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The Relationship Between Substance Use Disorder and Suicide in Individuals with Bipolar Disorder*

Bipolar Bozukluğu Olan Bireylerde Madde Kullanım Bozukluğu ile İntihar Arasındaki İlişki

Aybüke MÜFTÜOĞLU[1]
Aslı ENEZ DARÇIN[2]
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ABSTRACT

This research examines the relationship between substance use disorder and suicide among individuals with bipolar disorder. Bipolar disorder is a chronic mental health condition characterized by mood fluctuations. Substance use disorders are prevalent in individuals with this disorder, significantly increasing the risk of suicide. The research explores the impact of this comorbidity on suicidal behaviors and emphasizes the importance of treatment and intervention. The findings indicate that the combination of substance use disorder, and bipolar disorder increases the frequency of suicide attempts. Developing treatment and prevention strategies is crucial for improving the quality of life for at-risk individuals.

Keywords: *bipolar disorder, substance use disorder, suicide, comorbidity*

ÖZ

Bu araştırma, bipolar bozukluğu olan bireylerde madde kullanım bozukluğu ve intihar arasındaki ilişkiyi incelemektedir. Bipolar bozukluk, ruh hali dalgalanmalarıyla karakterize kronik bir ruh sağlığı durumudur. Bu bozukluğa sahip kişilerde madde kullanım bozuklukları yaygın olup, intihar riskini önemli ölçüde artırmaktadır. Araştırma, bu komorbiditenin intihar davranışları üzerindeki etkilerini araştırmakta ve tedavi ile müdahalenin önemini vurgulamaktadır. Bulgular, madde kullanım bozukluğu ve bipolar bozukluk birlikteliğinin intihar girişimlerini artırdığını göstermektedir. Risk altındaki bireylerin yaşam kalitesini iyileştirmek için tedavi ve önleme stratejileri geliştirilmesi gerekmektedir.

Anahtar Kelimeler: *bipolar bozukluk, madde kullanım bozukluğu, intihar, komorbidite*

[1]Bağımsız araştırmacı aybukemuftuoglu@stu.topkapi.edu.tr ORCID: 0009-0005-1615-7090
[2]Prof. Dr. İstanbul Topkapı Üniversitesi, Psikoloji Bölümü, aslienezdarcin@topkapi.edu.tr ORCID: 0000-0001-5831-3040

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1. Introduction

Bipolar disorder is a long-term condition distinguished by recurrent episodes of depression, mania, or mixed moods, occurring regularly or irregularly (Bağırov, 2014). This illness, characterized by fluctuating mood changes between opposite poles, manifests with high mood and energy levels during manic episodes, and with deep despair and low energy during depressive episodes. Typically, periods of stable mood or mild symptoms occur between these episodes. Individuals with bipolar disorder experience significant fluctuations in their lives between these periods, significantly impacting their functionality, relationships, and overall quality of life. Bipolar disorder, a recurrent condition that causes functional impairment, is reported to be the eighth leading psychiatric disorder contributing to disability in the community by the World Health Organization (Mueser et al., 1998).

Bipolar disorder leads to intense feelings of unhappiness, extreme energetic behaviors, feelings of helplessness, despair, suicidal thoughts, lack of self-esteem, and pessimism in individuals (Mengi and Aygür, 2018). In many individuals experiencing this condition, these mood changes continue for years (Bristol and Myers, 2011). Individuals with bipolar disorder face numerous challenges both for themselves and for their families and social circles as they navigate through life. Managing not only the manic and depressive episodes of the illness but also coping with the risk of suicide, substance misuse, involvement in criminal activities, family problems, and economic difficulties is equally important (Arguvanlı, 2018). Therefore, the chronic nature of bipolar disorder often requires long-term management strategies and support systems to effectively cope with the ongoing mood fluctuations and associated challenges.

Substance misuse is common among people with bipolar disorder, with research showing a strong link between the two conditions. Individuals may use substances to self-medicate, trying to relieve bipolar disorder symptoms or cope with the emotional distress it causes (Pilan and Bildik, 2019). However, this maladaptive strategy often worsens bipolar symptoms and complicates treatment outcomes.

