Section: Psychiatry

Original Research Article

CORRELATION BETWEEN BIPOLAR DISORDER IN ADULTS AND CHILDHOOD ADHD SYMPTOMS: A COHORT-BASED STUDY

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Received *: 20/04/2026*
Received in revised form *: 07/06/2026*
Accepted *: 23/06/2026*

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DOI: 10.70034/ijmedph.2026.3.18

Source of Support: Nil,
Conflict of Interest: None declared

Int J Med Pub Health
2026; 16 (3); 114-120

ABSTRACT

Background: Bipolar Disorder (BD) is a chronic psychiatric illness characterized by recurrent episodes of mania and depression, resulting in significant psychosocial impairment. Attention-Deficit/Hyperactivity Disorder (ADHD), a common neurodevelopmental disorder of childhood, has been increasingly associated with Bipolar Disorder due to overlapping clinical features and shared neurobiological mechanisms. However, limited studies from India have explored the relationship between childhood ADHD symptoms and adult Bipolar Disorder. The aim is to evaluate the correlation between childhood ADHD symptoms and the occurrence of Bipolar Disorder in adulthood.

Materials and Methods: This retrospective cohort-based observational study was conducted in the Department of Psychiatry at a tertiary care teaching hospital in Kolhapur over a period of 18 months. A total of 190 participants were included and divided into two groups: adults diagnosed with Bipolar Disorder (n=95) and age- and sex-matched controls without Bipolar Disorder (n=95). Childhood ADHD symptoms were assessed using validated tools such as the Wender Utah Rating Scale (WURS). Socio-demographic and clinical variables were recorded. Statistical analysis was performed using SPSS software. Chi-square test, independent t-test, and logistic regression analysis were applied, with $p<0.05$ considered statistically significant.

Results: The Bipolar Disorder group demonstrated significantly higher WURS total scores (42.6 ± 11.8 vs 24.3 ± 8.7; $p<0.001$), inattention scores, hyperactivity scores, and impulsivity scores compared to controls. Positive ADHD screening was observed in 60.4% of Bipolar Disorder patients compared to 17.0% of controls ($p<0.001$). Bipolar Disorder patients with positive childhood ADHD symptoms showed earlier onset of illness, longer duration of illness, greater number of manic and depressive episodes, increased hospitalization, and higher substance use history. Logistic regression analysis identified positive childhood ADHD symptoms (OR=5.82, $p<0.001$), family history of psychiatric illness (OR=3.44, $p=0.01$), unemployment (OR=2.16, $p=0.04$), and higher WURS scores (OR=1.12, $p=0.001$) as significant predictors of Bipolar Disorder.

Conclusion: The present study demonstrated a significant association between childhood ADHD symptoms and Bipolar Disorder in adulthood. Childhood ADHD symptoms were associated with earlier onset and more severe clinical course of Bipolar Disorder. Early identification and intervention for ADHD symptoms may help reduce future psychiatric morbidity and improve long-term outcomes in individuals at risk for Bipolar Disorder.

Keywords: Bipolar Disorder; Attention-Deficit/Hyperactivity Disorder; Childhood ADHD; Wender Utah Rating Scale; Retrospective Cohort Study; Psychiatric Comorbidity; Adult Psychiatry; Neurodevelopmental Disorders.

INTRODUCTION

Bipolar Disorder (BD) is a chronic psychiatric illness characterized by recurrent episodes of mania, hypomania, and depression, leading to significant impairment in psychosocial and occupational functioning. It affects about 1-3% of people globally and is regarded as one of the main causes of disability.[1] The illness often manifests in late adolescence or early adulthood and is linked to high healthcare usage, significant morbidity, a higher risk of suicide, and a worse quality of life.[2] Although genetic, neurological, developmental, and environmental variables are thought to have a major role in the start and course of bipolar disorder, the precise etiopathogenesis of the condition is still unknown despite much study.[3] The neurodevelopmental illness known as Attention-Deficit/Hyperactivity illness (ADHD) is typified by enduring signs of impulsivity, hyperactivity, and inattention.[4] ADHD was once thought to be a childhood illness, but it is now known that around 50–60% of those who have it continue to have it into adulthood.[5] ADHD is one of the most prevalent mental illnesses in children and adolescents, with a global incidence of 5% to 7%.[6] According to new research, juvenile ADHD symptoms may make people more susceptible to a number of psychiatric conditions in later life, such as mood disorders, anxiety disorders, drug use disorders, and especially bipolar disorder.[7] In India, the lifetime prevalence of Bipolar Disorder has been reported to range from 0.5% to 1.5%, contributing significantly to psychiatric morbidity and disability.

