

## Original Research

### To assess the prevalence of psychiatric comorbidities in Adult ADHD in RD Gardi Medical College, Ujjain

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#### ABSTRACT:

**Background:** Attention deficit hyperactivity disorder (ADHD) is a neurodevelopmental disorder with symptoms of inattention, hyperactivity, and impulsivity. Adult ADHD causes impairment and suffering and also various psychiatric comorbidities. Hence, the present study was conducted to assess the prevalence of psychiatric comorbidities in Adult ADHD in RD Gardi Medical College, Ujjain. **Material and methods:** The present study was carried out to assess the prevalence of psychiatric comorbidities in Adult ADHD in RD Gardi Medical College, Ujjain over a period of 1 year. A diagnosis of adult ADHD was made according to the Japanese version of Conners' Adult ADHD Diagnostic Interview for *DSM-IV*. The demographic detail of each patient, severity of ADHD as estimated using the Conners' Adult ADHD Rating Scales (CAARS) score at the time of entry into the study, and number of psychiatric comorbidities were collected. The diagnosis of these comorbidities was based on each physician's clinical judgment. Data was analyzed using SPSS version 22. P value less than 0.05 was considered significant. **Results:** In the present study a total of 300 adults with ADHD were enrolled in which 60% were male and 40% were female. Maximum patients were of age group 31-40 years (38%). The group included 65% with the inattentive type of ADHD, 5% patients with the hyperactive-impulsive type and 30% with the combined type. Frequently observed comorbid disorders included developmental disability and depressive disorder in the present study. **Conclusion:** Our study concluded that psychiatric comorbidities have a high prevalence in patients with adult ADHD. Frequently observed comorbid disorders included developmental disability and depressive disorder in the present study. **Keywords:** neurodevelopmental, ADHD, psychiatric comorbidities

Received: 24/07/2020

Modified: 12/08/2020

Accepted: 18/08/2020

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**This article may be cited as:** Nigam S, Nigam P. To assess the prevalence of psychiatric comorbidities in Adult ADHD in RD Gardi Medical College, Ujjain. *J Adv Med Dent Scie Res* 2020;8(9):246-249.

#### INTRODUCTION:

Attention-deficit/hyperactivity disorder (ADHD) is considered a continuous condition that develops in childhood and might persist into adulthood.<sup>1</sup> Symptoms of childhood attention-deficit/hyperactivity disorder (ADHD) often persist into adulthood among adults with this disorder.<sup>2</sup> Attention-deficit/hyperactivity disorder (ADHD) is a psychiatric disorder associated with considerable personal and societal burden. While ADHD is well recognized in the pediatric population, where it was first described as a clinical diagnosis in the 1930s.<sup>3</sup> Attention-deficit hyperactive disorder (ADHD) is a neuropsychiatric disorder with core symptoms of inattention, hyperactivity and impulsivity.<sup>4</sup> The

population prevalence of adult ADHD is reported to be 3%–5%.<sup>5,6</sup> Adult ADHD causes impairment and suffering.<sup>7,8</sup> Also, various comorbidities in the sense of additional psychiatric disorders are associated with considerable functional impairment and burden to family and society.<sup>5</sup> The prevalence of psychiatric disorders other than ADHD is higher in adults with ADHD than in the general population, with rates of comorbid disorders ranging from 47% to 89% in various clinical samples.<sup>9-15</sup> The most commonly reported comorbid disorders are drug abuse, anxiety disorders and mood disorders.<sup>13,14</sup> The present study was conducted to assess the prevalence of psychiatric comorbidities in Adult ADHD in RD Gardi Medical College, Ujjain.

**MATERIAL AND METHODS:**

The present study was carried out to assess the prevalence of psychiatric comorbidities in Adult ADHD in RD Gardi Medical College, Ujjain over a period of 1 year. Before the commencement of the study ethical approval was taken from the Ethical Committee of the institution and written informed consent was obtained from the patients. Patients 18 years of age or older who had recently commenced treatment with OROS-MPH for adult ADHD were included in the study. Patients who had commenced OROS-MPH treatment during childhood were excluded from the study. A diagnosis of adult ADHD was made according to the Japanese version of Conners' Adult ADHD Diagnostic Interview for DSM-IV.<sup>16</sup> The demographic detail of each patient i.e age, sex, age at the time of diagnosis of ADHD, severity of ADHD as estimated using the Conners' Adult ADHD Rating Scales (CAARS) score at the time of entry into the study, and number of psychiatric comorbidities were collected. To assess psychiatric comorbidities, the attending physicians were asked about the presence or absence of the following 15 disorders: developmental disability, depressive disorder, dysthymia, bipolar disorder, generalized