Substance use disorder is linked to various symptoms of bipolar disorder, such as increased suicide attempts, frequent hospitalizations, rapid mood swings, complex episodes, and earlier onset of mood episodes (Özyıldırım et al., 2009). Substance use among individuals with bipolar disorder can diminish rational decision-making, heighten impulsiveness, exacerbate mood volatility, and additionally elevate the likelihood of self-harm or suicidal actions.

The primary aim of the research is to investigate the relationship between bipolar disorder and substance use, and to understand how this relationship impacts the risk of suicide. Firstly, an examination of the definition and symptoms of bipolar disorder will be conducted, focusing on its detailed effects on individuals' quality of life, functionality, and social relationships. Additionally, the research will delve into the effects of substance use on bipolar symptoms, including the severity and frequency of these effects, as well as the impact of substance use on the course of bipolar disorder and response to treatment. Furthermore, the research will explore how bipolar disorder and substance use interact with each other and the potential effects of this interaction on the risk of suicide.

2. Bipolar Disorder

Bipolar disorder is a mood disorder characterized by hypomanic, manic, depressive, or mixed episodes, with periods of stable mood between episodes, and typically exhibiting seasonal patterns (Aydın, 2017). Bipolar disorder is one of the most common mental disorders that affect mood and behavior. Approximately 3-5% of adults worldwide are affected by this disorder (Aydın, 2017). The onset, course, and response to treatment of bipolar disorder can be a varied and complex process in each patient. It is known that bipolar disorder typically persists throughout the individual's lifespan.

Mood stabilising treatment is crucial in preventing illness periods in these patients, making it of vital importance. In this context, treatment increases individuals' quality of life by preventing recurrent episodes and reducing symptoms of this disorder (Eroğlu and Özpoyraz, 2010).

Depressive mood and loss of interest or inability to derive pleasure from previously enjoyable activities are the core symptoms of depression. Patients may feel sad, melancholic, hopeless, or worthless. In depressive episodes of this disorder, symptoms such as profound sadness, loss of energy, sleep problems, appetite changes, difficulty concentrating, suicide attempts, or thoughts of suicide may be observed.

In manic episodes, the patient exhibits pathologically elevated self-esteem, happiness, or euphoria, as well as irritability, anger, and aggression (Bağırov, 2014). It is characterized by an excessively elevated and excited mood. Symptoms such as excessive energy, racing thoughts and speech, decreased need for sleep, increased confidence, risky behaviors, increased distractibility, and inability to focus on any topic are observed.

The hypomanic episode is a short-term period in which no clear deterioration or regression is observed and is milder than mania (Gorwood, 2010). In general, it is not a condition that will alone cause impairment in functionality.

2.1. Epidemiology and Etiology of Bipolar Disorder

Bipolar disorder is a recurrent and chronic mental disorder characterized by fluctuations in mood and energy levels, and it is observed in approximately 1.3% of the population (Vega et al., 2011). The incidence of bipolar disorder may vary depending on various factors, such as gender, age, geographic location, and genetic factors.

There is no significant difference in the ratio of bipolar disorder between genders. However, there are differences in the clinical course between two genders. In bipolar disorder, a predominantly depressive course is observed in women, while a manic episode predominates in men (Kılıç, 2015). There is no difference between genders in terms of onset age. The average age of onset is in the twenties (Kessler et al., 2007). There is no difference between genders in terms of onset age.

In the etiology of bipolar disorder, it is believed that various factors interact in a complex manner and play roles of different magnitudes. It mostly occurs during adolescence and young adulthood. In the etiology of bipolar disorder, environmental, genetic, biochemical, and psychodynamic factors play a role (Young and MacPherson, 2011).