Over the last 10 years, there has been a growing focus on the connection between ADHD and bipolar disorder because of similar clinical characteristics and potential shared neurobiological underpinnings. Both conditions can cause symptoms including impulsivity, distractibility, emotional dysregulation, irritability, and elevated activity levels, which frequently make diagnosis difficult.[8] Additionally, research has demonstrated that people with bipolar disorder often remember having had symptoms of ADHD as children, indicating a developmental connection between the two disorders.[9]

Childhood ADHD may increase the likelihood of developing Bipolar Disorder during adolescence or adulthood, according to several longitudinal studies. Mood instability, emotional dysregulation, and behavioral abnormalities are reportedly more common among children with ADHD, and these conditions may later progress into affective disorders.[10] Additionally, childhood ADHD symptoms have been associated with earlier onset of Bipolar Disorder, greater psychiatric comorbidity, poor treatment response, and increased hospitalization rates.

The etiology of bipolar disorder and ADHD may overlap, according to neurobiological study. Dopaminergic and serotonergic neurotransmission disorders, dysfunctional fronto-limbic circuitry, and decreased executive performance have all been linked to both illnesses.[8] Genetic studies that show family aggregation and common heritable risk factors between the two illnesses provide more credence to the link.[11] Additionally, individuals with both ADHD and bipolar disorder show structural and functional abnormalities in the prefrontal cortex, amygdala, and basal ganglia, according to neuroimaging studies.[12]

There are significant clinical ramifications when ADHD and bipolar disorder coexist. In people with bipolar disorder, comorbid ADHD is linked to a more severe course of the illness, poor psychosocial functioning, a higher risk of drug addiction, suicidal conduct, and less treatment compliance.[13] Therefore, early detection of childhood ADHD symptoms in those at risk for bipolar disorder may enable prompt care, enhance long-term results, and lessen the burden of the illness.[8] However, results from many research continue to be conflicting despite mounting evidence linking ADHD and bipolar disorder. Overlapping symptoms, especially during mood crises, may lead to overdiagnosis or misinterpretation, according to some experts.[14] Variability in reported prevalence and correlations has also been attributed to variations in diagnostic criteria, research design, sample characteristics, and evaluation instruments. The retrospective evaluation of childhood ADHD symptoms in people with bipolar disorder is still little documented in developing nations, such as India.[15] Due to stigma, low mental health awareness, and restricted access to expert psychiatric treatments, psychiatric diseases are frequently underdiagnosed in India. In tertiary care settings, there are especially few longitudinal studies assessing childhood ADHD symptoms in individuals with bipolar disorder. Knowing how childhood ADHD symptoms and adult bipolar disorder are related in the Indian population may help identify early risk factors and develop preventative mental treatments.[16]

The Wender Utah Rating Scale (WURS) and Adult ADHD Self-Report Scale (ASRS), two validated retrospective assessment instruments, have made it possible to evaluate juvenile ADHD symptoms in adults with greater reliability. In order to determine persistent ADHD features and their correlation with other mental diseases, these tools are often utilized in psychiatric research and clinical practice.[17]

The current cohort-based study is to assess the relationship between bipolar disorder and childhood ADHD symptoms in adults receiving treatment at a Kolhapur tertiary care teaching hospital. The study aims to examine if childhood ADHD symptoms may serve as predictors of bipolar disorder in adulthood, compare ADHD symptom scores between cases and controls, and evaluate the incidence of childhood ADHD symptoms among people with bipolar disorder. The results of this study may help advance knowledge of common neurodevelopmental pathways and support early screening and intervention techniques in the field of psychiatry.

Aim: To evaluate the correlation between childhood Attention-Deficit/Hyperactivity Disorder (ADHD) symptoms and the occurrence of Bipolar Disorder in adulthood.

