Journal of Psychiatry Research & Reports

Research Article

Impact of Comorbid Substance Use in Patients with Bipolar Disorder

Tarek Triki[1] and Rim Sellami[2]

[1]*Psychiatry private clinic, Tunisia.*
[2]*University of Sfax, Tunisia.*

Abstract

The presence of addictive comorbidity complicates all psychiatric pathologies, affecting both their management and prognosis due to the numerous complications that punctuate their course. This is particularly true for bipolar disorder. This study explores the relationship between bipolar disorder and substance use, emphasizing the impact on management and prognosis. Using a sample of 40 male patients with bipolar disorder type I, this study investigates clinical parameters, and prognostic elements associated with comorbid substance use. The results reveal a prevalence of 42.5% of substance abuse among bipolar patients. Significant differences were observed in Global Functioning Score (72.78 versus 83.33, p = 0.018), mean number of hospitalizations (5.12 versus 1.45; p=0.010), annual relapses (p=0.044), and the quality of interval of mood episode (p=0.028) between bipolar patients with and without substance use. The study underscores the need for active screening and tailored interventions to address this comorbidity, providing valuable insights for comprehensive patient care and therapeutic recommendations.

Keywords

Bipolar disorder, Substance use, Comorbidity, Relapse.

Corresponding Author Information

Tarek Triki
Address: 9 rue Mohamed boufahja, 7050 Menzel bourguiba, Tunisia.

Received: February 11, 2024; **Accepted:** March 25, 2024; **Published:** April 02, 2024

Citation: Tarek Triki, Rim Sellami. Impact of Comorbid Substance Use in Patients with Bipolar Disorder. J Psychiatry Res Rep. 2023; 1(1):1-4.

Introduction

Bipolar disorder (BD) is a common, cyclic mental illness that presents with in mood and activity [1]. It is a risk factor for addictions, both behavioral and substance use disorders [2].

An epidemiological survey in North America called the Epidemiological Catchment Area (ECA), conducted by the National Institute of Mental Health (NIMH) and involving 20,291 individuals, found a lifetime substance abuse or dependence rate of 56.1% in bipolar patients, compared to 16.7% in the general population [3]. Understanding the relationship between bipolar disorder and substance use is crucial for prognosis and patient management. In fact, the presence of addictive comorbidity complicates all psychiatric pathologies, affecting both their management and prognosis. This is particularly true for bipolar disorder [4]. Several studies suggest that the presence of substance use in bipolar disorder complicates its course, leading to more severe symptoms, more relapses, increased hospitalizations, and less response to treatment [5]. Our study aims to specify the epidemiological, clinical, and evolutionary characteristics of this comorbidity.

Patients and Methods

We conducted a retrospective descriptive and comparative study on

a sample of 40 Tunisian male patients with bipolar disorder type I, recruited from psychiatry private clinic from January to December 2022. These patients met the following inclusion criteria: age at least 18 years, DSM-V diagnosis of bipolar I disorder, in euthymic remission for at least 3 months. Written informed consent after the study procedures had been fully explained. The sample was divided into two groups of euthymic patients by the presence or not of substance use comorbidity. An epidemiological form was developed and filled out during a semi-structured interview. Designations of 'poor interval of mood episode' was based on the presence of residual symptoms. The current functioning was assessed by the Global Assessment of Functioning Scale (GAF) [6]. The average duration of each interview ranged was 45 min. The data collected was entered and analyzed using Excel. Continuous variables were expressed as mean standard deviation, whereas categorical variables were presented as frequencies. The level of significance was established at $p < 0.05$.

Results

In our sample, 17 patients (42.5%) had bipolar disorder with substance use. The most implicated substance used in individuals with BD was cannabis, alcohol. Fifty per cent of our patient had low socioeconomic level and 40% of our patients were single and 45% were unemployed. The average age of bipolar patients with substance abuse was 30.1 years, while that of patients without associated substance use was 39.25 years. The mean GAF score is 77, with extremes ranging from 45 to 95.

We found that the bipolar disorder patient with substance use had significantly lower mean GAF score than the bipolar patients without substance use (72.78 versus 83.33, $p = 0.018$). The mean total number of hospitalizations is 5.55, ranging from 1 to 12 hospitalizations. The mean number of hospitalizations of bipolar patient with addictive comorbidity was significantly higher than bipolar patient without substance use (5.12 versus 1.45; $p=0.010$). The annual relapse rate differs between bipolar patients with substance abuse (0.65) and those without substance use (0.42). This difference was significant ($p=0.044$). Quality of intervals between mood episodes was significantly poor in patient with substance use ($p=0.028$).

Discussion

Our study showed the high association of bipolar disorder with substance use. It has been consistently reported by epidemiological surveys and also clinical studies [7]. McElroy reported a prevalence of substance abuse and dependence of 42% in bipolar patients, with alcohol, marijuana, amphetamines, and cocaine being the most frequently implicated substances [8]. Similarly, Pini et al. found that alcohol, cannabis, and stimulants were the substances most commonly used by bipolar patients [9]. This result could be justified by a higher tendency toward risky behaviors, mood instability, impulsivity, and increased sensitivity to rewards in patients with Bipolar Disorder [10]. Our findings indicate a significantly higher total number of hospitalizations in bipolar patients with substance use ($p=0.015$). The impact of substance abuse on hospitalization seems to vary, with conflicting results in the literature [5,11]. Our study showed a significant difference in the relapse rate between bipolar patients with and without substance use ($p=0.038$). The literature suggested that substance use complicates the course of bipolar disorder, leading to more frequent relapses [12,13].

