



AD/HD Myths

PUBLIC PERCEPTIONS of attention-deficit hyperactivity disorder (AD/HD) are replete with myths, misconceptions and misinformation about the nature, course and treatment of the disorder. Popular misconceptions assert that AD/HD is not a disorder or at minimum, is a benign one that is over-diagnosed. Critics often claim that children are needlessly medicated by parents who have not properly managed their unruly, unmotivated or underachieving children, or who are looking for an academic advantage (e.g., testing or classroom accommodations) in competitive, high-stakes educational environments. Some suggest that “a growing intolerance of childhood playfulness may in fact be leading to more and more children being labeled with AD/HD” (Panksepp, 1998, p. 91). Critics rarely present evidence-based arguments and frequently allege that professionals are harming otherwise normal children by diagnosing and treating AD/HD.

While barriers to treatment have been reduced in recent years, there is a climate of blame, shame, embarrassment and stigmatism that discourages some from seeking help for debilitating mental health disorders, including AD/HD. There is compelling evidence that a large number of youths with a variety of mental disorders, including AD/HD, are not being served, are inadequately served, or are inappropriately served in communities across the country (Surgeon General’s Report on Mental Health, 2001; Jensen et al., 1999; MTA, 1999). The *Executive Summary on Mental Health: Culture, Race and Ethnicity, a Supplement to the Surgeon General’s Report* (2001) indicates that 75–80 percent of children and youths with mental health illnesses do not receive needed services. Misinformation often demonizes those in need of treatment for AD/HD and

may discourage individuals from seeking appropriate care. Parents may avoid professional help because they fear being labeled poor parents who needlessly medicate their children. Parents of children with AD/HD are often accused of seeking to medicate overly playful, non-compliant or mildly disruptive children. More likely, parents are struggling to help their children cope with a serious constellation of problems and are seeking help because previous attempts to reduce the impact of AD/HD have failed. Chronic, untreated disorders such as AD/HD are costly to the individual, family and society (Leibson et al., 2001). Parents generally seek professional help for AD/HD after a great deal of deliberation, consternation and past failures. This article will summarize and attempt to dispel some of the common misconceptions about AD/HD.

Popularly held “false beliefs,” which are often perpetuated by emotional or unexamined arguments, do more harm than good.



Studies show that anywhere from 70–80 percent of children with AD/HD exhibit significant signs of restlessness and distractibility into adolescence and young adulthood.

Myth #1 AD/HD is Not a Real Disorder

This is a common refrain expressed by individuals who assert that the psychiatric community, in concert with pharmaceutical companies, created AD/HD to drum up business for private practices and to increase profits for drug companies. According to the National Institutes of Health, the Surgeon General of the United States, and an international community of clinical researchers, psychiatrists and physicians, there is general consensus that AD/HD is a valid disorder with severe, lifelong consequences (NIH, 2000; U.S. Surgeon General's Report, 2001). Studies over the past 100 years demonstrate that AD/HD is a chronic disorder that has a negative impact on virtually every aspect of daily social, emotional, academic and work functioning (Barkley, 1998). Studies show that children with AD/HD have higher rates of other psychiatric disorders, higher frequency of hospitalizations, emergency room visits and total medical costs, compared to individuals without AD/HD (Liebson et al., 2001).

Adolescent outcomes of children with AD/HD show that they are more likely to drop out of school, to rarely complete college, have fewer friends and to participate in antisocial activities than children with-

out AD/HD (Barkley, Fischer, Edelbrock, & Smallish, 1990). Rates of cigarette, alcohol and marijuana use among those with both AD/HD and conduct disorders were two to five times higher than in adolescents with AD/HD alone or for those without it. Later in life, adults with AD/HD have higher rates of employment difficulties, depression and personality disorders, auto accidents, sexually transmitted diseases and teen pregnancies, compared to individuals without AD/HD (Fischer, Barkley, Smallish, & Fletcher, 2002). Overwhelming evidence suggests that AD/HD is a real disorder with serious consequences.

Myth #2 AD/HD is a Disorder of Childhood

Early discussions of AD/HD theorized that individuals outgrew the disorder (Ingram, Hechtman, & Morgenstein, 1999). This notion has been dispelled by long-term studies showing that anywhere from 70–80 percent of children with AD/HD exhibit significant signs of restlessness and distractibility into adolescence and young adulthood, while a large percentage suffer co-morbid psychiatric disorders, academic failure, and social isolation and/or rejection (Barkley et al., 1990; Barkley, 1998). Research estimates that 1.5–2 percent of adults have AD/HD (Hunt,

1997), and between 2 and 6 percent of adolescents have AD/HD (Murphy & Barkley, 1996). Cuffe et al. (2001) found that children with persistent AD/HD have more severe AD/HD and adverse risk factors later in life. Adverse factors impact the expression of AD/HD and increase the risk for associated disorders that compromise adjustment over the lifespan. Thus, AD/HD is a lifelong disorder that requires a developmental framework for appropriate diagnosis and treatment (Teeter, 1998).

