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2734 17 Avenue SW,  
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+15878858911  
editorial-office@sciformat.ca

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## SEX DIFFERENCES IN ADHD – DIAGNOSTIC AND THERAPEUTIC CHALLENGES

**Aleksandra Marek** (Corresponding Author, Email: [aleksandra.marek539@gmail.com](mailto:aleksandra.marek539@gmail.com))  
Central Teaching Hospital of the Medical University of Lodz, Lodz, Poland  
ORCID ID: 0009-0002-3391-5082

**Wiktoria Balińska**  
Medical University of Lodz, Lodz, Poland  
ORCID ID: 0009-0002-2615-7236

**Jagoda Rogowska**  
Medical University of Lodz, Lodz, Poland  
ORCID ID: 0009-0004-5995-5802

**Jakub Wąsik**  
Medical University of Lodz, Lodz, Poland  
ORCID ID: 0009-0002-7145-8118

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### ABSTRACT

Attention-Deficit/Hyperactivity Disorder (ADHD) presents differently across sexes, yet current diagnostic and therapeutic frameworks remain largely based on male symptom profiles. This discrepancy contributes to the persistent underrecognition and misdiagnosis of ADHD in among girls and women. Females more commonly exhibit inattentive traits, emotional dysregulation, and internalizing symptoms, which are often misattributed to anxiety, depression, or personality disorders. As a result, many women receive a diagnosis only in adulthood, following years of impaired functioning, reduced self-esteem, and ineffective treatment for secondary symptoms. These delays carry significant psychosocial consequences, including higher risks of self-directed violence, relational difficulties, lower educational attainment, and unplanned pregnancy. Sex differences also extend to treatment. Evidence indicates that girls are less likely to receive stimulant medication in childhood and may respond differently to pharmacotherapy, with variable efficacy of methylphenidate and atomoxetine. Hormonal fluctuations across the menstrual cycle, pregnancy, and menopause further modulate symptom severity and treatment response, though research in this domain remains limited. Pregnancy presents unique challenges, as ADHD symptoms may intensify while medication options become more restricted due to safety considerations. These findings underscore the need for gender-sensitive approaches to ADHD diagnosis and management. Greater awareness of female-specific symptom patterns, masking behaviors, and hormonal influences is essential for improving early identification and optimizing therapeutic outcomes. Future research should prioritize sex-disaggregated data and explore hormonal and reproductive influences to inform more individualized treatment strategies for women with ADHD.

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### KEYWORDS

ADHD, Female, Pregnancy, Pharmacotherapy, Sex Differences

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## Introduction

Attention-Deficit/Hyperactivity Disorder (ADHD) is a neurodevelopmental condition historically associated with hyperactive boys, leading to a gender bias in both diagnosis and treatment. However, growing research reveals that ADHD in females often presents differently and is frequently underrecognized, resulting in delayed or missed diagnoses (Nussbaum, 2012). Unlike the disruptive behaviors more common in boys, girls and women often exhibit inattentive symptoms, emotional dysregulation, and anxiety traits less likely to be linked to ADHD and more often attributed to mood or personality disorders (Mowlem et al., 2019).

This diagnostic disparity has lasting consequences. Many women remain undiagnosed until adulthood, reporting chronic emotional distress, impaired relationships, and a persistent sense of personal failure. A formal diagnosis, when finally received, is often experienced as validating, providing a new framework for self-understanding and access to support (Young et al., 2020). However, the long delay frequently results in missed interventions during critical developmental windows.

Sex differences also extend to treatment. Girls are less likely to be prescribed stimulant medications in childhood and females may respond differently to pharmacotherapy. For example, methylphenidate tends to have a shorter duration of efficacy in women, while atomoxetine may offer greater benefit in treating emotional symptoms. Additionally, hormonal fluctuations during puberty, the menstrual cycle, pregnancy, and menopause can significantly affect symptom expression and medication response (Osianlis et al., 2025)

During pregnancy, ADHD symptoms may intensify, increasing risks such as prenatal stress and depression and reduced social support (Murray et al., 2022). Although stimulant medications are generally considered safe, especially methylphenidate, there is limited long-term safety data, necessitating individualized risk-benefit assessments (Ornoy & Koren, 2021).

