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# The Gender Lens on ADHD: A Critical Assessment of Diagnostic Patterns and Pitfalls *Taylor Funkhouser*

Within the realm of neurodevelopmental disorders, attention deficit hyperactivity disorder (ADHD) is one of the most prevalent. However, research uncovers a major discrepancy between the diagnostic rates of men vs women, which points to the potential underdiagnosis and misdiagnosis in females compared to their male counterparts. This phenomenon raises concerns towards the impact this has on women, such has their mental and physical health. It begs the question, why does this discrepancy occur? To understand the answer to this question, it is important to look at the standard process and procedures involved with diagnosing a person with ADHD and compare that to how women experience ADHD.

Keywords: attention deficit hyperactivity disorder, ADHD, diagnosis, female, male, gender

ithin the world of neurodevelopmental disorders, attention deficit hyperactivity disorder (ADHD) is one of the most prevalent. specifically among youth. However, it is still one of the most ambiguous disorders to diagnose. With over 5.64 million children and 10.5 million adults having been diagnosed with ADHD, one would expect the diagnostic process to be mainstream without many flaws; however, this is not the case.<sup>1-2</sup> Women and young girls are a perfect example of the pitfalls in diagnosing ADHD with women standing at 3.2% diagnosed to men's 5.4% and young girls standing at 5.6% diagnosed to young boys' 12.7%.<sup>1-2</sup> Examining the gender-based differences in ADHD diagnoses is crucial in order to identify and highlight the importance of understanding the consequences these differences can have.

#### **DIAGNOSTIC CRITERIA**

Few studies have been established in finding biomarkers that can help with ADHD diagnosis, making the process a clinical decision. However, there is not one singular test a person suspected of having ADHD must take. Therefore, mental health professionals or primary care providers use clinical interviews, questionnaires, and other resources from the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5), making this process ambiguous and up to the determination of the provider. The criteria itself is straightforward, but certain aspects lead to young girls and women falling through the cracks.

The DSM-5 states that a person under 17 years of age must have six or more symptoms that fall under the inattention category and six or more symptoms that fall under the hyperactive and impulsivity category. People 17 years and older must have five or more symptoms. Some examples of symptoms include trouble holding attention, easily being distracted, interrupting others, fidgeting, and excessive talking. The DSM-5 also states that these symptoms must have been present before the age of 12, are present in more than one location (ex. home and work), have clear evidence they interrupt daily life, and are not explained by any other condition.<sup>3</sup> Gender-based differences can start to be seen with the requirement of hyperactivity symptoms.

#### GENDER DIFFERENCES

Not many studies have been conducted to determine why men are more likely to be diagnosed with ADHD than women, but most published studies all point to a similar conclusion - women and young girls don't experience the explosive, loud, and disruptive behaviors that occur with hyperactivity. Instead, they tend to present with inattentive behavior. In a 2020 review by da Silva and colleagues', the ratio of boys to girls diagnosed with ADHD was 3:1, while in adulthood the ratio is closer to 1:1, suggesting underdiagnosis in females.<sup>4</sup> This disconnect has been established in other studies as well.

Mowlem and colleagues conducted a series of interviews with parents of all twins born in Sweden since 1992; their work is also known as The Child and Adolescent Twin Study in Sweden (CATSS).<sup>5</sup> They found that 2,556 (12.9%) of kids from the CATSS sample met the DSM-5 criteria for ADHD symptoms. Of those, more males (6.3%, n=1635) met the symptom criteria than females (9.43%, n=921), with even fewer females (12.1%, n=111) being diagnosed with ADHD compared to their male counterparts (18.5%, n=303). This study also assessed symptom severity as well as circumstances that made it more likely for a person to be diagnosed and prescribed medication for ADHD. They found that higher severity of symptom domains - hyperactivity/impulsivity, inattention. combined – increased the likelihood of a clinical diagnosis in both sexes, but across all domains, the odds ratios were higher for females. This suggests a greater deviation from their normal behavior and can indicate a need for females to have a greater symptom threshold requirement to be diagnosed.<sup>5</sup> In summary, females need to have incredibly disruptive and hyperactive behavior to be diagnosed with ADHD. Research by Arcia and Conners

further supports this observation. Their study concluded that females with "externalizing" symptoms were referred quicker than males with similar behaviors. Externalizing symptoms are behaviors that are directed outwards toward other individuals and can be seen as bothersome or harmful. These behaviors are a greater contrast to expected "normal" female behavior.<sup>6</sup> This points to ADHD referral largely being driven by externalizing behaviors, making it more difficult for females to be referred for diagnosis as more common presentations in females do not follow this standard.

## OUTCOMES OF UNTREATED ADHD

A referral does not guarantee a correct diagnosis. Inattention in girls and women can present as disorganization, being distracted easily, and a lack of motivation.<sup>7</sup> Anxiety and low mood are also common presentations. Women with ADHD are at a higher risk for severe mental illness, including schizophrenia and other mental health impairments. These internalizing behaviors can mask the underlying ADHD, as they don't match the stereotypical hyperactive behaviors associated with the neurological disorder. As a result, females are more likely to be diagnosed with a personality or internalizing disorder instead of ADHD, leaving their condition untreated longer than necessary.

While untreated ADHD may not seem as problematic as other untreated neurological disorders, it can have negative consequences. Untreated individuals have controlling their emotions. difficultv maintaining relationships, and even finishing school. This can develop into other problems such as drug and alcohol abuse, gambling, and poor career choices.<sup>8,1</sup> Mental health tends to be low in individuals with untreated ADHD and can lead to comorbidities such as depression and anxiety.9 Undiagnosed ADHD can also have a significant impact on women's overall mental wellbeing. Women felt as though they were lazy, stupid, crazy, a failure, not good enough, and had an overall feeling of shame and self-hatred when undiagnosed.<sup>10</sup> These negative emotions can lead to the exact same outcomes as an untreated diagnosis and shows just how important it is to learn about genderbased differences in the ADHD diagnostic process. Even everyday activities such as driving become dangerous for untreated individuals as there is an increased risk of vehicle crashes and injuries.<sup>11</sup> It is important to remember these outcomes can be prevented. With early detection and appropriate treatment, these negative outcomes can be prevented.9

## CONCLUSION

Attention deficit hyperactivity disorder (ADHD) remains a prevalent diagnosis today. Although a very manageable condition, progress needs to be made in the current diagnostic process and criteria used for identifying this condition. Specifically, gender differences within this diagnosis can severely affect one's quality of life if gone undiagnosed. Acknowledging these differences is only the first step in making the ADHD diagnosing process equitable for every person who presents with symptoms, regardless of gender.

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