Bipolar disorder is significantly more common in some families, indicating a strong hereditary component (Post et al., 2016). Genetic factors are estimated to account for about 60-80% of the development of bipolar disorder (Patel et al., 2006). The risk of developing bipolar disorder is higher in first-degree relatives of individuals with the condition. Moreover, the familial transmission of bipolar disorder is twice as high in female patients compared to male patients (Currier et al., 2006). It is believed that the etiology and clinical course of bipolar disorder are determined by genetic and environmental factors (Akıllı, 2022). Environmental factors play an important role in the onset of the illness by interacting with genetic factors. In some cases, lifestyle factors, alcohol or substance use, certain medications taken externally, and psychosocial influences can contribute to the development or exacerbation of the illness, even when there are no genetic factors predisposing to the illness (Yeloğlu, 2017).

The impact of climatic factors on bipolar disorder is considered to have the most consistent data among environmental factors (Akıllı, 2022). Depressive and manic episodes in bipolar disorder

tend to occur more frequently during certain seasons. Additionally, it has been noted that bipolar patients who are sensitive to seasonal changes experience more severe clinical courses (Mortensen and Pedersen, 2011).

2.2. Clinical Course

Bipolar disorder is a cyclical and recurrent illness. The clinical course may vary depending on factors such as the frequency, severity, and duration of episodes. It has been reported that as the number of episodes increases, there is a tendency for the duration between episodes to shorten (Kılıç, 2015).

When it comes to Bipolar Disorder I, a significant portion of patients experience a depressive onset (Akıllı, 2022). The frequency of onset with depression is more common in women compared to men. In the course of Bipolar Disorder I, manic episodes tend to show a rapid onset in the majority of cases. Along with rapid onset, symptoms gradually increase and stabilize over a few weeks. An untreated manic episode typically lasts for an average of three months (Akıllı, 2022). For the depressive period, this duration varies between three to six months. A treated depressive episode typically lasts about three months (Kılıç, 2015). Therefore, discontinuing antidepressant treatment before three months typically results in the reappearance of symptoms (Akiskal, 2007).

Bipolar Disorder II presents itself with a depressive episode, and it is not considered as Bipolar Disorder II until a hypomanic episode occurs (Akıllı, 2022).

Late age onset, absence of comorbidity, short duration of manic episodes, and absence of suicidal thoughts are good prognostic indicators for bipolar disorder (Rihmer and Angst, 2007). Bipolar patients make suicide attempts at a rate of 15-25%, with a mortality rate of 10-15% due to suicide (Dilsaver et al., 1997). Female gender, younger age, total number of previous episodes, number of depressive episodes, family history of mental illness, comorbidity with anxiety disorder and alcohol/substance use disorder were found to be associated with the frequency of suicide attempts (Simon et al., 2007).

2.3. Treatment of Bipolar Disorder

Treatment in bipolar disorder is divided into two categories: acute and maintenance treatments (Kılıç, 2015). Treatment of acute episodes is usually with mood-stabilizing medication, while preventive treatment usually focuses on preventing relapse and involves regular medication intake. One of the most commonly used methods for treating bipolar disorder is medication. The medications typically used are mood stabilizers, which include lithium, anticonvulsants, and antipsychotics (Akıllı, 2022). During medication selection, the severity of episodes, psychotic features, comorbid medical and psychiatric disorders, and previous treatment modalities with good response in past episodes should be taken into account (Grunze et al., 2009).

Maintenance treatment aims to prevent possible new attacks. While medication forms the cornerstone of treatment for bipolar disorder, psychological therapies play an important role in the process due to the presence of psychosocial issues (Akıllı, 2022). There are findings that patients who receive both medication and psychotherapy have a milder level of depression or mania experienced during hospitalizations and cycles compared to other patients. This means that for bipolar disorder, individuals should manage their treatment process not by opting for a single approach but by using multiple methods (Stahl, 2006).