Furthermore, women with ADHD face increased risk of non-suicidal self-harm (Hinshaw et al., 2024), relational difficulties, and sexual vulnerability. These outcomes highlight the need for a gender-sensitive, developmental approach to ADHD that incorporates hormonal, emotional, and social dimensions across the lifespan.

This review synthesizes current knowledge about ADHD in women, emphasizing diagnostic challenges, treatment gaps, hormonal influences, pregnancy considerations, and psychosocial outcomes.

## Methodology

The primary method used in this study was a critical analysis of existing scientific research. The first step was a comprehensive review of the literature on the subject. For this purpose, electronic databases were used, primarily PubMed and Google Scholar.

Published studies on gender differences in the diagnosis of ADHD were systematically identified and analyzed. Particular attention was paid to problems in diagnosing ADHD in girls and women and the consequences of the sometimes long-term lack of proper diagnosis. In addition, the impact of hormones, including those related to pregnancy, was analyzed.

Although the study did not address different therapeutic methods (psychoeducation, non-pharmacological interventions), it did signal the need to take gender differences into account in the pharmacological treatment of ADHD.

## Results

### 1. Sex Differences in Diagnosis

Sex differences significantly influence the diagnostic process for ADHD, often resulting in underdiagnosis, misdiagnosis, or delayed recognition in females. This disparity is largely driven by sociocultural norms and gender expectations, which shape the perception and reporting of symptoms. While hyperactivity and impulsivity, which are common in boys, are external and disruptive, drawing attention from caregivers and educators, girls are more likely to exhibit inattentive symptoms such as forgetfulness, disorganization, and daydreaming. These traits are often misunderstood or attributed to personality or emotional issues rather than to a neurodevelopmental disorder (Nussbaum, 2012).

The failure to diagnose ADHD in women or misdiagnosis as another mental disorder also results from the different way symptoms manifest themselves, due to the more common subtype of ADHD in women with a predominance of attention deficit disorders and due to cultural and social factors manifested in the masking of symptoms in order to conform to prevailing social norms (Attou DE, Climie EA. 2023). These factors have a significant impact on the distorted perception of women by doctors as being able to cope well with problems, and as a result, they are not referred for appropriate diagnosis. This has far-reaching therapeutic consequences

– according to estimates, ADHD is diagnosed in women on average 4 years later than in men, which, as studies of the Swedish population have shown, increases the risk of psychiatric complications and, as a consequence, the need for more frequent use of the healthcare system (Skoglund C et al., 2024). Another problem is that the accepted diagnostic criteria do not take into account the differences in ADHD symptoms in women. These criteria are based to a much greater extent on the symptoms of the male population (Mowlem et al. 2019).

The current diagnostic frameworks remain heavily influenced by male-centric symptom profiles, which can overlook the more subtle, internalized presentations typical in females. Traits like emotional dysregulation, anxiety, and low self-esteem are frequently dismissed or misattributed to mood disorders or personality characteristics (Mowlem et al., 2019). As a result, many girls are referred for mental health assessments only when symptoms escalate or manifest as emotional crises. Girls are less likely to be referred for ADHD evaluations by both teachers and parents, even when exhibiting identical behaviors to boys (Ohan & Visser, 2009). Furthermore, girls often receive treatment for secondary symptoms, for example: anxiety or depression, before receiving an accurate ADHD diagnosis.

Expert consensus emphasizes the need to adopt a lifespan approach to ADHD care that accounts for developmental transitions and sex-specific manifestations. Awareness of gendered masking behaviors, such as overcompensating with perfectionism or social conformity, is essential to improving timely and accurate identification of ADHD in females. Awareness of gendered masking behaviors, such as overcompensating with perfectionism or social conformity, is essential to improve timely and accurate identification of ADHD in females (Young et al., 2020).