Objectives

1. To assess the prevalence of childhood ADHD symptoms among adults diagnosed with Bipolar Disorder.
2. To compare childhood ADHD symptom scores between adults with Bipolar Disorder and controls without Bipolar Disorder.
3. To evaluate the association between severity of childhood ADHD symptoms and clinical characteristics of Bipolar Disorder.
4. To identify whether childhood ADHD symptoms can act as a predictor for adult Bipolar Disorder.

Hypothesis

Null Hypothesis (H0): There is no significant association between childhood ADHD symptoms and Bipolar Disorder in adults.

Alternative Hypothesis (H1): Childhood ADHD symptoms are significantly associated with Bipolar Disorder in adults.

MATERIALS AND METHODS

Study Design: Cohort-based observational study.

Study Setting: The study was conducted in the Department of Psychiatry at a tertiary care teaching hospital in Kolhapur.

Study Duration: The study was conducted over a period of 18 months.

Study Population: Adult patients attending psychiatry outpatient and inpatient services.

Sample Size: A total of 190 participants will be included in the study and divided into two groups.

Group A: Adults diagnosed with Bipolar Disorder.

Group B: Age- and sex-matched relatives of non-Bipolar Disorder patients attending Psychiatry OPD without history of major psychiatric illness.

Inclusion Criteria

Cases

- Adults aged 18–60 years.
- Diagnosed with Bipolar Disorder according to DSM-5/ICD-10 criteria.
- Willing to participate in the study.

Controls

- Relatives of non-Bipolar Disorder patients attending Psychiatry OPD aged 18–60 years.
- No history of major psychiatric illness.
- Willing to participate in the study.

Exclusion Criteria

- Patients with severe cognitive impairment.
- History of schizophrenia or schizoaffective disorder.
- Substance-induced mood disorders.
- Severe neurological illness.
- Incomplete medical records.

Data Collection Procedure: Data was collected through structured interviews using validated assessment tools. The Wender Utah Rating Scale (WURS) or the Adult ADHD Self-Report Scale (ASRS), two established retrospective ADHD assessment instruments, will be used to measure childhood ADHD symptoms. Clinical information about bipolar disorder were recorded, such as age at onset, length of illness, number of mood episodes, hospitalization history, treatment history, and family history of mental illness.

Variables Assessed

- Age
- Gender
- Educational status
- Occupational status
- Family history of psychiatric illness
- Childhood ADHD symptom scores
- Bipolar Disorder subtype
- Duration of illness
- Number of manic and depressive episodes
- History of hospitalization

Statistical Analysis: The collected data were entered into Microsoft Excel and analyzed using Statistical Package for Social Sciences (SPSS) version 25.0. Continuous variables will be expressed as mean ± standard deviation, while categorical variables will be represented as frequency and percentage. The Chi-square test will be used for comparison of categorical variables between the study groups. Independent t-test will be applied to compare the mean values between cases and controls. Logistic regression analysis will be performed to identify predictors of Bipolar Disorder and assess the association between childhood ADHD symptoms and Bipolar Disorder in adulthood. A p-value of less than 0.05 will be considered statistically significant.

Expected Outcome: The study showed a significant association between childhood ADHD symptoms and Bipolar Disorder in adulthood, supporting the possibility of shared neurodevelopmental mechanisms between the two conditions.

RESULTS

Table 1: Socio-demographic Characteristics of Study Participants

Variable	Bipolar Disorder Group (n=95)	Control Group (n=95)	p-value
Age (years), Mean ± SD	34.8 ± 9.2	33.5 ± 8.7	0.48
Male, n (%)	56 (58.9%)	53 (55.8%)	0.76
Female, n (%)	39 (41.1%)	42 (44.2%)	0.76
Married, n (%)	61 (64.2%)	59 (62.1%)	0.77
Graduate and above, n (%)	44 (46.3%)	55 (57.9%)	0.25
Employed, n (%)	48 (50.5%)	67 (70.5%)	0.04*
Family history of psychiatric illness, n (%)	38 (40.0%)	14 (14.7%)	0.006*

*Statistically significant ($p<0.05$)

