### **10** points about sex differences in ADHD

### 1. ADHD is more prevalent in males than females in childhood but this gap narrows in adulthood.

This difference in diagnostic rates may stem from females exhibiting less overt symptoms and experiencing higher rates of co-occurring conditions, leading to misdiagnosis or delayed diagnosis.

## 2. Females with ADHD frequently exhibit inattentive symptoms and internalizing behaviors.

While males tend to display more hyperactive-impulsive behaviors, females may present with subtler symptoms like daydreaming, disorganization, and internalized feelings of anxiety or distress. This can lead to ADHD being overlooked, as these behaviors may be misconstrued as personality traits or attributed to other conditions.

### **3.** Co-occurring conditions are common in females with ADHD, often obscuring the underlying ADHD diagnosis.

Conditions such as anxiety disorders, depression, learning disabilities, and autism spectrum disorder (ASD) can coexist with ADHD, making diagnosis more complex. This emphasizes the need for comprehensive assessment to identify and address all contributing factors.

### 4. Females with ADHD often develop compensatory strategies to mask their symptoms, potentially delaying diagnosis.

These strategies can include working harder to maintain good grades, meticulously organizing their belongings, or seeking external support to manage their responsibilities. This can create an illusion of functionality, hindering recognition of the underlying struggles and delaying appropriate intervention.

### 5. Life transitions often exacerbate ADHD symptoms in females, particularly during adolescence and young adulthood.

Periods of significant change, such as transitioning to secondary school, entering the workforce, or starting a family, can amplify existing symptoms and lead to increased difficulties. These transitional phases underscore the need for ongoing support and treatment adjustments as life demands evolve.

#### 6. Clinicians require greater awareness of the distinct presentation of ADHD in females.

Traditional diagnostic criteria and assessment tools are often based on male-centric presentations, potentially leading to underdiagnosis of females. Increased clinician training and the development of sex- and gender-sensitive assessment approaches are crucial for improving diagnostic accuracy.

### 7. Hormonal fluctuations can influence ADHD symptom severity and treatment response in females.

The interplay of hormones, particularly estrogen and progesterone, with stimulant medications remains poorly understood. Research suggests that fluctuating hormone levels during the menstrual cycle and menopause can impact medication effectiveness, highlighting the need for individualized treatment plans and ongoing monitoring.

## 8. Emotional distress in females with ADHD should not be automatically attributed to depression.

Untreated ADHD can lead to feelings of anxiety, self-doubt, and confusion, which may be mistaken for primary mood disorders. This underscores the importance of comprehensive evaluation and the consideration of ADHD as a potential contributing factor to emotional difficulties.

### 9. Brain differences in individuals with ADHD are distinct for females with the disorder compared to males with the disorder.

Recent studies of brain images of individuals with and without ADHD have isolated distinct patterns of cortical thicknesses and functional co-activation patterns in females with ADHD compared to males with ADHD. These studies suggest that ADHD may have unique neurobiological correlates in males and females, which possibly explains potential differences in prevalence and expression.

# 10. More research and multi-agency collaboration is needed to further understand the nuances and perhaps distinct neural underpinnings of ADHD in females to develop more targeted interventions.

Exploring gender-specific symptom profiles and examining the long-term outcomes of various treatment approaches are crucial areas for future research. Moreover, coordination between healthcare providers, educators, social service agencies, and families is key to provide comprehensive and tailored interventions. Early identification and intervention in school settings, reasonable adjustments in educational and occupational environments, and ongoing family support can significantly improve outcomes and enhance the lives of children and adults with ADHD.

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