The Discussion and Analysis of the Treatment of the Bipolar Disorder

Xianglong Zeng(✉)

University of California, Davis, USA
xlzeng@ucdavis.edu

Abstract. This article is a general overview of the treatment of bipolar II disorder, including pharmacological treatments, psychosocial treatment, and recommendations for future development. This research aims to systematically review different types of bipolar disorder treatment to promote further research of therapeutic mechanisms and innovative development of new treatment methods. The methodology used in this research is reviewing pertinent literature. Through the analysis and reviewing of pertinent literature, this study integrates most treatment methods for bipolar disorder and discusses their mechanism, advantages, and shortcomings, including adverse effects. A finding of this essay is the optimal treatment method for bipolar disorder, which is combined therapy of psychosocial treatment and medical treatment. Mood stabilizers combined with antipsychotics are believed to be more effective for severe patient. Monotherapy solely using a mood stabilizer is recommended only for mild parents. Moreover, psychologists should make psychosocial treatment plans based on the patient's individual conditions, characteristics, and background. Patients should adhere to psychosocial treatment for long-term maintenance. Another finding of this essay is exploring what has been neglected by the psychology academia and encouraging scholars to do more research in that field. Nowadays, many people have met difficulties in their life and gotten mental illnesses during the pandemic. As mental health problems are getting more severe among people, it is significant to list all the treatment methods and analyze them to give researchers insight and give a basic understanding of bipolar disorder treatment for ordinary readers.

Keywords: Bipolar Disorder · Combination Treatment · Psychosocial interventions

1 Introduction

Bipolar disorder (B.P.), also known as manic-depressive illness, is referred to as recurrent episodes of depression and mania (or hypomania). Three types of bipolar disorder—are cyclothymia, bipolar I disorder, and bipolar II disorder. Bipolar disorder is one of the world's most prevalent and influential mental diseases. It not only impairs patients' psychosocial functioning but also negatively impacts the whole society. A society's suicide rate, productivity, and employment rate could all be affected by bipolar disorder. Since bipolar disorder is so common and detrimental, the treatment of the bipolar disorder

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is significant and noteworthy for the improvement of social stability and individual well-being.

To begin with, the treatment of bipolar disorder could be divided into two parts, which are the treatment of mania and depression. Treatment of mania is only for patients who have bipolar I disorder or cyclothymia because bipolar II disorder patients' hypomania symptoms are less severe. Medications such as lithium, Divalproex, and atypical antipsychotic olanzapine are effective for treating mania symptoms, and this essay will explain them in detail in subsequent paragraphs. Bipolar depression treatment is relatively more complex. Mood stabilizers are widely utilized in bipolar depression treatment, especially when used in combination with antidepressants like serotonin reuptake inhibitors. There are still controversies in the treatment of bipolar depression. For example, the effectiveness of paroxetine, lamotrigine, and aripiprazole is still unclear yet needs more research. Another way to categorize bipolar disorder treatment is to divide it into acute treatment and maintenance treatment. Acute treatment aims to improve existing symptoms. Medication is the fastest and most effective way to relieve patients' symptoms within a short time. Psychotherapy can also be used with mood stabilizers and accelerate recovery during patients' acute manic episodes. Maintenance treatment aims to prevent relapse and reduce the impact of disease on patients long-term. Medications like antipsychotics can be used for a long time, even after acute episodes, to reduce relapse. Psychosocial treatments like cognitive-behavioral therapy, interpersonal and social rhythm therapy, functional remediation treatment, systematic care management, group psychoeducation, and family-focused therapy (FFT) are all effective therapies for maintenance treatment, and psychologists may select the most suitable one for each patient [1, 2]. Overall, research on bipolar disorder treatment is still developing. Mechanisms, adverse reactions, and the effectiveness of certain treatments are still unclear or unwarranted.

Treating bipolar disorder is a global challenge that needs innovative clinical research and public awareness. David J. Miklowitz and Sheri L. Johnson's literature review of bipolar disorder effectively and clearly summarizes the treatment of the bipolar disorder. However, it does not mention traditional Chinese medication, MECT, Functional remediation, and Systematic care management. The advantage of this essay is its comprehensiveness and objectivity. The essay includes most treatments on the market and lists their advantages and disadvantages. In order to contribute to bipolar disorder treatment, this essay will review pertinent literature and discuss bipolar disorder treatment from three aspects—psychosocial treatment, medication, and recommendations for future development. The purpose of this essay is to analyze and summarize research and study about bipolar disorder treatment to impart knowledge to the public and give psychologists new insights into the future development direction of bipolar disorder treatment.