Myth #3 AD/HD is Over-Diagnosed

Critics claim that AD/HD is over-diagnosed and that many children with the diagnosis do not have AD/HD. Despite these claims, it is difficult to find evidence that AD/HD is over-diagnosed or that stimulant medications are over-prescribed (Jensen et al., 1999). Moreover, Jensen et al. (1999) suggest that in "some cases AD/HD may be undiagnosed and/or untreated" (p. 798). Although this is a complex problem, prevalence rates of AD/HD range from 2–9 percent (Barkley, 1998). Rates vary depending on the rating scales employed, the criteria used to make a diagnosis, the use of cut-off scores, and changes in diagnostic criteria. Prevalence rates increased when AD/HD—primarily inattentive type (AD/HD-PI)—was added to the DSM-IV (Wolraich et al., 1996).

Changes in special education legislation in the early 1990s increased general awareness of AD/HD as a handicapping condition and provided the legal basis for the diagnosis and treatment of AD/HD in the school setting. These legal mandates have increased the number of school-based services available to children with AD/HD and may have inadvertently led some to conclude that AD/HD is a new disorder that is over-diagnosed.

Myth #4 Children with AD/HD are Over-Medicated

"Critics of stimulant treatment for youths with attention-deficit hyperactivity disorder (AD/HD) have increased their rhetoric of late, contending that the leading medication for it, Ritalin, is vastly over-prescribed" (Safer, 2000, p. 55). There are seemingly contradictory data that contribute to this confusion—e.g., a steady increase in stimulant use, although most school-aged children with AD/HD are not medicated in the community (Jensen et al., 1999).

Although there has been an increase in the rate of prescriptions for stimulants and an increase in the production of methylphenidate, "little is known about why these increases are occurring" (Jensen et al., 1999,

p. 797). "Most researchers believe that much of the increased use of stimulants reflects better diagnosis and more effective treatment of a prevalent disorder." (Surgeon General's Report, 2001, p. 149). Others suggest that the changes may be a function of increased prescription rates for girls and teens with AD/HD (Safer, 2000). The percentage of children who receive medication of any kind is small. Goldman et al. (1998) reported that 2.8 percent of elementary school-aged students were on medication, and that stimulants accounted for 99 percent of the prescribed medications. So while there has been an increase in the number of prescriptions, a relatively low overall rate of stimulant use is reported in school-aged children. Furthermore, physicians in the community tend to use less than optimal doses, have fewer follow-up monitoring sessions, and less achieve medication compliance than recommended by the MTA study (Jensen et al., 2001).

Myth #5 Poor Parenting Causes AD/HD

This misconception may be the most difficult to dispel because parenting characteristics (i.e., being critical, commanding, negative) and poor management do exacerbate AD/HD and increase the risk for comorbid disorders (e.g., oppositional defiance and conduct disorders; Barkley, 1998). Twin studies exploring the contribution of environmental factors (e.g., parenting practices, parental psychopathology) find that genetic factors, and not a shared environment, account for the greatest variance in AD/HD symptoms—about 80 percent (Goodman & Stevenson, 1989). While management difficulties influence parent-child conflicts and the maintenance of hyperactivity and oppositional problems in young children (Barkley et al., 1990), Barkley (1998) concludes that "theories of causation of AD/HD can no longer be based solely or even primarily on social factors, such as parental characteristics, caregiving abilities, child management, or other family environmental factors" (p. 176).

Other factors may play a causal role in the individual differences in symptoms of AD/HD, including exposure to environmental toxins (e.g., elevated blood lead, prenatal exposure to alcohol and tobacco smoke), but not all children exposed to these risk factors have high rates of hyperactivity, nor do all children with AD/HD have these risk factors (Barkley, 1998). Furthermore, prenatal and birth complications are not more frequent in children with AD/HD compared to normal children. Although other factors (e.g., family adversity, poverty, educational/occupational status, home environment, poor nutrition, environmental toxins, ineffective childrearing practices) do not appear

to have a significant contribution to the development of AD/HD symptoms (see Barkley, 1998 for a review), these factors contribute to comorbid disorders and complicate treatment effectiveness.