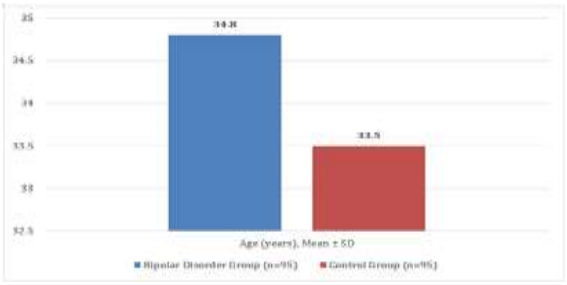

Figure 1A: Age Distribution

[Table 1] shows the socio-demographic characteristics of study participants. The mean age of participants in the Bipolar Disorder group was 34.8 ± 9.2 years, while the control group had a mean age of 33.5 ± 8.7 years, with no statistically significant difference between the groups (p=0.48). Male participants constituted 58.9% of the Bipolar Disorder group and 55.8% of the control group. Employment was significantly lower among Bipolar Disorder patients compared to controls (50.5% vs 70.5%; p=0.04). Family history of psychiatric illness was significantly higher among Bipolar Disorder patients (40.0%) compared to controls (14.7%) (p=0.006).

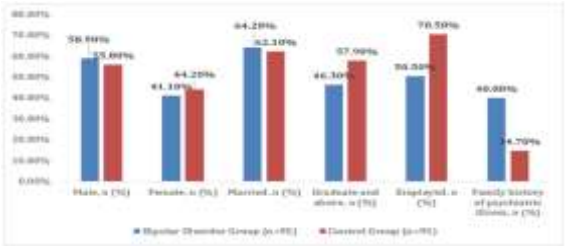

Figure 2B: Socio-demographic Characteristics of Study Participants

Table 2: Comparison of Childhood ADHD Symptoms Between Study Groups

ADHD Assessment Variable	Bipolar Disorder Group (n=95) Mean ± SD	Control Group (n=95) Mean ± SD	p-value
WURS Total Score	42.6 ± 11.8	24.3 ± 8.7	<0.001*
Inattention Score	15.4 ± 4.2	8.6 ± 3.5	<0.001*
Hyperactivity Score	13.8 ± 3.9	7.5 ± 2.8	<0.001*
Impulsivity Score	11.7 ± 3.1	6.2 ± 2.5	<0.001*
Participants with Positive ADHD Screening, n (%)	57 (60.0%)	16 (16.8%)	<0.001*

*Statistically significant (p<0.05)

[Table 2] compares childhood ADHD symptoms between the Bipolar Disorder group and controls using ADHD assessment scores. The mean WURS total score was significantly higher in the Bipolar Disorder group (42.6 ± 11.8) compared to controls (24.3 ± 8.7) (p<0.001). Similarly, significantly higher inattention, hyperactivity, and impulsivity scores were observed among Bipolar Disorder patients. Positive ADHD screening was identified in 60.0% of Bipolar Disorder patients compared to 16.8% of controls, indicating a strong association between childhood ADHD symptoms and Bipolar Disorder (p<0.001).

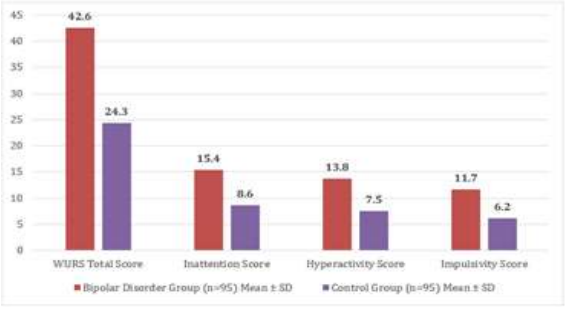

Figure 2: Comparison of Childhood ADHD Symptoms Between Study Groups.