According to Hinshaw et al. (2016), ADHD presents differently in females and males. Girls are diagnosed less often than boys in childhood, but rates become closer by adulthood. Females tend to show more inattentive symptoms and internalizing problems like anxiety and depression, while males more often display hyperactive-impulsive behaviors and externalizing issues. Girls frequently use coping strategies that mask their symptoms, which can contribute to underdiagnosis. Despite this, females with ADHD face significant challenges, including difficulties in relationships and higher risks of self-harm. Longitudinal evidence suggests that childhood ADHD in girls can lead to a range of problems later in life, such as comorbid mental health conditions, unplanned pregnancy, and experiences of intimate partner violence. These findings emphasize the importance of recognizing female-specific patterns of ADHD for accurate diagnosis and effective treatment (Hinshaw et al., 2016).

## **2. Adult Diagnosis and the Impact of Being Undiagnosed**

Many women with ADHD are not diagnosed until adulthood, often after years of internal struggle and unrecognized impairment. The consequences of delayed diagnosis can be far-reaching, impacting mental health, self-perception, academic achievement, and relationships. A systematic review by Young et al. (2020) identified key themes among women diagnosed later in life: chronic emotional distress, difficulties with emotional regulation, interpersonal conflict, and a persistent sense of losing control over their lives.

The lack of proper early diagnosis of ADHD in women and the resulting long-term implementation of ineffective therapies has far-reaching consequences. It can lead to complications and disorders such as addiction, anxiety without a specific cause, eating disorders, sleep disorders, and psychosomatic symptoms. The lack of ADHD diagnosis means that the diagnosis is often superficial, referring to depressive, anxiety, or eating disorders. This results in long-term therapy, which can cause further complications and often does not produce the expected results (Attoe DE, Climie EA. 2023; Biederman J, Monuteaux MC, Mick E. 2006).

People with untreated ADHD experience emotional dysregulation, which can negatively affect the quality of life of both patients and their loved ones (Retz et al. 2012). The consequences include reduced self-esteem, problems with social functioning, and reduced self-efficacy (Harpin et al., 2016). ADHD is also recognized as one of the most common neurodevelopmental disorders that can significantly affect educational achievement.

For many, receiving a diagnosis in adulthood can be transformative. It brings a sense of validation, helps make sense of past difficulties, and enables access to appropriate treatments and coping strategies. Women often report increased self-compassion and self-awareness following diagnosis. However, they also face structural and systemic challenges, including lack of clinician awareness, stigma, and diagnostic overshadowing by mood or anxiety disorders. The process of securing a diagnosis often requires strong self-advocacy and resilience, particularly when symptoms have been masked or minimized by others (Griffiths et al., 2023). These findings highlight the need to raise awareness among clinicians, improve diagnostic criteria, and implement gender-sensitive care pathways that facilitate earlier detection and intervention for females with ADHD.

In addition, support for patients with ADHD should involve various types of interventions and therapies, sometimes taking into account the need to consult various specialists and modify therapy depending on the patient's gender and individual needs.

### 3. Lifespan Challenges and Psychosocial Outcomes

ADHD is considered one of the most common neurodevelopmental disorders, which can significantly affect functioning in many aspects of life, including educational and professional achievements. People with untreated ADHD experience emotional dysregulation, which significantly reduces the quality of life of both patients and their families (Retz et al. 2012).

Girls with ADHD in childhood often face distinct challenges during adolescence and young adulthood. Research indicates that they are at greater risk for depressive symptoms, increased family conflict, especially with their mothers, and difficulties forming and maintaining romantic relationships (Mikami et al., 2010). Emotional regulation and self-esteem issues can persist, affecting identity formation and social confidence.

