



Causes and Symptoms of Bipolar Disorder in College Students

Yinle Ouyang^(✉)

University of Toronto, Toronto, ON, Canada
christie.ouyang@mail.utoronto.ca

Abstract. In recent years, bipolar disorder is gradually becoming younger, and the incidence rate among young people is increasing yearly. However, the dissemination of information and awareness about bipolar disorder among young people, especially college students, has been slow or lacking. Although associated with bipolar disorder in adults and other younger populations, the specific life and social environment of college students lead to specific causes of bipolar disorder, which makes the diagnosis more complex and therefore requires more targeted interventions and appropriate treatments. This academic article describes the symptoms, causes, and primary interventions of bipolar disorder in college students. This study is a literature review, analysis, and survey summary based on studies on bipolar disorder associated with young adults or the college student population from 2001 to 2022. The primary sources for the research literature were Google Scholar and the University of Toronto Library. The DSM-5 and NIMH provided much reliable information to support this paper. This study finally analyzed three main results: (1) The prevalence of manic and depressive episode characteristics of bipolar disorder in college students. (2) The specific and essential etiologist of bipolar disorder in college students include sleep problems, smoking, and drinking problems. Moreover, (3) medication and on-campus treatment approach for college students.

Keywords: Bipolar disorder · Bipolar I and Bipolar II · Depressive · Stress related · Anxiety related

1 Introduction

The DSM-5 defines bipolar disorder as a brain condition that produces significant mood, ability, and energy swings [1]. It is a common psychological disorder, with approximately 46 million people with bipolar disorder worldwide [2]. However, the low age of bipolar disorder has not attracted widespread attention.

Among the young people group, the student group, because it is in late adolescence and young adulthood, two critical stages of mental illness budding and manifestation [3], so the mental and psychological problems of the college student group between the ages of 18 and 25 are severe, and the incidence of mental illness is very high reaching 22.1%. However, according to statistics, only one-third of this group receives proper

psychological treatment, and most student patients do not receive help [3]. As early as 2003, young persons aged 18 to 29 had the most significant frequency of bipolar disorder (4.7%) [4]. Furthermore, according to the NIMH, in 2015, the prevalence of bipolar disorder grew to 5.9% among adults aged 18 to 29 [5].

The low age of bipolar disorder is intensifying yearly, but the community's attention to it is very little. Bipolar disorder in university students should be addressed as a critical public health concern that requires more attention, inquiry, and intervention. In focusing on bipolar disorder among college students, there is a question that people should consider: whether the development of bipolar disorder among college students is associated with other highly prevalent mental illnesses in this group, such as depression and anxiety disorders. Some data show that about 6% of young people have a severe mental illness, while at the same time, 70% of young people enter university [4, 6]. These data show that mental illness among college students is a public problem that deserves attention and urgent intervention.

Young individuals who experience mental disorders, on the other hand, are the least likely to obtain therapy [3]. The consequences of this phenomenon are severe and long-term. Abnormal mental health states prevent some students from completing their education at university or even leaving it, and this long-term development leads to a massive brain drain that negatively affects society's technological, economic, and cultural progress [3]. The community must treat bipolar disorder seriously and implement focused treatments since it is a severe condition that compromises college students' mental health. Therefore, this paper aims to analyse the symptoms, causes, and therapeutic interventions of bipolar disorder in this particular set of university students, hoping to find more targeted and effective interventions for bipolar disorder in college or university students.

2 Diagnosis

A manic episode or extremely severe mania for at least one week is required to diagnose Bipolar I disorder. Bipolar II disorder is defined as at least one incidence of moderately manic symptoms and at least one occurrence of substantially depressed symptoms, as opposed to a typical manic episode. Manic and depressive symptoms can last for two or more years [1]. Nevertheless, compared to the clinical guidelines for Bipolar I and Bipolar II, the diagnoses are not lengthy or powerful enough for each episode. Notably, these three disorders are independent of each other for diagnosis; Cyclothymic disorder is neither a mild type of Bipolar I disorder nor a minor form of Bipolar II. The onset of Bipolar I disease is severe and deadly in a short time, whereas Bipolar II disorder causes patients to have symptoms of depression for a more extended period, which is also very distressing [1]. In the college population, one to two cases per 10,000 college students per year may exhibit a first manic symptom episode [3]. Among people over 18, 2.6% suffer from Bipolar I disorder, which is the age at which most young people enter college [3].