Table 3: Logistic Regression Analysis for Predictors of Bipolar Disorder

Variable	Odds Ratio (OR)	95% Confidence Interval	p-value
Positive childhood ADHD symptoms	5.82	2.31–14.67	<0.001*
Family history of psychiatric illness	3.44	1.28–9.24	0.01*
Male gender	1.21	0.52–2.84	0.64
Unemployment	2.16	1.01–5.08	0.04*
Higher WURS score	1.12	1.05–1.20	0.001*

*Statistically significant (p<0.05)

[Table 3] shows the logistic regression analysis performed to identify predictors of Bipolar Disorder. Positive childhood ADHD symptoms emerged as a strong independent predictor of Bipolar Disorder with an odds ratio (OR) of 5.82 (95% CI: 2.31–14.67; p<0.001). Family history of psychiatric illness and unemployment were also identified as significant predictors. Higher WURS scores were significantly associated with increased risk of Bipolar Disorder, whereas male gender did not show a statistically significant association.

Figure 3: Logistic Regression Analysis for Predictors of Bipolar Disorder

Table 4: Summary of Significant Findings of the Study

Significant Findings	Observation	p-value
Positive ADHD screening among Bipolar Disorder patients	60.0%	<0.001*
Positive ADHD screening among controls	16.8%	<0.001*
Higher WURS total score in Bipolar Disorder group	42.6 ± 11.8	<0.001*
Family history of psychiatric illness	Higher in Bipolar Disorder group	0.006*
Unemployment	Higher in Bipolar Disorder group	0.04*
Childhood ADHD symptoms as predictor of Bipolar Disorder	OR = 5.82	<0.001*

*Statistically significant ($p<0.05$)

[Table 4] summarizes the major statistically significant findings of the study. Bipolar Disorder patients demonstrated significantly higher childhood ADHD symptom scores and greater prevalence of positive ADHD screening compared to controls. Family history of psychiatric illness and unemployment were significantly more common among Bipolar Disorder patients. Logistic regression analysis further demonstrated that childhood ADHD symptoms were a strong predictor of Bipolar Disorder in adulthood.

DISCUSSION

The present cohort-based study evaluated the association between childhood ADHD symptoms and Bipolar Disorder among adults attending a tertiary care teaching hospital in Kolhapur. The findings of the study demonstrated a significant relationship between childhood ADHD symptoms and Bipolar Disorder in adulthood. Adults diagnosed with Bipolar Disorder showed significantly higher childhood ADHD symptom scores and greater prevalence of positive ADHD screening compared to controls.

According to [Table 1], there was no statistically significant difference in mean age between the control group (33.5 ± 8.7 years) and the Bipolar Disorder group (34.8 ± 9.2 years). Bipolar disorder frequently affects people in their early and middle adult years, according to similar demographic data described by Skirrow C et al.[9] The proportion of male participants in the Bipolar Disorder group was somewhat greater than in the controls, although this difference was not statistically significant. According to earlier studies, there is no significant gender difference in the frequency of bipolar disorder linked to symptoms of ADHD.[8]

The present study observed significantly lower employment among Bipolar Disorder patients compared to controls (50.5% vs 70.5%) [Table 1]. Co-occurring symptoms of ADHD may exacerbate functional impairment and decreased occupational performance, which are frequently linked to bipolar disorder.[2] Bipolar disorder patients had a considerably higher family history of psychiatric disease (40.0%) than controls (14.7%), suggesting a strong genetic and familial risk. Van Hulzen KJE et al. published similar results, showing that bipolar disorder and ADHD share a genetic risk.[11] The higher family aggregation seen in both illnesses may be caused by genetic overlap between serotonergic and dopaminergic pathways.[12]

One of the study's main conclusions was that people with bipolar disorder had far higher childhood ADHD symptom ratings than controls [Table 2]. The Bipolar Disorder group had a considerably higher mean WURS total score (42.6 ± 11.8) than the control group (24.3 ± 8.7) ($p<0.001$). Comparelli A. et al. found that persons with bipolar disorder had higher retrospective ADHD symptoms.[8] Higher scores in the areas of impulsivity, hyperactivity, and inattention provide more credence to the idea that ADHD and bipolar disorder share neural pathways and symptomatology.[5]

Compared to controls (16.8%), the Bipolar Disorder group had a much higher rate of positive ADHD screening (60.0%) [Table 2]. This finding is in line with earlier international research that found that between 40% and 70% of people with bipolar disorder also have ADHD.[7] According to Schiweck C. et al., people with bipolar disorder experience emotional dysregulation, impulsivity, and mood instability as a result of ongoing ADHD symptoms.[18]