Women with untreated ADHD are more likely than men to have low self-esteem and difficulty performing domestic and professional duties, which can lead to disorganization in family, professional, and social spheres. In addition, women are more likely to experience childhood sexual abuse, anxiety, and borderline personality disorder. Women, especially those with undiagnosed and untreated or late-diagnosed ADHD, often achieve lower levels of education and have poorer professional outcomes compared to men who receive treatment. Failure at school and later at work, as well as difficulties in family and social relationships, exacerbate low self-esteem in women. These difficulties, related to executive functions, often make them more dependent on others, first on teachers and later on their partners.

Despite these difficulties, not all functional outcomes are negatively impacted. Studies have found no significant differences in substance use, job performance, or self-reported ADHD symptoms in adulthood between females with and without ADHD, suggesting that the impact of ADHD is not uniformly negative and may vary depending on environmental factors, comorbidities, and support systems (Morley et al., 2023). These nuanced findings reinforce the importance of individualized support and long-term monitoring.

### 4. Pharmacotherapy: Sex-Specific Considerations

Evidence from pharmacologic research shows that both amphetamine (AMP) and methylphenidate (MPH) remain the core pharmacotherapies for ADHD, primarily because they increase central dopamine (DA) and norepinephrine (NE) activity in cortical and striatal brain regions involved in attention and executive functioning (Faraone, 2021). Although AMP and MPH share this primary mechanism, they differ in several molecular actions: AMP additionally inhibits VMAT-2 and monoamine oxidase activity, while MPH demonstrates serotonin 1A receptor agonist activity and influences VMAT-2 redistribution. Despite these mechanistic differences, current clinical data do not support choosing one stimulant class over the other based on pharmacology alone, as neither has demonstrated clear superiority in specific patient populations. Importantly, the review emphasizes that comorbid psychiatric conditions, such as anxiety, depression, substance use disorders, and sleep disturbances, should guide treatment selection, given overlapping neurobiological pathways that may affect both symptom expression and medication response. These findings highlight the complexity of stimulant treatment in ADHD and suggest that individual variability in neurobiology may contribute to differential therapeutic outcomes across sexes and clinical presentations (Faraone, 2021).

Evidence from randomized controlled trials indicates that pharmacotherapy for adult ADHD extends beyond stimulant medications, with bupropion emerging as a potential non-stimulant alternative. Across six studies involving 438 adults, long-acting bupropion formulations (150–450 mg/day) were associated with reductions in ADHD symptom severity and modest increases in clinical improvement compared with placebo, though the overall certainty of evidence was rated low due to small sample sizes and methodological limitations. Importantly, tolerability of bupropion did not differ significantly from placebo, suggesting that it may be an option for adults who do not respond to or cannot tolerate stimulants. These findings underscore the need for individualized treatment approaches, especially given known sex differences in symptom presentation and comorbidities, which may influence medication choice and response. While stimulants remain first-line treatment, the available evidence highlights that non-stimulant agents such as bupropion may play a meaningful role in addressing therapeutic challenges in diverse clinical populations (Verbeeck et al., 2017).

Pharmacological treatment of ADHD has shown distinct sex differences in both prescription patterns and efficacy. Girls and women are consistently less likely to be prescribed stimulant medication during

childhood and adolescence, although this gap diminishes in adulthood. The efficacy and tolerability of medication may also differ by sex. For instance, methylphenidate (MPH) has shown reduced effectiveness in improving hyperactivity and inattention in females. Furthermore, girls often experience an earlier onset of therapeutic effects but a more rapid decline, suggesting that standard once-daily dosing may not be ideal (Kok et al., 2020).

In contrast, atomoxetine (ATX), a non-stimulant medication, has demonstrated greater efficacy in treating emotional dysregulation and core ADHD symptoms in females. These findings show the importance of sex-specific treatment planning, dose optimization, and regular symptom monitoring. Despite growing evidence, many clinical trials still fail to disaggregate data by sex, limiting the development of tailored treatment approaches.

