and often long-delayed diagnostic difference between depression as an initial presentation of BD vs. a symptom of non-bipolar MDD. It is common for diagnosis and therapy to be delayed for at least six to eight years after the onset of symptoms [4]. Many people with bipolar disorder (BD) suffer from depression and seek professional help because they are afraid, avoid, disclose, or avoid seeking help. Although they may not regard clinically significant hypomanic signs like improved mood, vitality, or libido to be clinically important, they may even prefer such conditions. Early in the course of sickness, diagnostic uncertainty is more frequent in the absence of confirmation from a family member or close friend [5]. Many people with bipolar depression aren't diagnosed until their moods "flip" into either hypomania or manic episodes, either naturally or as the result of exposure to a mood-lifting drugs [6].

There are other signs of bipolar disorder that can't be seen directly, such as: (a) a history of mental illness in the family, such as bipolar disorder, schizophrenia, or

"nervous breakdown," (b) the onset of illness at a young age, often accompanied by depression (c), a cyclothymic temperament (d), and multiple recurrences e.g., four depressive episodes in ten years or depression accompanied by irritability and insomnia [5].

Epidemiology of bipolar disorder:

The bipolar type according to epidemiological research has a lifetime prevalence of about 1% in the general population [7]. Type I bipolar illnesses were found to affect 2.4% of the general population, while type II disorders affected 0.4% of the population. This finding was based on data from a large cross-sectional study conducted across 11 countries [8]. Recent scientific evidence is insufficient to sway opinion away from the conclusion that bipolar disorder affects nearly the same numbers of men and women. There's also evidence of a link between metropolitan surroundings and higher prevalence of bipolar disorder [9]. While the evidence for the link between urbanization and bipolar disorder is higher in schizophrenia [10].

Etiology:

There is no single concept for bipolar disease that integrates genetic, biochemical, pharmacological, anatomical, and sleep data [11]. The transmitter substances; (The neurotransmitters catecholamines, serotonin, glutamate, and others), hormones (Neurotrophic factor, thyroid, and other brain-derived compounds), as well as steroid are all currently the subject of biochemical research. Imaging studies, which are becoming more frequent in medicine, may shed light on the problem. Studies of concordance in identical and fraternal twins have shown that affective diseases are heritable.

A family member of a bipolar proband has a morbidity risk of between 2.9 and 14.5 percent, depending on the diagnostic criteria utilised and the heterogeneity of the probands. Bipolar I, II, hypomania, cyclothymia, and unipolar depression are not known to be linked to each other genetically or to be different diseases. Debate persists as to whether a person's temperament (phenotype) is the best indicator of a person's genetic predisposition. Therapy can help patients and their families cope with their anxieties and concerns [5].

Bipolar Disorder and Disability:

Depression accounts for a substantial percentage of the time spent by people with bipolar disorder, so it's not surprising that it's linked to a variety of dysfunction and disability in the patients. In their working years, 30–40% of people with bipolar disorder (BD) go through prolonged periods of unemployment, with depression being blamed for much of this damage [12].

Suicidal risks:

It's estimated that 15.4 per 100,000 people commit suicide each year (0.015 percent of the population),

however there's a lot of regional variance [13]. Globally, the suicide rate is estimated to be 15.4 per 100,000 people per year, or 0.015 percent each year [14, 15]. There is a higher risk of suicide attempt and death in the days immediately after a stay in a mental health facility, particularly when appropriate follow-up care is delayed or nonexistent [16, 17].

Cognition in bipolar disorder:

A variety of neuropsychological areas, such as executive function, learning and memory, attention, and psychomotor speed, might be affected by bipolar disease-related deficits in neurocognitive processing capacities. There is some evidence of trait and state grouping in cognitive impairments across clinical phases, according to recent studies. Research shows that the number of hospitalizations and affective episodes in bipolar individuals has been associated to their cognitive function. Attention, linguistic learning, and memory are some of the cognitive abilities most commonly affected in bipolar patients because they are mediated by the frontal and temporal systems. Deficits in self-regulation and affective response modulation are two key implications of these findings. New insights into the pathogenesis and treatment of bipolar disorder may be gained by studying these modifications [18].

CONCLUSION

Researchers are performing numerous neuroanatomical and neuroimaging investigations to learn more about bipolar disorder. Bipolar disease is associated with impairments in neurocognitive processing abilities, which can be seen in a variety of neuropsychological domains such as psychomotor speed, attention, memory, executive function, as well as learning.

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