In fact, research has consistently shown that substance use in bipolar patients may have negative consequences on long-term course: impairment of social functioning, more hospitalizations and poorer prognosis, with a higher frequency of suicide attempts [14]. Substance use also facilitates additional comorbidities in BD patients such as anxiety disorders [15,16]. Moreover, bipolar patients with comorbid substance use were shown to be more likely non-compliant to treatment compared to bipolar patients without a history of addiction [17]. Regarding the management of patients with bipolar disorder and comorbid substance use, studies are diverse and imprecise. It seems to be no treatment of proven efficacy for patients in these condition. This could be explained by the typical dichotomy between care systems – for mental health disorders or for drug addiction–, as well as therapeutic approaches (pharmacological or psychological). This indicates the need for simultaneous management of both disorders, integrating pharmacological and psychotherapeutic intervention rather than applying them separately [18].

Limitations

There are several methodological limitations in this study, particularly the small sample size because many patients didn't consent to participate in this study because they feared risk of legal issues despite we explained and insisted on the a the confidentiality of study. Certainly, it is necessary to consider more studies with large sample size and especially prospective studies to characterize better the relationship between addiction and bipolar disorder.

Conclusion

Substance use is the most frequently associated comorbidity with bipolar disorder. Patients with bipolar disorder report substance use behaviors in nearly 60% of cases in the literature. Addiction exacerbates the course and prognosis of bipolar disorder by delaying diagnosis, leading to more frequent and severe relapses. It also acts as a factor of poor therapeutic adherence. Ideally, early and individualized therapeutic interventions that combine appropriate pharmacotherapy and psychotherapy are recommended for these patients, with an emphasis on comprehensive care, including social aspects, to ensure the socio-professional reintegration of patients.

References

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. APA Press Washington DC USA. 2013.
2. Hunt GE, Malhi GS, Cleary M, et al. Comorbidity of bipolar and substance use disorders in national surveys of general populations 1990-2015 Systematic review and meta-analysis. J Affect Disord. 2016; 206: 321-330.
3. Regier DA, Farmer ME, Rae DS, et al. Comorbidity of mental disorders with alcohol and other drug abuse. Results from the Epidemiologic Catchment Area ECA study. JAMA. 1990; 264: 2511-2518.
4. Sonne SC, Brady KT, Morton WA. Substance abuse and bipolar affective disorder. J Nerv Ment Dis. 1994; 182: 349-352.
5. Sajatovic M. Bipolar disorder disease burden. Am J Manag Care. 2005; 11: 80-84.
6. Angst J. The Emerging Epidemiology of Hypomania and Bipolar II Disorder. J Affect Disord. 1998; 50: 143-151.
7. Kessler RC, Nelson CB, McGonagle KA, et al. The epidemiology of co-occuring addictive and mental disorders Implications for prevention and service utilization. Am J Orthopsychiatry. 1996; 66: 17-33.
8. McElroy SL, Altshuler LL, Tuppes T, et al. Axis I psychiatric comorbidity and its relationship to historical illness variables in 288 patients with bipolar disorder. Am J Psychiatry. 2001; 158: 420-426.
9. Pini S, Dell'Osso L, Mastrocinque C, et al. Axis I comorbidity in bipolar disorder with psychotic features. Br J psychiatry. 1999; 175: 467-471.
10. Bodkyn CN, Holroyd CB. Neural Mechanisms of Affective Instability and Cognitive Control in Substance Use. Int J Psychophysiol. 2019; 146: 1-19.
11. Gold AK, Peters AT, Otto MW, et al. The impact of substance use disorders on recovery from bipolar depression Results from the Systematic Treatment Enhancement Program for Bipolar Disorder psychosocial treatment trial. Aust N Z J Psychiatry. 2018; 52: 847-855.
12. Ostacher MJ, Perlis RH, Nierenberg AA, et al. Impact of substance use disorders on recovery from episodes of depression in bipolar disorder patients Prospective data from the Systematic Treatment Enhancement Program for Bipolar Disorder STEP-BD Am J Psychiatry. 2010; 167: 289-297.
13. Lagerberg TV, Icick R, Aminoff SR, et al. Substance Misuse Trajectories and Risk of Relapse in the Early Course of Bipolar Disorder. Front Psychiatry. 2021; 12: 656912.
14. Manwani SG, Szilagyi KA, Zablotsky B, et al. Adherence to pharmacotherapy in bipolar disorder patients with and without co-occurring substance use disorders. J Clin Psychiatry. 2007; 68: 1172-1176.
15. Salloum IM, Brown ES. Management of comorbid bipolar disorder and substance use disorders. Am J Drug Alcohol Abuse. 2017; 43: 366-376.
16. Preuss UW, Schaefer M, Born C, et al. Bipolar Disorder and Comorbid Use of Illicit Substances. Medicina Kaunas. 2021; 57: 1256.
17. Baca-Garcia E, Sher L, Perez-Rodriguez MM, et al. Treatment of depressed bipolar patients with alcohol use disorders Plenty of room for improvement. J Affect Disord. 2009; 115: 262–268.
18. Secades-Álvarez A, Fernández-Rodríguez C. Review of the efficacy of treatments for bipolar disorder and substance abuse. Rev Psiquiatr Salud Ment. 2017; 10: 113-124.