### **5. Hormonal Influences Across the Reproductive Lifespan**

Emerging research highlights the role of sex hormones in modulating ADHD symptoms in females. Fluctuations in estrogen and progesterone, during puberty, the menstrual cycle, pregnancy, and menopause, can exacerbate or alter symptom presentation. A systematic review (2025) suggests that hormonal transitions are critical periods of vulnerability, with many women reporting worsened symptoms during the premenstrual and ovulatory phases of their cycle. Estrogen decline is associated with reduced executive functioning and increased impulsivity (Martel, 2023).

Fluctuations in ADHD symptoms in girls and women, depending on hormonal changes, have been confirmed by studies conducted over the past few years based on clinical interviews (Burger I et al., 2024; Kooij JS. 2023; Antoniou E, Rigas N, Orovou E et al. 2021). These fluctuations may occur throughout life: puberty, pregnancy, postpartum, perimenopause, menopause, as well as in relation to the menstrual cycle.

Similar to menstruating women, declining estrogen and progesterone levels just before menstruation can lead to greater mood swings, feelings of irritability or distraction, and some ADHD symptoms may be more troublesome in menopausal and postmenopausal women.

Premenstrual dysphoric disorder is more common in women with ADHD, leading to severe psychological distress and physical symptoms.

Hormonal changes during menopause can exacerbate ADHD symptoms. Tailored treatment approaches are essential for effectively managing the overlap of menopause and ADHD symptoms.

Adolescence and puberty may intensify ADHD symptoms due to both hormonal changes and increased social demands. These compounded stressors contribute to a unique developmental trajectory in females, characterized by heightened emotional sensitivity and interpersonal challenges. Despite growing recognition, research on hormonal impacts remains limited by small sample sizes and inconsistent methodologies. Future studies should explore menopause and other hormonal milestones to inform treatment approaches.

In a study of 656 women aged 45–60 exploring the relationship between ADHD and menopausal experiences, including 245 women diagnosed with ADHD. The results indicated that having an ADHD diagnosis or taking ADHD medication did not significantly influence menopausal symptoms at any stage of menopause. Nonetheless, higher levels of ADHD symptoms were modestly associated with more menopausal complaints across the entire sample, though this pattern was less evident among women already diagnosed with ADHD, suggesting possible differences in how symptoms are perceived or attributed. Overall, these findings indicate that ADHD does not intensify menopausal difficulties at the group level, but individual symptom severity may still relate to menopausal experiences (Chapman et al., 2025).

### **6. ADHD and Pregnancy**

Pregnancy represents a particularly challenging period for women with ADHD. Pregnancy and the perinatal period are characterized by significant hormonal changes, particularly in relation to estrogen and progesterone levels. Estrogen can increase dopamine and serotonin concentrations, and its steadily increased concentration during pregnancy can have a significant impact on attention span and impulsive behavior. Sudden hormonal changes during childbirth can cause a sudden worsening of ADHD symptoms (Osianlis et al., 2025).

Women diagnosed with ADHD have greater difficulty coping with external stimuli during pregnancy, which mainly manifests itself in increased sensory sensitivity. Problems related to underweight or overweight are also more common, as are risks associated with alcohol abuse, smoking, and psychoactive substance use. These factors can have significant negative consequences not only for the fetus, but also for obstetric and perinatal outcomes (Skoglund et al., 2019).

Problems with planning, forgetfulness, and concentration disorders in women with ADHD may intensify during pregnancy, which negatively affects their ability to use medical care appropriately (Scoten et al., 2024).

During pregnancy symptoms often intensify, while treatment options may be limited due to concerns over medication safety. Non-pharmacological interventions, such as cognitive-behavioral therapy, are preferred for mild to moderate cases. However, for women with moderate to severe symptoms, pharmacotherapy may be necessary to maintain functioning. Most ADHD medications are considered relatively safe during pregnancy, with stimulants such as methylphenidate and amphetamines showing no strong evidence of teratogenicity. However, slight increases in risks, including cardiac malformations (methylphenidate), spontaneous abortion, low birth weight, and preterm birth (amphetamines), have been reported. Among non-stimulants, bupropion appears to have the most favorable safety profile, though data for other agents such as atomoxetine, clonidine, and guanfacine are limited (Ornoy & Koren, 2021).

