

# Myths and Misunderstandings

Evidence from research studies continue to dispel the myths and misunderstandings about ADHD. Here are some of the misconceptions and recent research available to address them:



## **Myth # 1: ADHD is Not a Real Disorder**

ADHD cases have been described as far back as the textbook published in 1775 by Adam Weikard in German. Since that time, over 10,000 clinical and scientific publications have been published on ADHD (Barkley 2015). Research studies show numerous differences between those with and without ADHD (Roberts et al. 2015). ADHD impairs major life activities including social, emotional, academic and work functioning. It is a lifespan disorder with the majority of children with ADHD continuing to struggle with symptoms as adults. ADHD also runs in families with a heritability chance of 57% for a child if a parent has ADHD, and a 70%–80% chance for a twin if the other twin has ADHD (Barkley 2015). Brain scan studies show differences in the development of the brain of individuals with ADHD, such as cortical thinning in the frontal regions; reduced volume in the inferior frontal gyrus; and reduced gray matter in the parietal, temporal, and occipital cortices (Matthews et al. 2014).

## **Myth # 2: ADHD is a Disorder of Childhood**

Long-term studies of children diagnosed with ADHD show that ADHD is a lifespan disorder. Recent follow-up studies of children with ADHD show that ADHD persists from childhood to adolescence in 50%–80% of cases, and into adulthood in 35%–65% of cases (Owens et al. 2015). A 16-year follow-study of boys diagnosed with ADHD found that 77% continued to have full or

subthreshold DSM-IV ADHD (Biederman et al. 2012). A study of girls ages 6–12 years with childhood ADHD found that 10 years later, they continued to have higher rates of ADHD and coexisting conditions, including higher rates of suicide attempts and self-injury, compared to girls without ADHD (Hinshaw et al. 2012).

### **Myth # 3: ADHD is Over-Diagnosed**

The rate of diagnosed ADHD in children has increased approximately 5% every year, according to the National Survey of Children's Health, 2003—2011. This has led many to wonder if the condition is being over-diagnosed. But the report based on the 2014 National Survey of the Diagnosis and Treatment of ADHD and Tourette Syndrome found that children are being carefully diagnosed by healthcare practitioners. The vast majority (9 out of 10) of the 2,976 children diagnosed with ADHD had been diagnosed by practitioners using best practice guidelines (Visser et al. 2015). Possible explanations for increased diagnostic rates include improved awareness about ADHD among healthcare practitioners and parents, more screenings by pediatricians and other primary care givers, decreased stigma about ADHD, availability of better treatment options, and more cases arising from suspected environmental causes such as prenatal exposure to toxins or high blood lead levels.

### **Myth # 4: Children with ADHD are Over-medicated**

Most evidence from research studies suggest that levels of treating ADHD with medication are either appropriate or that ADHD is undertreated (Connor 2015). According to the National Survey of Children's Health (NSCH) 2003–2011, of the 5.1 million children with a current diagnosis of ADHD, 69% (or 3.5 million) were taking medication for ADHD. Data from the National Comorbidity Survey Adolescent Supplement, which included over 10,000 adolescents aged 13–18, found that only 20.4% of those with ADHD received stimulants (Merikangas et al. 2013). Data from the National Health and Nutrition Examination Survey report a 7.8% prevalence rate of ADHD among the 3,042 participants aged 8–15, but only about 48% of them were receiving treatment in the past 12 months (Merikangas et al. 2010).

### **Myth # 5: Poor Parenting Causes ADHD**

Research studies point to genetic (hereditary) and neurological factors (such as pregnancy and birth complications, brain damage, toxins and infections) as the main causes of ADHD rather than social factors including poor parenting. Twin studies of children with ADHD show that the family environments of the children contribute very little to their individual differences in ADHD symptoms (Barkley, 2015). Although parenting practices do not cause ADHD, they can contribute to worsening of coexisting disorders such as oppositional defiant disorder (ODD) or

conduct disorder (CD), and inconsistent parental discipline as well as low paternal involvement have been found to be associated with ADHD symptoms (Ellis et al. 2009).

### **Myth # 6: Minority Children are Over-Diagnosed with ADHD and are Over-Medicating**

Findings from the National Health Interview Survey (NHIS) 2011–2013 show that it is not minority children, but non-Hispanic white children who had the highest rates of diagnosis according to parent reports. The prevalence rates for non-Hispanic white children is 11.5%, compared to 8.9% for non-Hispanic black children and 6.3% for Hispanic children (Pastor et al. 2015). Analysis from the Early Childhood Longitudinal Study, Kindergarten Class of 1998–1999 (n=17,100) had also found that minority children were less likely than white children to receive an ADHD diagnosis (Morgan et al. 2013). This same study found that children with ADHD were much less likely to use prescription medication for the disorder if they were Hispanic, African American or of other races/ethnicities.

### **Myth # 7: Girls Have Lower Rates and Less Severe ADHD than Boys**

ADHD in girls and women has been recognized only in the past few decades, and more research studies are reporting on the substantial impairments they experience, often to the same extent as boys. They are at risk for many of the same coexisting conditions and impairments as males—oppositional defiance disorder, conduct disorder, academic and social impairments, driving problems, substance abuse and risky sexual behavior. Adolescent girls with ADHD may be more prone than boys to eating disorders, but by young adulthood this difference is reduced (Owens et al. 2015). A 10-year follow-up study of girls aged 6–12 years by Hinshaw et al. (2012) found a higher risk for suicide attempts and self-injury by adulthood among the girls. The latest diagnosis data as reported by parents of children ages 4–17 in the National Health Interview Survey (NHIS) 2011–2013 found a diagnostic rate of 13.3% for boys and 5.6% for girls. Other large community samples have found a similar gender ratio of 2.3:1.0, but by adulthood, studies have found that prevalence is nearly the same between genders (Owens et al. 2015).