3. Substance Use Disorders

Substance use disorder is characterized by an excessive and harmful use of legal or illegal substances. Individuals may consume substances such as alcohol, drugs, or prescribed medications in an uncontrolled and damaging way. This disorder adversely affects an individual's functionality, relationships, and overall quality of life. Substance use disorder, also known as substance addiction, manifests as the deterioration of an individual's personal, social, and professional life due to long-term physiological and psychological dependence on a substance (Özer, 2020). However, for this diagnosis to be made, there needs to be a frequent recurrence of substance use over an extended period; development of tolerance to the substance, meaning the individual requires the substance to alleviate symptoms such as anxiety, tremors, insomnia, and restlessness when the substance is discontinued or reduced. This disorder is a complex condition characterized by the uncontrolled use of a substance despite its harmful consequences. Individuals continue to use the substance even if they are aware of the problems it causes or may cause.

According to Gabor Maté (2017), addiction cannot be solely defined as a physiological disease. It is a complex psychophysiological process with several important components, including pleasure, relief, craving, and inability to abstain. Individuals seek temporary pleasure and relief from the substance, experience cravings, and continue to use it despite facing negative consequences (Özer, 2020). The problem in addiction lies not in the properties of the substance but in the internal relationship established with it. Childhood traumas and stress predispose individuals to addiction (Maté, 2017).

3.1. Epidemiology and Etiology of Substance Use Disorders

Many studies have been conducted on the gender differences in substance abuse or susceptibility. Initially, it was observed that such abuse cases were less frequent in women compared to men, but recently, an increase in substance abuse among women has also been reported (Garcia et al., 2016). According to the Epidemiologic Catchment Area (ECA) results, the annual prevalence of substance dependence is %1.7 in adult males, while this rate is %0.7 in females (Bağırov, 2014). The usage rate is higher among individuals aged 18-25. In the age groups of 30-44 and 45 and above, the frequency gradually decreases (Kaplan and Sadock, 2004).

Substance use disorders are complex and result from the interplay of psychological, biological, behavioral, and social factors. Genetic predisposition contributes to an individual's susceptibility to substance use-related risks and increases the likelihood of developing addiction. Additionally, changes in brain chemistry and imbalances in neurotransmitter systems play a role in the development of substance use disorders.

Addiction is not an innate condition and there is no natural need for substances in the body's structure (Sancar, 2017). Factors such as family, circle of friends, and educational level can contribute to the risk of substance use. In addition, an individual's personality traits and experienced stress factors can also lead to substance use. Individuals with low self-esteem and introverted, aggressive, rebellious, and socially incompetent individuals may have a higher risk of substance use (Ercan, 2013). These individuals may use substances to calm their anxieties, alleviate their tensions, which can lead to substance addiction in individuals (Uzbay, 2015).

3.2. Treatment of Substance Use Disorders

The treatment of substance use disorder requires a long-term effort to support the individual's sustained recovery. Treatment typically involves a personalized approach and may require the use of multiple methods simultaneously. Treatment plans should be carefully considered based on the individual's

identified needs, and treatment should be implemented through a combination of single intervention methods, the combination of different interventions, or the use of various intervention elements (Ögel, 2010). It is implemented and monitored as a program that regulates the patient's integration with society, adaptation, and work, along with pharmacological and psychological treatment (Çavuşoğlu, 2009).

There are two important points in addiction treatment: eliminating withdrawal symptoms and preventing relapse (Özer, 2020). In the initial stage of treatment, medication is used to prevent the physiological effects that arise from discontinuing the substance. These medications serve to alleviate withdrawal symptoms, diminish cravings, and deter relapse. Psychotherapy methods aimed at coping with substance use disorder help individuals understand and modify thought patterns, emotional difficulties, and behaviors associated with substance use. The goal in therapies is to enable individuals to develop healthier habits by addressing thought patterns, emotional reactions, and behaviors associated with substance use. This involves promoting selfawareness, understanding, and self-assessment skills, exploring reasons for initial use, addressing related causes, recognizing the effects of substances, acquiring skills to prevent relapse, and preparing for life outside of therapy (Çavuşoğlu, 2009).