Preconception planning, individualized treatment strategies, and collaborative care models are essential. Women with ADHD are also more likely to experience perinatal mental health challenges, including stress, anxiety, and depression, and often report lower levels of support from partners and family (Murray et al., 2022).

Results from the Multimodal Treatment Study of ADHD showed that children with ADHD were more than twice as likely as their peers to become involved in an early pregnancy by age 18 (Meinzer et al., 2020). When the researchers looked at different factors that might explain this link, they found that continued ADHD symptoms, involvement in criminal or substance-using behaviors, and lower academic performance each played a role on their own. However, when all factors were examined together, only delinquency and substance use continued to explain the increased risk. This suggests that risky and impulsive behaviors in adolescence are the main pathway connecting childhood ADHD to early pregnancy. Although the study did not focus on sex differences, these results have important implications: boys with ADHD often show more externalizing behaviors, while girls may be overlooked until risky behaviors appear. This helps clarify how ADHD may lead to different outcomes for males and females during adolescence (Meinzer et al., 2020).

### **7. Self-Directed Violence and Emotional Regulation**

Young women with ADHD are at increased risk for non-suicidal self-directed violence (NSSDV), particularly during adolescence. Hinshaw et al. (2024) found that NSSDV is often used as a maladaptive coping mechanism for emotion regulation, self-punishment, or gaining a sense of control. These behaviors reflect underlying ADHD traits, particularly impulsivity and difficulty with emotional regulation.

Stigma associated with both ADHD and NSSDV compounds emotional distress and can hinder help-seeking behaviors. Notably, many participants engaged in self-injury before high school, indicating a critical need for early screening and mental health education. Family involvement, peer support, and public health campaigns can play a key role in prevention and destigmatization.

Emotional dysregulation is a widespread and impactful feature of ADHD that affects individuals across all ages. Difficulties in recognizing, processing, and responding to emotional information appear to contribute significantly to functional impairments and are linked to altered activity in brain regions including the striatum, amygdala, and medial prefrontal cortex. While standard ADHD treatments can help improve both attention and emotional control, the authors suggest that explicitly addressing emotion dysregulation may require specialized therapeutic strategies. They propose three conceptual models: that emotion dysregulation and ADHD are related but separate dimensions, that emotional difficulties are a core diagnostic component of ADHD, or that the combination forms a distinct clinical entity. Understanding these pathways is particularly relevant for exploring sex differences, as girls with ADHD often display more internalizing emotional challenges, whereas boys are more likely to show externalizing patterns, potentially influencing both diagnosis and treatment planning.

### **8. Sexuality and Relationship Challenges**

Available research suggests that individuals with ADHD are at greater risk of experiencing victimization and violence in childhood (Aguado-Gracia et al., 2021) and a significantly higher risk of experiencing domestic violence and sexual violence. These negative experiences include both events in which the person was a victim and events in which the person was a perpetrator (Arrondo et al., 2023).

Women with ADHD frequently experience challenges in their sexual and romantic relationships due to core ADHD symptoms and related emotional struggles. A qualitative study by Wiklander et al. (2022) highlighted difficulties with attention during intimacy, communication of sexual needs, and vulnerability to

negative sexual experiences. Many participants expressed a sense of being “different” from their peers and reported low sexual self-esteem.

Due to their increased tendency toward impulsivity and risky behavior, people with ADHD are statistically more likely to engage in risky sexual behavior and, as a result, are more likely to contract sexually transmitted diseases. It is worth noting that this risk was significantly reduced if the patient was treated with a psychostimulant drug (Soldati et al., 2024).

Two dominant themes emerged: the need for acceptance of their neurodiversity in intimate relationships and a desire for sexual safety and confidence. Self-awareness was identified as a key factor in developing healthier relationship strategies. These findings point to the need for early diagnosis, inclusive sexual education, and trauma-informed support to improve relationship outcomes in women with ADHD.