3 Symptoms

Bipolar disorder has complex, diverse, and variable symptoms. The main symptoms of bipolar disorder are manic or hypomanic episodes and depressive episodes. All three types of bipolar disorder contain both types of extreme mood states, causing the patient to exhibit extreme hyperactivity, such as being energetic or irritable, as well as appearing very depressed, sad or apathetic, or even hopeless. The three main categories of symptoms discussed here: Manic episodes, hypomanic episodes, and depressive episodes, as well as their unique importance to the college student.

3.1 Manic Episodes

A manic episode is defined by a solid and sustained rise in mood over a while, which may be accompanied by hyperactivity, impatience, racing thoughts, and excessive behaviour. Manic episodes are usually accompanied by abnormal behaviours such as delusions and hallucinations, which are paranoid and severe manic reactions. A considerable decrease in sleeping length is a typical symptom of manic episodes, and other sleep issues such as trouble falling asleep or excessive sleep duration may also be symptoms of manic episodes [1]. It is worth noting that sleep problems are not only a symptom of manic episodes, but the abnormal reduction of sleep is one of the factors triggering manic and hypomanic episodes [7]. The prevalence of sleep problems among the college student population makes sleep abnormalities a critical factor in this group's development of the bipolar disorder, which will be explicitly discussed below. In addition to this, simultaneous performance of multiple activities, loud talking, marked increase in discourse, inability to concentrate, engaging in risky excesses related to money transactions (e.g., gambling, overspending transactions), hypersexuality, and development of thoughts and behaviours with suicidal tendencies are among the possible symptoms during Manic episodes, the duration is usually 3 to 6 months [1]. The impact on college students of these two-way affective disorder symptoms will be magnified when they occur in college because college students generally do not have a long-term stable source of financial income, and making risky transactions can devastate their financial situation. College students generally suffer more significant financial losses in this situation than adults who are entering society and have full-time jobs. The inability to concentrate can severely impact college students' academic performance, and many college students with bipolar disorder face the crisis of not being able to complete their education. Likewise, college is an intimate and sizeable social environment. If bipolar disorder causes college students to initiate risky sexual behaviour, the spread of the sex virus will spread rapidly on campus, and the number of unplanned pregnancies will increase significantly as a result.

3.2 Hypomanic Episodes

Hypomanic episodes can be interpreted as milder forms of manic episodes, but they do not include severe manic phenomena such as delusions and hallucinations or other behaviours that can seriously affect everyday life, social life, and workability. Hypomanic episodes are defined if the patient continues to exhibit the other milder symptoms of manic episodes for at least four days [8].

3.3 Depressive Episodes

Depressive episodes are distinguished by a persistently depressed mood (sadness, distress, despair, and more), a substantial reduction or loss of enthusiasm in almost every action, significant weight loss, eating problems, sleep problems (insomnia or excessive sleep), irritability or difficulty maintaining patience, difficulty concentrating, and suicidal thoughts or actions. The development of suicide conduct severely impacts depressive episodes in the college population. One of the significant reasons for death for students at American colleges and universities is suicide [9]. A large percentage of students on college campuses have had suicidal thoughts. Around 24,000 college students attempt suicide each year in the United States, and 1,100 of these students carry out these suicidal thoughts, making suicide the second primary reason for mortality for university students [10]. Moreover, bipolar disorder would significantly increase the likelihood of college students developing suicidal behaviour.

4 Causes and Formation

4.1 Sleep

Although no studies have shown that sleep problems directly contribute to bipolar disorder, the two can indeed interact, with sleep problems triggering manic episode symptoms in bipolar disorder. Some studies have shown that 25% to 65% of patients have experienced sleep issues common among present undergrads, with 27% having at least one type of sleep problem and about 60% having persistent poor sleep quality [11, 12]. Most college students are young adults who are just coming of age and need to adapt to independent living, a new social environment, and more difficult academic tests. They are transitioning from adolescence to adulthood, and the stress caused by these new environments and tests cannot be underestimated. These pressures are also the key to the sleep problems of most college students. Insomnia, disrupted circadian rhythms, irregular sleep schedules, nightmares, and other types of chronic sleep problems are all potential contributors to the development of the bipolar disorder.