2 Medication Treatment for Bipolar Disorder

First, mood stabilizers alone or combined with an antipsychotic are the key medical treatments for manic episodes. Mood stabilizer refers to lithium and anticonvulsants, not including antipsychotics. Divalproex and lithium are the best mood stabilizers for treating mania [3]. The mechanism of Divalproex is still unclear, but most psychologists

believe that Divalproex can cause an increase of GABA in the brain and block sensitive sodium channels. The blockade of the sodium channel can cause a reduction in glutamine release, which can prevent and alleviate manic episodes. Lithium was introduced to treat bipolar disorder in 1949. The pharmacological action of lithium treatment is increasing the activity of serotonin, regulating the activity of the second messenger, and modifying the activity of potassium in neurons. Around 60%–70% of B.D. patients' manic symptoms were alleviated using lithium. Antipsychotic drugs such as olanzapine, risperidone, and haloperidol can be used in acute treatment to relieve manic symptoms within a short time. Many researchers believe that manic episode in bipolar disorder is related to dopamine hyperactivity. Therefore the blockade of dopamine receptors by antipsychotics can inhibit manic episodes. Notably, olanzapine is particularly effective in mixed states and rapid cycling. The pharmacological action of olanzapine blocks the 5HT2A receptor and A2 receptor, which leads to the inhibitory release of monoamine. The release of monoamine can relieve psychotic and depressive symptoms.

However, all these medications have adverse effects on patients. For example, most antipsychotics can cause weight gain and sedation. The potential side effects of taking lithium are sedation, renal failure, stomach discomfort, tremors in the motor, thirst, and growth in weight. Decrease in platelet counts, stomach irritation, raised liver enzymes, exhaustion, nausea, and weight gain are side effects of Divalproex.

Thus, these medicines should be used carefully under the psychologist's supervision. For treating depression episodes, lithium, lamotrigine, and antidepressant are the first-line medication [4]. However, the monotherapy of taking an antidepressant is not a preferred choice because using an antidepressant alone may trigger manic symptoms. Combined therapy is more effective and more commonly used. When patients are not able to respond to first-line medication, adding bupropion, paroxetine, serotonin reuptake inhibitor, or other alternatives is recommended. If patients can respond well to the first-line medication, psychologists need to consider reducing ineffective or poorly tolerated medications and determine drug dosage based on patients' responses. Although combined therapy is more effective, there are still shortcomings of it. Combined therapy cause difficulties for psychologists in identifying each medication's positive efficacy and adverse effect on patients. Thus, psychologists need to make sure the adverse effect is controllable and worthwhile before implementing a treatment plan [3]. Another disadvantage of combined therapy is its high cost. More kinds of medication used may add a financial burden on patients. In this case, the loss may outweigh the gain. Patients' conditions might even be aggravated because of mental stress. The noteworthy point is that certain types of medication should be limited in treatment. For example, more than one antipsychotic or anxiolytic should not be used at the same time. After acute episodes, patients will experience a high risk of relapse in the next 6 months. During this period, having long-term maintenance treatment can prevent relapse and stabilize patients' condition. Lithium and valproate are first-line medications for continuation treatment [5]. The potential alternatives could be lamotrigine, carbamazepine or oxcarbazepine. Lithium, according to research, lowers the incidence of manic and depressive relapses by 38% and 28%, respectively. This data supports that lithium is an effective medication to prevent relapse and reduce suicidal risk. The effectiveness of using

antipsychotics as a long-term medication is still uncertain. The utilization of antipsychotics should be discontinued after acute episodes since there is a lack of study clearly proving it is useful for remission and relapse prevention.