### **Discussion**

Research confirms significant differences in the manifestation of ADHD symptoms in women and men. Among the key differences observed in children and adolescents are rebellious behavior and behavioral disorders in boys, while girls are more likely to experience depressive and anxiety disorders. To improve the timely identification of ADHD in girls, it is essential to be aware of gender-specific masking behaviors, such as excessive compensation through perfectionism or social conformity in females (Young et al., 2020).

This should influence different diagnostic and therapeutic processes. Researchers point to the need for an approach to the care of patients with ADHD that takes into account developmental changes throughout the life span and gender-specific symptoms.

It should be emphasized that the consequences of not diagnosing (or diagnosing too late) and implementing ADHD treatment can be significantly negative for the patient in many areas of life. Failure to implement appropriate therapy, which, as research confirms, is much more common in girls and women, can lead to many negative personal consequences. There is a significant reduction in the quality of life of patients and their families, affecting self-esteem and causing problems in family and social functioning (Retz et al. 2012; Harpin et al. 2016). Young women with ADHD are more vulnerable to non-suicidal self-directed violence, especially during adolescence (Shaikh I. Ahmad and Stephen P. Hinshaw, 2024).

The negative social consequences are also significant, adolescents with untreated ADHD have a higher rate of unplanned pregnancies, and women often experience a lack of success in their professional lives and problems in their relationships.

Other consequences of undiagnosed or delayed diagnosis of ADHD in women relate to economic issues. Patients treated according to a different diagnosis (ignoring ADHD, which often does not bring about significant improvement in the long term) incur higher financial costs associated with therapy and also experience difficulties in functioning in society (Doshi JA, Hodgkins P, Kahle J et al. 2012). In such cases, there is also a burden on the healthcare system, both financially and in terms of accessibility.

Although the need for gender-specific differentiation in ADHD diagnosis and the negative consequences of undiagnosed or delayed diagnosis of ADHD in girls and women have been confirmed in numerous studies, this issue has yet to be widely recognized and understood in practice. It seems that the problem concerns not only the self-awareness of patients and their loved ones struggling with this common neurodevelopmental condition, but also a wide range of stakeholders – educators, psychotherapists, general practitioners, and even psychiatrists.

Another important issue is the impact of hormonal changes associated with puberty, pregnancy, postpartum, perimenopause, and menopause on changes in ADHD symptoms. Inconsistent research methodologies and an insufficient number of people undergoing this type of diagnostic testing make it difficult to develop recommendations and therapeutic standards. The need for further research in this area seems obvious, as it would help to improve existing therapeutic methods.

## Conclusions

The differences between women and men with ADHD are significant and should influence how symptoms are perceived and how diagnosis and treatment are approached. However, ADHD in women often remains undiagnosed or is misdiagnosed as another mental disorder. Therefore, further clinical and diagnostic research in this area is necessary.

The lack of proper diagnosis of ADHD in girls can lead to many serious consequences that negatively affect the quality of life of patients and their families. The lack of or incorrect diagnosis affects, among other things, social functioning and can lead to lower levels of education, which in turn leads to poorer professional achievements compared to men who are diagnosed and treated in childhood. In addition, misdiagnosis also entails financial costs for patients and places a burden on the healthcare system.

Current research confirms that it is important to adopt a lifelong approach to the care of people diagnosed with ADHD that takes into account developmental changes and gender-specific symptoms. Awareness of gender-specific masking behaviors, such as overcompensation through perfectionism or social conformity, is essential to improving the timely and accurate identification of ADHD in girls.

Despite growing awareness in this area, research on the impact of hormones remains limited by small sample sizes and inconsistent methodologies. Future studies should focus on menopause and other important hormonal events to develop appropriate treatments.

The varying effectiveness of different medications highlights the importance of gender-specific treatment planning, dose optimization, and regular symptom monitoring. Despite growing evidence, many clinical trials still do not include gender-specific data, limiting the development of personalized treatments.

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