4.2 Alcohol, Cigarettes, and E-cigarettes Use

The prevalence of alcohol, combustible cigarettes, and e-cigarettes in college is perhaps much higher than one might think. The stressful academic life, the high number of social events, and other college environments all contribute to the risk of academic drinking and smoking. According to relevant studies, 81% of college students have been exposed to alcohol, and about 31% have experienced alcohol abuse [13]. Whereas alcohol and nicotine use have synergistic effects, both have also been linked to the popularity of cigarettes. Alcohol-using college students tend to consume combustible or electronic cigarettes [13]. Furthermore, the consumption of e-cigarettes increases the likelihood that students who have been exposed to combustible cigarettes may turn to alcohol. As a result, teenagers and young people who use alcohol, combustible cigarettes, and e-cigarettes are more likely to develop and be exposed to harmful behaviours [13]. Individuals who abuse alcohol are more prone to suffer from psychological problems

such as bipolar disorder and depression [14]. Similarly, smoking and chronic smoking are key risk factors for bipolar illness [15]. The symptoms of bipolar disorder could also result in more alcohol and substance misuse. The interaction between alcohol, smoking, and bipolar disorder can further afflict college students.

5 Treatment

5.1 Medication

The three main medications usually used to treat bipolar disorder are Mood stabilizers, Antipsychotics, and Antidepressants. However, how to administer medication to college students with bipolar disorder is complicated and controversial. On the one hand, some students may resist medication, believing that taking psychotropic drugs may hurt their learning ability. Moreover, psychotropic medications with severe side effects do carry such a risk. Therefore, taking Lithium is a better option for patients targeting ongoing academic work on campus. Lithium is a psychotropic medication with relatively mild side effects, commonly hand tremors, dizziness, and diarrhoea, and usually does not negatively affect college students in terms of academic ability and memory [16]. Lithium is generally used for two-way affective disorder for long-term treatment, and its effectiveness is significant in stabilizing mood over time and effectively reducing the risk of suicide in college patients. However, the difficulty in treating college students is that it requires good long-term cooperation from the patients themselves, and getting college students to participate in and adhere to long-term treatment intuitively is one of the challenges. Short-term treatment with antipsychotic drugs is more effective if one wishes to treat bipolar disorder in a short period. For some college students who present with acute and severe bipolar symptoms and need to be treated in the short term, medications such as haloperidol, aripiprazole, and more, can be used [17].

5.2 Treatment on Campus

Providing opportunities for on-campus treatment of the bipolar disorder is a better option for college students. Universities should actively conduct regular surveys of students' mental health status to identify better potential bipolar patients or students who are already suffering from the disorder on campus. The university should provide more comprehensive and practical information on mental health and illness to students and faculty, encourage students to pay more attention to their mental health, and help sick students learn to face their mental problems and illnesses and actively seek help. Teachers' ideological work can go a long way in helping college students with bipolar disorders. Every teacher should tell students that they should respect students with mental illnesses and that students with illnesses should pay attention to their psychological state and insist on cooperating with treatment. Such a campus climate will allow more students to receive psychotherapy and be willing to undergo treatment rather than feeling that having a mental disorder is something unimportant or shameful.

University campuses need to be matched with more counsellors and psychologists. Because bipolar disorder is a persistent psychiatric disorder that typically necessitates

a longer-term intervention program, on-campus treatment is preferable for college students. On-campus treatment is more convenient for college students' academic and living schedules and can significantly increase the rate of college students receiving treatment. Some specific on-campus treatments for bipolar disorder include individual psychotherapy, participation in bipolar support groups, and pharmacotherapy [18].

General psychotherapy is generally "talk therapy," which includes cognitive behavioral therapy (CBT), psychoeducation, and social rhythm therapy (IPSRT) [1]. "Talk therapy" is effective in helping college students identify and change abnormal emotions, thoughts, and behaviours. This individual psychotherapy effectively allows psychologists to monitor students' long-term adherence and cooperation with treatment.

The establishment of bipolar disorder support groups within universities can effectively help students with bipolar disorder to face their psychological abnormalities optimistically and positively. These groups are usually composed of several students with bipolar disorder and counsellors who are qualified in counselling. When students with bipolar disorder can interact positively with other patients under the guidance of a counsellor, they will have more confidence in treating their illness and will be more likely to persevere.

6 Conclusion

College students' mental health is an essential threat to public health, and the number of college students with bipolar illness is growing yearly. Society needs to pay more and broader attention to this issue, and all sectors should actively participate in solving this problem. The symptoms, causes, and therapeutic interventions of bipolar disorder among college students are more environment-specific than in adults. Therefore, research studies on bipolar disorder should be more frequent and effective in universities. Treatment opportunities for bipolar disorder should be significantly increased on college campuses. A combination of medication and psychotherapy and enhanced daily communication with students with the disorder are crucial to helping address bipolar disorder in college students.