3 Psychosocial Interventions

Psychotherapy is often used in long-term maintenance treatment because patients in acute episodes are more likely to reject help and disbelieve psychologists' advice. Also, certain patients, like children, pregnant women, and people with a predisposition to allergies, are not suitable for taking medicine. In this case, psychotherapy plays an essential role in treatment. There are different kinds of psychosocial treatments, and each one has a different mechanism. Different psychosocial interventions are suitable for different patients. Psychologists should choose the most suitable psychotherapy according to the patient's specific conditions, including state of illness and personality. Common psychosocial treatments for bipolar disorder are psychoeducation, family-focused therapy, individual cognitive-behavioral therapy (CBT), interpersonal and social-rhythm therapy (IPSRT), Functional remediation, and Systematic care management. Each therapy will be explained in depth in the next section.

3.1 Psychoeducation

First off, psychoeducation aims to teach B.P. patients strategies to identify symptoms and prevent relapse in order to maximize protective factors and minimize risk factors. There are three types of psychoeducation—group psychoeducation, individual psychoeducational approaches, and family-based psychoeducation. Group psychoeducation teaches patients self-care skills and provides a platform for patients to gain a sense of belonging and identity from the group. Patients can learn from and support each other, which can decrease their stigma. Patients' mania symptoms decrease, and their manic episodes shorten after group psychoeducation. Individual psychoeducation is essential in psychotherapy because it is a cost-effective way to reduce manic symptoms. Family-based psychoeducation gives knowledge about B.D. to patients and their family members. Family-based psychoeducation can reduce relapse and improve patients' social functioning [6]. The effect of psychoeducation has been verified in Francesc Coloma and Dominic Lamb's systematic review and Eduard Vieta's study.

3.2 Family-Focused Therapy

The family environment is highly related to the onset of bipolar disorder. Family conflicts and criticism can stimulate bipolar disorder; according to David J. Miklowitz and Bowen Chung's study, FFT can reduce the level of symptom severity and the possibility of relapse. The conclusion is drawn from 8 controlled experiments within 30 years [2]. Hence, family-focused therapy can increase protective factors and reduce relapse, and this treatment is especially important for teenage patients. Family-focused therapy consists of problem-solving training, communication training, and family psychoeducation. It can lower relapse rates and increase recovery speed in the long term. This therapy can indirectly benefit the patient by educating the caregivers even if the patients themselves cannot participate in the therapy [6].

3.3 Individual Cognitive-Behavioral Therapy (CBT)

Individual cognitive-behavioral therapy (CBT) treats patients by restructuring their cognition—their beliefs, values, and understanding of the world and themselves. B.P. patients' depressive episodes may relate to excessive pessimistic thinking, and manic episodes may relate to excessive optimistic thinking. CBT aims to improve patients' thinking mode and let them feel good about themselves. Studies show that CBT cannot significantly prevent relapse but positively impacts patients' mood and time of relapse. It indicates that CBT might be suitable for patients in the early stages of the disorder [5]. Acceptance and commitment therapy (ACT) is an example of individual cognitive-behavioral therapy. It is one of the latest development in CBT. The mechanism of ACT is improving patients' psychological flexibility to accept their negative emotions and thoughts. The core treatment steps of ACT are mindfulness, acceptance, cognitive dissociation, taking self as the background, clarifying values, and commitment actions.

3.4 Interpersonal and Social-Rhythm Therapy (IPSRT)

The mechanism of interpersonal and social-rhythm therapy (IPSRT) is improving patients' circadian rhythms. IPSRT suggests that patients regulate the sleep-wake cycle and daily routines and solve interpersonal issues. Stabilizing patients' sleep-wake rhythm, daily events, and social activities can cause their moods to be stabilized. Patients' vocational functioning gets significantly improved from the therapy, and their relapse time is often delayed [7]. Holly A. Swartz and Elaine Boland's study supports the importance of IPSRT by providing two large controlled trials and explains the therapeutic methods and processes of IPSRT in detail.

3.5 Others

Functional remediation aims to improve B.P. patients' cognitive functioning from different aspects, including attention, memory, reasoning, problem-solving, organization, verbal thinking, and more. Patients' occupational functioning and social functioning could be improved to different degrees [1].

"Let nature take its course" is the basic treatment principle of Morita therapy. The aim of Morita therapy is to modify patients' self-containment and self-preoccupations. Morita therapy guides patients to accept their nervous and anxious energy by redirecting patients' self-focused attention to the concrete, objective environment and the practical tasks. Patients would gain experiential knowledge and adapt to the natural change of emotion while living in the present [8].