anxiety disorder (GAD), social phobia, impulse control disorder, panic disorder, learning disorder, obsessive-compulsive disorder (OCD), abuse (alcohol and/or substance), mental retardation, conduct disorder, oppositional defiant disorder (ODD), and posttraumatic stress disorder (PTSD). The diagnosis of these comorbidities was based on each physician's clinical judgment. Nonmetric multidimensional scaling (NMDS) was employed to explore correlations among disorders and to extract the major dimensions underlying variations in the pattern of concurrent disorders. Data was analyzed using SPSS version 22. P value less than 0.05 was considered significant.

**RESULTS:**

In the present study a total of 300 adults with ADHD were enrolled in which 60% were male and 40% were female. Maximum patients were of age group 31-40 years(38%). The group included 65% with the inattentive type of ADHD, 5% patients with the hyperactive-impulsive type and 30% with the combined type. Frequently observed comorbid disorders included developmental disability and depressive disorder in the present study.

**Table 1: Demographic detail of study subjects**

Variables	N(%)
<b>Gender</b>	
Male	180(60%)
Female	120(40%)
<b>Age group(yrs)</b>	
18-30	98(32.66%)
31-40	114(38%)
40-50	88(29.33%)
<b>Type of ADHD</b>	
Inattentive	195(65%)
Hyperactive-impulsive	15(5%)
Combined	90(30%)
<b>Total</b>	<b>300(100%)</b>

**Table 2:Prevalence of psychiatric comorbidities**

Comorbidity	ADHD subtype		
	Inattentive (N=195)	Hyperactive-impulsive (N=15)	Combined (N=90)
Depressive disorder	50	4	25
Dysthymia	30	2	4
Bipolar disorder	6	1	3
Generalized anxiety disorder	11	1	2
Social phobia	5	2	3
Impulse control disorder	6	1	2
Panic disorder	2	5	3
Learning disorder	4	3	2
Obsessive-compulsive disorder	3	1	1
Substance abuse	2	5	2
Intellectual disability	3	1	3
Conduct disorder	2	1	1
Oppositional defiant disorder	1	3	1
Posttraumatic stress disorder	4	1	4
<b>Total</b>			

## DISCUSSION:

The population prevalence of adult ADHD is reported to be 3%–5%.<sup>2,3</sup> Adult ADHD causes impairment and suffering.<sup>17,18</sup> Also, various comorbidities in the sense of additional psychiatric disorders are associated with considerable functional impairment and burden to family and society.<sup>5</sup>

In the present study a total of 300 adults with ADHD were enrolled in which 60% were male and 40% were female. Maximum patients were of age group 31-40 years(38%). The group included 65% with the inattentive type of ADHD, 5% patients with the hyperactive–impulsive type and 30% with the combined type. Frequently observed comorbid disorders included developmental disability and depressive disorder in the present study.

ADHD and depression often occur together, and the prevalence rate of depression in patients with adult ADHD has been reported ranging from 18.6 to 53.3 percent.<sup>6,19</sup>

According to Hesselbrock et al., 66% of patients met criteria for current psychiatric disorder involving other substance abuse (9%), depression (23%), phobia (6%), mania (2%), somatization (1%), and schizophrenia (2%).<sup>20</sup>

Psychiatric comorbidities are commonly found among adult ADHD patients, in particular, mood, anxiety, substance use, and antisocial personality disorders.<sup>21,22</sup>

Females with ADHD are more likely to have internalizing symptoms, resulting in a later diagnosis, and greater time for developing strategies to mask core symptoms.<sup>23</sup>

ADHD and dysthymia/depression co-occur frequently, with studies reporting prevalence rates of depression in individuals with ADHD ranging from 18.6%<sup>19</sup> to 53.3%<sup>24</sup>.

The risk for anxiety disorders is higher in individuals with ADHD than in the general population.<sup>25,26</sup>

## CONCLUSION:

Our study concluded that psychiatric comorbidities have a high prevalence in patients with adult ADHD. Frequently observed comorbid disorders included developmental disability and depressive disorder in the present study.

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