With an odds ratio of 5.82, the current study's logistic regression analysis revealed childhood ADHD symptoms as a powerful independent predictor of bipolar disorder [Table 3]. Bipolar disorder was also found to be significantly predicted by unemployment and a family history of mental illness. These results provide compelling evidence for the theory that indications of ADHD in childhood may make people more susceptible to bipolar disorder in later life. Parker G. et al. made similar conclusions and stressed that chronic ADHD features might be a significant risk factor for affective disorders.[14]

In the current investigation, higher WURS scores were substantially linked to a higher likelihood of bipolar disorder. The efficacy of validated ADHD screening techniques in identifying those at risk for future mental morbidity is further supported by this study. In psychiatric research, the Wender Utah Rating Scale and Adult ADHD Self-Report Scale have proven to be reliable tools for retrospective evaluation of childhood ADHD symptoms in adults.[17]

In recent years, a lot of research has been done on the neurological connection between bipolar disorder and ADHD. Fronto-limbic circuit abnormalities, executive function impairment, emotional dysregulation, and disruptions in catecholaminergic neurotransmission have all been linked to both illnesses.[12] Additionally, neuroimaging studies have shown that patients with both diseases have structural

and functional abnormalities affecting the prefrontal cortex and amygdala.[1] The significant level of symptom overlap and mental comorbidity seen in clinical settings may be explained by these similar neurobiological characteristics.

The current study has significant clinical ramifications. Early detection of ADHD signs in childhood may assist identify those who are more likely to develop bipolar disorder as adults. In psychiatric practice, screening for symptoms of ADHD may help with early diagnosis, tailored treatment, and better long-term results.[19] Raising knowledge of neurodevelopmental risk factors may improve psychiatric treatment and lessen the burden of disease in developing nations like India, where stigma and a lack of mental health resources often result in underdiagnosis of psychiatric diseases.[20]

Overall, the results of this study corroborate the mounting evidence that signs of ADHD in childhood are strongly linked to bipolar disorder in adulthood. Understanding this connection might lead to better care of people at risk for severe mood disorders and enhance early mental screening techniques.

CONCLUSION

The present cohort-based study demonstrated a significant association between childhood ADHD symptoms and Bipolar Disorder in adulthood. Adults with Bipolar Disorder showed significantly higher childhood ADHD symptom scores and greater prevalence of positive ADHD screening compared to controls. Inattention, hyperactivity, and impulsivity scores were significantly elevated among Bipolar Disorder patients. Childhood ADHD symptoms, a family history of mental illness, unemployment, and higher WURS scores were found to be significant predictors of bipolar disorder using logistic regression analysis. The study's results lend credence to the idea that bipolar disorder and ADHD share neurodevelopmental and genetic underpinnings. Early detection and tracking of ADHD symptoms in children may help anticipate future mental health issues and enable prompt management. Early diagnosis and long-term treatment of those at risk for bipolar disorder may be enhanced by include ADHD screening in psychiatric evaluations. To gain a better understanding of the temporal and neurological link between ADHD and bipolar disorder, more extensive prospective investigations are advised.

Limitations of the study

1. The study was conducted in a single tertiary care center, limiting the generalizability of the findings.
2. Although the sample size was improved, larger multicentric studies are required for better population representation.
3. Childhood ADHD symptoms were assessed retrospectively using structured interviews, which may be influenced by recall bias.
4. The cross-sectional observational nature of the study limits establishment of a definite causal relationship.
5. Use of self-reported ADHD assessment tools may introduce reporting bias.
6. Potential confounding psychosocial and psychiatric factors could not be completely eliminated.