Additionally, the rehabilitation support provided to individuals facilitates the reorganization of disrupted behavior patterns and interpersonal relationships due to substance use, as well as the establishment of new relationships (Sancar, 2017). This process involves overcoming the challenges individuals face when building a new life, providing new habits, and readjusting to society.

4. Suicide

Suicide, defined as a self-directed aggression that emerges alongside the individual's voluntary desire to end their life (Koç, 2016). The person loses the desire to continue living due to various reasons and therefore decides to end their own life. An individual who attempts suicide may indeed have a genuine desire to die, but they may also have the intention to express their spiritual pain, helplessness, and hopelessness through this attitude (Öncü, 2019).

Suicide is largely associated with mental disorders. It is believed that more than 90% of those who die as a result of suicide attempts have a psychiatric disorder (Windfuhr and Kapur, 2011). This is a serious issue that needs to be carefully addressed due to its potential to disrupt the patient's adherence to psychiatric treatment and the risk of recurrence in the later stages of the illness (Mazalıauskiene and Navickas, 2012). Therefore, understanding the factors that pose a risk for suicide in psychiatric illnesses can assist in early planning of necessary interventions and preventing the transition of suicidal ideation into action. Previously, suicide behavior was typically examined in two subcategories: those resulting in death and those not resulting in death. However, nowadays, any action by an individual resulting in the voluntary termination of their own life, regardless of the manner or outcome, is generally classified as suicide (Harmancı, 2015). The International Institute of Mental Health has defined suicide in three groups:

1. Suicidal ideation: Suicide at the ideation stage is the most likely phase for intervention.

   Failure to take action at this stage can lead to irreversible consequences for both the individual and society (Köknel, 1989). These are people who have thought about committing suicide but have never gone beyond it.

2. Suicide attempt: This pertains to a deliberate and voluntary act where an individual endeavors to inflict harm upon themselves. They may be ambivalent about ending their life, yet the injury sustained does not culminate in death (Arsel, 2010).

3. Completed suicide: Completed suicide is used to describe a situation where an individual has voluntarily ended their own life (Arsel, 2010). These people have been thinking and planning about suicide for a long time. After a long period of thinking and planning, suicide often ends in death.

4.1. Epidemiology and Etiology of Suicide

Suicide risk factors are quite diverse and the combination of multiple factors often increases the risk of suicide. It is known that almost one million people end their lives by suicide each year (Borges et al., 2010). However, it is estimated that there are 25 to 50 times as many suicide attempts as completed suicides (WHO, 2015). One study revealed that between 25% and 50% of patients diagnosed with bipolar disorder had attempted suicide at least once in their lifetime, with 8% to 19% completing these attempts (Latalova et al., 2014). Additionally, it was determined that 25.2% of 1244 patients receiving treatment for alcohol and substance use disorder had experienced at least one suicide attempt (Evren et al., 2001).

The etiology of suicide is complex and multifaceted, often resulting from the interaction of multiple factors. The underlying causes of suicide are often related to personal, psychological, social and environmental factors. Sociodemographic, physical diseases, psychiatric disorders, personal and developmental disorders, biological and genetic, adverse life events and familial problems can be risk factors (Tiryaki, 2023).

5. Comorbidity

It is quite common for substance use and addiction to occur together in individuals with bipolar disorder (Bağırov, 2014). The combination of these two conditions can increase complexity in terms of both diagnosis and treatment because both conditions are different mental health problems that must be addressed separately.

It has been asserted that individuals diagnosed with bipolar disorder use more alcohol and drugs, as a means of alleviating their emotional symptoms (Strakowsky et al., 1992). Another perspective is that alcohol consumption increases during manic episodes. The elevation of mood is associated with increased alcohol consumption, which is correlated with agitation, impulsivity, and insomnia in patients (Marneros et al., 2002). Additionally, the presence of substance abuse and addiction in individuals with bipolar disorder can exacerbate the severity of their symptoms and contribute to the overall challenges in managing their mental health effectively. In most studies, the comorbidity of bipolar disorder and substance use disorder has been reported to lead to experiencing more episodes, more hospitalizations, and an increased risk of suicide (Bağırov, 2014). The comorbidity of these two disorders has significant negative effects on the subsequent course and outcome of the disease.