References

1. Bipolar Disorder, National Institute of Mental Health, 2020. Retrieved from: <https://www.nimh.nih.gov/health/topics/bipolar-disorder>
2. H. Ritchie, M. Roser, S. Dattani, Mental health, in: Our World in Data, 2018, Retrieved from: <https://ourworldindata.org/mental-health>
3. D. E. Pedersen, Bipolar disorder and the college student: A review and implications for universities, *Journal of American College Health*, vol. 68, 2019, pp. 341–346. DOI: <https://doi.org/10.1080/07448481.2019.1573173>
4. National Comorbidity Survey (NSC), Harvard Medical School, 2017. Retrieved from: <https://www.hcp.med.harvard.edu/ncs/index.php>.
5. Bipolar disorder among adults, National Institute of Mental Health, 2015, Retrieved from: <http://www.nimh.nih.gov/health/statistics/prevalence/bipolar-disorder-among-adults.shtml>

6. 7 percent of high school graduates enrolled in college in October 2016, in: United States Bureau of Labor Statistics Web site, 2017. Retrieved from: <https://www.bls.gov/opub/ted/2017/69-point-7-percent-of-2016-high-school-graduates-enrolled-in-college-in-october-2016.htm>.
7. T.H. Ng, K.F. Chung, F.Y. Ho, W.F. Yeung, K.P. Yung, T.H. Lam, Sleep-wake disturbance in interepisode bipolar disorder and high-risk individuals: a systematic review and meta-analysis, in: *Sleep Med Rev*, vol. 20, 2015, pp. 46–58. DOI: <https://doi.org/10.1016/j.smrv.2014.06.006>
8. T.A. Beentjes, P.J. Goossens, I.E. Poslowsky, Caregiver burden in bipolar hypomania and mania: a systematic review, in: *Perspect Psychiatr Care*, 2012, vol. 48, pp. 187–197. DOI: <https://doi.org/10.1111/j.1744-6163.2012.00328.x>. PMID 23005586.
9. D. J. Taub and J. Thompson, College Student Suicide, in: *New Directions for Student Services*, vol. 2013, 2013, pp. 5–14. DOI: <https://doi.org/10.1002/ss.20036>.
10. P. S. Appelbaum, *Law & Psychiatry: 'Depressed? Get Out!': Dealing With Suicidal Students on College Campuses*, in: *Psychiatric Services*, vol. 57, 2006, pp. 914–916. DOI: <https://doi.org/10.1176/ps.2006.57.7.914>.
11. J.F. Gaultney, The prevalence of sleep disorders in college students: impact on academic performance, in: *J Am Coll Health*, vol. 59, 2010, pp. 91–97.
12. H. G. Lund, B.D. Reider, A.B. Whiting, J.R. Prichard, Sleep patterns and predictors of disturbed sleep in a large population of college students, in: *J Adolesc Health*, vol. 46, 2010, pp. 124–132.
13. K. R. Hefner, A. Sollazzo, S. Mullaney, K. L. Coker, M. Sofuoglu, E-cigarettes, alcohol use, and mental health: Use and perceptions of e-cigarettes among college students, by alcohol use and mental health status, in: *Addictive Behaviors*, vol. 91, 2019, pp. 12–20. DOI: <https://doi.org/10.1016/j.addbeh.2018.10.040>
14. S.M. Strakowski, M.P. DelBello, D.E. Fleck, et al., Effects of Co-occurring Alcohol Abuse on the Course of Bipolar Disorder Following a First Hospitalization for Mania, in: *Arch Gen Psychiatry*, vol. 62, 2005, pp. 851–858. DOI: <https://doi.org/10.1001/archpsyc.62.8.851>
15. J. Vermeulen, R. Wootton, J. Treur, H. Sallis, H. Jones, S. Zammit, et al., Smoking and the risk for bipolar disorder: Evidence from a bidirectional Mendelian randomization study, in: *The British Journal of Psychiatry*, vol. 218, 2021, pp. 88–94. DOI: <https://doi.org/10.1192/bjp.2019.202>
16. National Alliance on Mental Illness (NAMI), *Lithium*, 2016, Retrieved from: <https://www.nami.org/About-Mental-Illness/Treatments/Mental-Health-Medications/Types-of-Medication/Lithium>
17. A. Cipriani, J. M. Rendell, and J. Geddes, Haloperidol alone or in combination for acute mania, in: *Cochrane Database of Systematic Reviews*, 2006, DOI: <https://doi.org/10.1002/14651858.cd004362.pub2>.
18. R. Federman, Treatment of Bipolar Disorder in the University Student Population, in: *Journal of College Student Psychotherapy*, vol. 25, 2010, pp. 24–38. DOI: <https://doi.org/10.1080/87568225.2011.532471>

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

