Attention Deficit Hyperactivity Disorder

Attention-deficit/hyperactivity disorder (ADHD) is one of the most common mental disorders affecting children. Symptoms of ADHD include inattention (not being able to keep focus), hyperactivity (excess movement that is not fitting to the setting) and impulsivity (hasty acts that occur in the moment without thought). ADHD is considered a chronic and debilitating disorder and is known to impact the individual in many aspects of their life including academic and professional achievements, interpersonal relationships, and daily functioning (Harpin, 2005).

ADHD can lead to poor self-esteem and social function in children when not appropriately treated (Harpin et al., 2016). Adults with ADHD may experience poor self-worth, sensitivity towards criticism, and increased self-criticism possibly stemming from higher levels of criticism throughout life (Beaton, et al., 2022). Of note, ADHD presentation and assessment in adults differs; this page focuses on children.

An estimated 8.4% of children and 2.5% of adults have ADHD (Danielson, 2018; Simon, et al., 2009). ADHD is often first identified in school-aged children when it leads to disruption in the classroom or problems with schoolwork. It is more commonly diagnosed among boys than girls given differences in how the symptoms present. However, this does not mean that boys are more likely to have ADHD. Boys tend to present with hyperactivity and other externalizing symptoms whereas girls tend to have inactivity.

Scientists have not yet identified the specific causes of ADHD. While there is growing evidence that genetics contribute to ADHD and several genes have been linked to the disorder, no specific gene or gene combination has been identified as the cause of the disorder. There is evidence of anatomical differences in the brains of children with ADHD in comparison to other children without the condition.

For instance, children with ADHD have reduced grey and white brain matter volume and demonstrate different brain region activation during certain tasks (Pliszka, 2007). Further studies have indicated that the frontal lobes, caudate nucleus, and cerebellar vermis of the brain are affected in ADHD (Tripp & Wickens, 2009).