The existence of comorbidity is linked with unfavorable treatment outcomes, extended and recurrent mood episodes, diminished levels of functional enhancement, deterioration in quality of life, reduced treatment adherence, increased risk of hospitalizations, increased visits to emergency departments, and a higher incidence of impulsivity and suicide attempts (Dilbaz and Yılmaz, 2019).

It is suggested that the lifetime prevalence of any substance use in Bipolar Disorder I patients is higher than that of in schizophrenia or major depression patients. The comorbidity rate of these two disorders was found to be 47.3% (Dilbaz and Yılmaz, 2019).

A study determined that the history of substance use disorder is higher in males than in females diagnosed with bipolar disorder (Akarsu et al., 2012). It was found that 30% of the cases had a

comorbid diagnosis of alcohol use disorder, followed by other substance uses, primarily cannabis (20%) (Dilbaz and Yılmaz, 2019). Researches indicate that the prevalence of substance use disorders among individuals diagnosed with bipolar disorder is higher compared to other psychiatric disorders. Especially among young adults, the comorbidity rate of these two disorders is significantly high. It is known that this comorbidity has negative effects on the clinical course.

Following the diagnosis of substance abuse, the risk of developing any mood disorder increases by 4.6 times, while after the diagnosis of substance dependence, the risk of developing a mood disorder increases by 9.5 times (Dilbaz and Yılmaz, 2019). In patients diagnosed with bipolar disorder, early onset of the illness, male gender, low educational level, and family history of substance use are reported to be risk factors for substance use (Tohen et al., 1996).

Researchers have attempted to explain the high prevalence of substance use in bipolar disorder patients by various assumptions, including the fact that substance use may be a symptom of bipolar disorder, it may arise as a form of self-medication, bipolar disorder itself may contribute to substance use, and that there may be similar risk factors for bipolar disorder and substance use disorder (Kesebir et al., 2013). Factors related to the development of comorbid bipolar disorder in individuals with substance use disorder have been suggested to include a history of conduct disorder, not living with biological parents, a history of physical or sexual abuse, and a history of suicide attempts (Dilbaz and Yılmaz, 2019).

5.1. Treatment of Comorbid Bipolar Disorder and Substance Use Disorder

Bipolar disorder and substance use disorder often intertwine, influencing each other's clinical trajectory and seldom manifesting independently. When individuals exhibit comorbid bipolar disorder and alcohol or substance use disorder, their response to treatment is often compromised, potentially resulting in reduced treatment adherence. Moreover, the severity of mood symptoms during mood episodes tends to escalate, accompanied by more frequent cycling between mood states. Consequently, this combination contributes to diminished levels of both quality of life and functionality. Given the heightened risk of suicide attempts when these disorders co-occur, prioritizing treatment becomes even more crucial.

In comorbid bipolar disorder and alcohol-substance use disorder, treatment can be divided into acute, maintenance and sustaining phases. The main purpose of acute phase treatment is to alleviate the bipolar disorder disease period, provide mood stabilization, and ensure the patient's participation in the treatment and abstain from alcohol and substances. During the maintenance and sustaining phases, the aim is to reinforce the progress achieved during the acute phase, maintain sobriety by implementing preventive measures, and prevent the recurrence of both disorders (Altınbaş and Evren, 2013). The efficacy of lithium treatment, one of the most effective options in the treatment of bipolar disorder, has been observed to be particularly effective in the presence of substance use disorder, especially during alcohol use and depressive episodes (Altınbaş and Evren, 2013).

