

The Disorder Named Attention Deficit Hyperactivity a New Understanding

Azza El Bakry

Psychiatry Faculty of Medicine, Cairo University, Cairo, Egypt

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INTRODUCTION

Attention Deficit Hyperactivity Disorder, ADHD, is one of the most common psychiatric disorders that develop in children. Children with ADHD have impaired functioning in multiple settings, including home, school, and in relationships with peers. If untreated, the disorder can have long-term adverse effects into adolescence and adulthood. A number of studies have examined the prevalence of ADHD in various countries. Variations in prevalence rates of ADHD exist between different studies due to such factors as the sources of information, assessment of clinical impairment, population characteristics, methodological features, ethnic and cultural differences and diagnostic criteria (Skounti, et al. 2007). Studies of ADHD among school children yield prevalence rates ranging from 2.4% to 19%. Therefore the characterization of these factors is critical and the differences could throw light on identifying causative agents (Faraone, et al. 2003).

Until now, only little representative international data on the prevalence rate of ADHD in preschool children exist. According to the German Child- and Youth Health Survey study, the prevalence rate among preschool children is around 2%. Former studies in the US reported prevalence rates up to 6% (Posner, et al. 2007). Among school children and adolescents the prevalence rate diverges from 3.2% to 15.8%, depending on the classification system used. Prevalence rates between 5% and 7% are most often reported. For the transition to adulthood, studies document the persistence of behavioural problems in 40-60% of the cases. Prevalence rates between 1-7.3% were found (Schmidt and Petermann, 2009).

Manifestations of this condition include inattention, impulsivity and hyperactivity according to the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-TR-IV, 2000).

ADHD has now been recognized to exist in both males and females, albeit the literature supports a higher prevalence in males. In children and adolescents the estimated male to female ratio is 4:1, and females tend to present as the predominately inattentive type, which may lead to underdiagnosis and undertreatment

(Marks, et al. 2009 and Rucklidge, 2008). Also needing to repeat a grade in school is more common among girls than among boys, which supports the observation that they experience more cognitive and academic problems (Brown, et al. 1991). Symptoms such as inattentiveness, poor school performance, and depressive affect are seen as the hallmark signs of the disorder in girls, yet they elicit less attention from teachers and parents than characteristic symptoms seen in boys, such as disruptive behavior and "acting out." This is partly because girls' symptoms are not recognized as typical indications of ADHD and partly because these symptoms are less noticeable and less troublesome to adults than are boys' symptoms. The tendency of girls to "suffer silently" often means that they bear the burden of untreated ADHD for a much longer time than do boys (Quinn, 2008). Around 60% carry symptoms into adulthood (Schweitzer, et al. 2001).

Nature of the Disorder:

The conceptualization of the nature of attention deficit hyperactivity disorder (ADHD) has changed in the last decade. ADHD is now viewed as a neurologically based condition with primary deficits in executive functions (EF) and working memory (WM). Students with ADHD have deficits in discourse organization, inferring, and monitoring that are related to their executive function and WM deficits. A large number of students with ADHD also have comorbid reading and language disabilities that exist in addition to the deficits directly associated with the ADHD. Comprehensive evaluation of students with ADHD is essential to address their specific learning needs (Westby and Watson, 2004).

Current consensus that the etiology of ADHD involves complex interactions of neuroanatomical and neurochemical systems is based on twin and adoption family genetic studies, dopamine transport gene studies, neuroimaging studies, and neurotransmitter data (Sadock and Sadock, 2007). The incontrovertible benefit of psychostimulants on hyperactive and impulsive behaviors has resulted in research into