Systematic care management includes regulated pharmacotherapy, group education, and intensive patient monitoring by the nurse in healthcare facilities. Systematic management of patients is cost-effective. It saves money for needy patients and reduces their manic episodes [1].

Exercise therapy can relieve anxiety, depression, and manic symptoms of patients with bipolar disorder. Proper exercise can mobilize nerve cells and enhance the regulation of the nervous system. It can also promote the secretion of certain glandular hormones. Patients' emotions could be calmed and controlled, and their psychological pain could

be alleviated through exercise therapy. Psychologists should start the treatment with the exercises patients are interested in and formulate a reasonable exercise plan with emphasis on interest and group work [9].

4 Combination Treatment

Psychotherapy combined with medication can achieve an optimal therapeutic result. Medication is effective, but most have poor compliance and severe adverse effects. Also, there is a high risk of relapse if patients stop taking the medication. Patients who take medicine for a too long time may develop drug tolerance which may give rise to treatment failure. Psychotherapy has a slow effect, but it emphasizes the transformation of personality and cognition and the modification of problematic behavior. It provides permanent benefits for patients. Hence, an effective treatment plan could be using pharmacology as the primary treatment method and adding psychotherapy as an adjunctive treatment [3].

5 Discussion of the Future Trend

Treatment of the bipolar disorder is still developing and improving. There are still areas that have not been completely studied. This paragraph will suggest recommendations for future research. For psychosocial treatment, the effect and mechanisms of some treatments are still uncertain. Most psychosocial treatments improve B.P. patients' emotional state, but to what exact degree they stabilize mood is still unclear.

For pharmacological treatment, most medications are proven to reduce relapse and symptoms. However, it is still unknown to what extent medication directly improves patients' life quality by reducing suicidal attempts and enhancing functioning. What is more, medication's adverse effects should be seriously considered before treatment. Lithium can potentially cause renal failure, especially during periods of acute lithium toxicity. Methods of preventing renal failure and reducing lithium toxicity are areas worthy of study. Also, taking lithium may increase the risk of teratogenicity in fetuses or infants, but it is still not sure whether lithium or bipolar disorder itself is the cause of teratogenicity. More research needs to be done to verify whether lithium can be taken for infants and pregnant women or not. In addition, treatment mechanisms need more study and investigation to inspire insights to innovate new drug treatments with fewer side effects and customize a treatment plan for the individual patient. Since bipolar disorder is episodic, long-term research years are more reliable and should be done more. Another future recommendation is more research on modified electric convulsive therapy (MECT) and traditional Chinese treatment. MECT is a physical treatment that stimulates the brain with pulsed currents to make the cerebral cortex produce extensive discharge and influence the secretion of neurotransmitters. This treatment has immediate and good effects. However, it can cause recent memory impairment and potential brain damage [10]. Traditional Chinese medication for treating bipolar disorder needs more research. A traditional Chinese etiology for bipolar disorder is the weakness of viscera, causing heart and spleen deficiency. Chinse medications like SuHeXiangWan and JiuWeiZhenXinKeLi were found to be effective on B.P. patients. Their mechanism

is to nourish the heart and spleen by adjusting main and collateral channels around the body through reinforcing and reducing. Traditional Chinese medicine also has the function of promoting sleep quality and calming the mind. It is helpful to eliminate the influence of insomnia on patients and stabilize patients' emotions [8]. In addition, traditional Chinese medications are mostly made from natural herbs, which have very few side effects. However, the sample of traditional Chinese medicine treating bipolar disorder is too small. More studies on MECT and traditional Chinese medication need to be done to prove their reliability.

6 Conclusion

In conclusion, different treatments have different characteristics and are suitable for different patients. This essay briefly introduces a variety of treatments from the pharmacological and psychosocial aspects. It is very important to choose the most appropriate treatment according to the patient's own conditions. Although psychology academia has done profound research on bipolar disorder, bipolar disorder is still one of the most prevalent and detrimental mental illnesses that cause suicide events in the world. More studies on neglected areas like traditional Chinese medicine are needed. The purpose of this essay is to provide holistic insight into bipolar disorder treatment for psychologists in order to enlighten them to develop more accurate diagnostic guidelines and a comprehensive systematic treatment approach. Other readers may gain an overall understanding of bipolar treatment.

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