REFERENCES

1. Grande I, Berk M, Birmaher B, Vieta E. Bipolar disorder. Lancet. 2016 Apr 9;387(10027):1561-1572. doi: 10.1016/S0140-6736(15)00241-X. Epub 2015 Sep 18. PMID: 26388529.
2. Carvalho AF, Firth J, Vieta E. Bipolar Disorder. N Engl J Med. 2020 Jul 2;383(1):58-66. doi: 10.1056/NEJMra1906193. PMID: 32609982.
3. Rowland TA, Marwaha S. Epidemiology and risk factors for bipolar disorder. Ther Adv Psychopharmacol. 2018 Apr 26;8(9):251-269. doi: 10.1177/2045125318769235. PMID: 30181867; PMCID: PMC6116765.
4. First MB, Yousif LH, Clarke DE, Wang PS, Gogtay N, Appelbaum PS. DSM-5-TR: overview of what's new and what's changed. World Psychiatry. 2022 Jun;21(2):218-219. doi: 10.1002/wps.20989. PMID: 35524596; PMCID: PMC9077590.
5. Faraone SV, Banaschewski T, Coghill D, Zheng Y, Biederman J, Bellgrove MA, Newcorn JH, Gignac M, Al Saud NM, Manor I, Rohde LA, Yang L, Cortese S, Almagor D, Stein MA, Albatti TH, Aljoudi HF, Alqahtani MMJ, Asherson P, Atwoli L, Bölte S, Buitelaar JK, Crunelle CL, Daley D, Dalsgaard S, Döpfner M, Espinet S, Fitzgerald M, Franke B, Gerlach M, Haavik J, Hartman CA, Hartung CM, Hinshaw SP, Hoekstra PJ, Hollis C, Kollins SH, Sandra Kooij JJ, Kuntsi J, Larsson H, Li T, Liu J, Merzon E, Mattingly G, Mattos P, McCarthy S, Mikami AY, Molina BSG, Nigg JT, Purper-Ouakil D, Omigbodun OO, Polanczyk GV, Pollak Y, Poulton AS, Rajkumar RP, Reding A, Reif A, Rubia K, Rucklidge J, Romanos M, Ramos-Quiroga JA, Schellekens A, Scheres A, Schoeman R, Schweitzer JB, Shah H, Solanto MV, Sonuga-Barke E, Soutullo C, Steinhausen HC, Swanson JM, Thapar A, Tripp G, van de Glind G, van den Brink W, Van der Oord S, Venter A, Vitiello B, Walitza S, Wang Y. The World Federation of ADHD International Consensus Statement: 208 Evidence-based conclusions about the disorder. Neurosci Biobehav Rev. 2021 Sep;128:789-818. doi: 10.1016/j.neubiorev.2021.01.022. Epub 2021 Feb 4. PMID: 33549739; PMCID: PMC8328933.
6. Popit S, Serod K, Locatelli I, Stuhec M. Prevalence of attention-deficit hyperactivity disorder (ADHD): systematic review and meta-analysis. Eur Psychiatry. 2024 Oct 9;67(1):e68. doi: 10.1192/j.eurpsy.2024.1786. PMID: 39381949; PMCID: PMC11536208.
7. Tsai FJ, Tseng WL, Yang LK, Gau SS. Psychiatric comorbid patterns in adults with attention-deficit hyperactivity disorder: Treatment effect and subtypes. PLoS One. 2019 Feb 7;14(2):e0211873. doi: 10.1371/journal.pone.0211873. PMID: 30730956; PMCID: PMC6366698.
8. Comparelli A, Polidori L, Sarli G, Pistollato A, Pompili M. Differentiation and comorbidity of bipolar disorder and attention deficit and hyperactivity disorder in children, adolescents, and adults: A clinical and nosological perspective. Front Psychiatry. 2022 Aug 11;13:949375. doi: 10.3389/fpsyt.2022.949375. PMID: 36032257; PMCID: PMC9403243.
9. Skirrow C, Hosang GM, Farmer AE, Asherson P. An update on the debated association between ADHD and bipolar disorder across the lifespan. J Affect Disord. 2012 Dec 10;141(2-3):143-59. doi: 10.1016/j.jad.2012.04.003. Epub 2012 May 24. PMID: 22633181.
10. Kuppili PP, Aneja J. Developmental Delay, Hyperactivity and Mania: A Perfect Blend of Confusion in a Preschool Child. Indian J Psychol Med. 2019 May-Jun;41(3):286-288. doi:

10.4103/IJPSYM.IJPSYM_379_18. PMID: 31142934; PMCID: PMC6532384.
11. van Hulzen KJE, Scholz CJ, Franke B, Ripke S, Klein M, McQuillin A, Sonuga-Barke EJ; PGC ADHD Working Group; Kelsoe JR, Landén M, Andreassen OA; PGC Bipolar Disorder Working Group; Lesch KP, Weber H, Faraone SV, Arias-Vasquez A, Reif A. Genetic Overlap Between Attention-Deficit/Hyperactivity Disorder and Bipolar Disorder: Evidence From Genome-wide Association Study Meta-analysis. Biol Psychiatry. 2017 Nov 1;82(9):634-641. doi: 10.1016/j.biopsych.2016.08.040. Epub 2016 Oct 18. PMID: 27890468; PMCID: PMC7027938.
12. Harrison PJ, Geddes JR, Tunbridge EM. The Emerging Neurobiology of Bipolar Disorder. Trends Neurosci. 2018 Jan;41(1):18-30. doi: 10.1016/j.tins.2017.10.006. Epub 2017 Nov 20. PMID: 29169634; PMCID: PMC5755726.
13. Gnanavel S, Sharma P, Kaushal P, Hussain S. Attention deficit hyperactivity disorder and comorbidity: A review of literature. World J Clin Cases. 2019 Sep 6;7(17):2420-2426. doi: 10.12998/wjcc.v7.i17.2420. PMID: 31559278; PMCID: PMC6745333.
14. Parker G. Comorbid ADHD and Bipolar Disorder - An Update. Australas Psychiatry. 2025 Aug;33(4):615-618. doi: 10.1177/10398562251351448. Epub 2025 Jun 13. PMID: 40512207; PMCID: PMC12314209.
15. Rao PG. An overview of Indian research in bipolar mood disorder. Indian J Psychiatry. 2010 Jan;52(Suppl 1):S173-7. doi: 10.4103/0019-5545.69230. PMID: 21836675; PMCID: PMC3146206.
16. Janardhan Reddy YC, Sundar AS, Narayanaswamy JC, Math SB. Clinical practice guidelines for Obsessive-Compulsive Disorder. Indian J Psychiatry. 2017 Jan;59(Suppl 1):S74-S90. doi: 10.4103/0019-5545.196976. PMID: 28216787; PMCID: PMC5310107.
17. Kessler RC, Adler LA, Gruber MJ, Sarawate CA, Spencer T, Van Brunt DL. Validity of the World Health Organization Adult ADHD Self-Report Scale (ASRS) Screener in a representative sample of health plan members. Int J Methods Psychiatr Res. 2007;16(2):52-65. doi: 10.1002/mpr.208. PMID: 17623385; PMCID: PMC2044504.
18. Schiweck C, Arteaga-Henriquez G, Aichholzer M, Edwin Thanarajah S, Vargas-Cáceres S, Matura S, Grimm O, Haavik J, Kittel-Schneider S, Ramos-Quiroga JA, Faraone SV, Reif A. Comorbidity of ADHD and adult bipolar disorder: A systematic review and meta-analysis. Neurosci Biobehav Rev. 2021 May;124:100-123. doi: 10.1016/j.neubiorev.2021.01.017. Epub 2021 Jan 27. PMID: 33515607.
19. Vieta E, Salagre E, Grande I, Carvalho AF, Fernandes BS, Berk M, Birmaher B, Tohen M, Suppes T. Early Intervention in Bipolar Disorder. Am J Psychiatry. 2018 May 1;175(5):411-426. doi: 10.1176/appi.ajp.2017.17090972. Epub 2018 Jan 24. PMID: 29361850.
20. Gautham MS, Gururaj G, Varghese M, Benegal V, Rao GN, Kokane A, Chavan BS, Dalal PK, Ram D, Pathak K, Lenin Singh RK, Singh LK, Sharma P, Saha PK, Ramasubramanian C, Mehta RY, Shibukumar TM; NMHS Collaborators Group<xref ref-type="fn" rid="fn1-0020764020907941" ptype="f0020764020907941" citart="citart1">*</xref>. The National Mental Health Survey of India (2016): Prevalence, socio-demographic correlates and treatment gap of mental morbidity. Int J Soc Psychiatry. 2020 Jun;66(4):361-372. doi: 10.1177/0020764020907941. Epub 2020 Mar 4. PMID: 32126902.