6. Bipolar Disorder and Understanding and Preventing Suicide Risk in Comorbidity with Substance Use

The cooccurrence of bipolar disorder and substance use disorder significantly increases the risk of suicide. In this case, the primary focus of treatment should be the prevention of suicide. Interventions aimed at preventing suicide require a comprehensive approach from both medical and psychosocial perspectives. First and foremost, crisis intervention is crucial for individuals at risk of suicide; patients should be stabilized in a safe environment, and hospitalization should be considered if necessary. Additionally, appropriate pharmacotherapy is critical; medications like lithium have proven

effectiveness in reducing suicide risk in the treatment of bipolar disorder. Psychotherapeutic methods, especially cognitive-behavioral therapy and dialectical behavior therapy, help patients learn emotion regulation and develop coping strategies for suicidal tendencies. Treating substance use is also a vital part of suicide prevention; detoxification, rehabilitation, and support groups are essential components for individuals struggling with alcohol or drug addiction. Furthermore, strengthening relationships with patients' families and social networks plays an important role in reducing suicide risk. Family therapy, social support groups, and educating the close circle of patients are important elements of suicide prevention interventions. Finally, ongoing monitoring and follow-up for individuals with suicidal tendencies are crucial; regular assessments help with the early detection of potential crises. In this context, a comprehensive treatment plan should be developed to reduce suicide risk in individuals with bipolar disorder and substance use, integrating pharmacotherapy, psychotherapy, substance use treatment, and social support systems.

7. Method

This research is based on the examination of scientific articles available in the literature. In the research, articles published in Google Scholar, DergiPark, ResearchGate, and TezYok academic databases were scanned. Keywords such as "bipolar disorder," "substance use disorder," "addiction," "mood disorders," "substance abuse," "comorbidity," "suicide," and "treatment" were searched in these search engines. Out of over 500 articles retrieved, many were not relevant to the subject and therefore were not included in the research. The articles most closely related to the research topic were carefully examined and based on the current information and findings supporting the research purpose, relevant data were selected and analyzed accordingly. The literature review of the research was completed based on this information.

8. Discussion and Conclusion

In this part of the research, the relationship between bipolar disorder and substance use disorder and the effect of this relationship on suicide risk were examined. In the research, the prevalence of substance use in individuals with bipolar disorder, the effects of substance use on the clinical course of the disorder and its relationship with suicide attempts were discussed. Upon reviewing the literature, it has been concluded that the comorbidity of both disorders is common and among the factors influencing the risk of suicide.

In comorbid conditions, it has been found that the duration of episodes is longer and suicide attempts are more frequent (Kesebir et al., 2007). Alcohol and substance use have been shown to exacerbate the challenges of managing bipolar disorder, particularly regarding the heightened risk of suicide.

Numerous studies have consistently demonstrated that in cases where alcohol and substance dependence coexist with bipolar disorder, the rates of suicide tend to be higher compared to those without such comorbid conditions. Although the rates vary across studies, numerous research findings indicate an increase in the risk of suicide in comorbid conditions. In a study conducted by Messer and his colleagues (2017), it was demonstrated that there is a significant relationship between substance use and suicide attempts. Additionally, the same study highlighted that suicide attempts escalate substance use, while substance use may in turn lead to suicide attempts.

8.1 Suggestions and Limitations

Future research should prioritize longitudinal studies to better understand the long-term effects and progression of comorbid bipolar disorder and substance use disorder. Research should include diverse populations to account for cultural and socio-economic influences and focus on integrated treatment

models that address both disorders simultaneously. Early intervention programs should be explored to prevent symptom worsening and improve outcomes. Multidisciplinary approaches, including psychosocial interventions, should also be investigated. Finally, examining healthcare policies can identify barriers to effective care, supporting improved treatment and management.

The research findings have limitations due to varying methodologies, diagnostic criteria, and assessment tools across studies, which limit result comparability. Many studies are regionspecific or outdated, affecting their relevance and universality. Observational methods and reliance on self-reported data introduce potential bias. Future research should use standardized criteria, longitudinal designs, and diverse samples to better understand the comorbidity of bipolar disorder and substance use disorder.

Authors' Contribution Rate
The authors contributed to the study equally.

Conflict of Interest Statement
The authors declare that they have no conflicts of interest.

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