Johnston and Freeman (2002) identified a number of inaccurate or non-scientific-based parent beliefs about the causes of AD/HD including: allergic reactions or sensitivity to foods, family problems like alcoholism or marital discord, high sugar consumption, ineffective discipline, lazy learning habits, a lack of motivation, etc. In this study, inaccurate or "false beliefs" were associated with parental attributions that children were responsible for their AD/HD symptoms (symptoms are intentional and children can control their symptoms) and the use of less effective treatment (e.g., diet control). Parent perceptions and beliefs about the nature of AD/HD are related to treatment outcome (Hoza et al., 2000). Furthermore, attributions that AD/HD symptoms are intentional and controllable often result in harsh, critical and punitive parenting practices (Johnston & Patenaude, 1994). These misperceptions are frequently addressed in parent training components of multimodal treatment plans.

The misconception that poor parenting causes AD/HD may be the most difficult to dispel because parenting characteristics (i.e., being critical, commanding, negative) and poor management do exacerbate AD/HD.



Myth #6 Minority Children are Over-Diagnosed with AD/HD and are Over-Medicating

Access to diagnosis and treatment of mental disorders varies depending on gender, race and social economic status (SES), but not in the way one might predict. *Mental Health: Culture, Race and Ethnicity from the Report of the Surgeon General* (2001) shows that African American youths are over-represented in arrests, detentions, incarcerations, classes for emotional disturbance and the child welfare system. However, African Americans do not appear to receive needed treatment for AD/HD or for other mental health disorders.

Research investigating AD/HD in African American youths is also sparse. In a study of public school children and youths in Florida, Bussing et al. (1998) found that service delivery to African American children was deficient even though there was no evidence that the incidence rate of AD/HD was lower than those reported in whites. Bussing et al. (1998) found that: (1) only 50 percent of children with AD/HD were receiving treatment, (2) girls were underserved at a rate three times lower than boys, and (3) whites were three times more likely to be referred compared to African American children. In the few studies exploring medication rates across races, ethnic minority children are 2–2.5 times less likely to be medicated for AD/HD than white children (Safer & Malever, 2000).

Access to treatment is affected by a number of factors unrelated to need including: (1) a lack of perceived need; (2) system barriers including availability, cost and language; (3) concerns that their children would be taken from the home if parents seek services; (4) stigma associated with seeking help for mental illnesses; and, (5) cost of treatment, lack of adequate reimbursement, length of treatment and cost of medication (Bussing et al., 1998). Furthermore, African Americans are less likely to receive care and are more likely to leave mental health treatment prematurely. Evidence suggests that minority children are not over medicated and may actually be underserved for AD/HD.

Myth #7 Girls Have Lower Rates and Less Severe AD/HD than Boys

According to the *Surgeon General's Report on Mental Health* (2001), girls are less likely to receive a diagnosis of and treatment for AD/HD compared to boys despite need. Gaub and Carlson (1997) found that girls with AD/HD have greater intellectual impairment, but lower rates of hyperactivity and externalizing disorders compared to boys. Girls with AD/HD

have more severe internalizing disorders than boys, and both show more similarities than differences in symptoms and treatment needs. Biederman et al. (1999) found that girls with AD/HD were more likely to have conduct problems, mood and anxiety disorders, lower IQ, and more impairment on social, family and school functioning than non-referred girls. However, conduct problems occurred less in girls than in boys with AD/HD, which may account for lower referral rates in community and school samples. Girls in clinic samples also had high rates of substance abuse, alcohol, drug and cigarette use, and were at an increased risk for panic and obsessive compulsive disorders (Biederman et al., 1999).

Finally, Rucklidge and Tanner (2001) found that girls with AD/HD were more impaired than a control group on measures of depression, anxiety, self-esteem, overall symptom distress and stress. Girls with AD/HD reported strained relationships with teachers, thoughts of suicide and past episodes of self-harm. Compared to boys with AD/HD, girls with AD/HD reported higher rates of overall distress, anxiety and depression. They also demonstrated more hyperactivity and conduct and cognitive deficits. Parents and teachers noted higher rates of inattention, hyperactivity, oppositional defiance, conduct problems, social difficulties, depression and anxiety. Girls may report more distress than boys, and they "may be more affected by environmental factors than males with AD/HD" (Rucklidge & Tanner, 2001). Thus, gender differences need to be more fully addressed in longitudinal and treatment studies. ■

Myths and inaccurate information about AD/HD should be dispelled by scientific findings. However, popularly held "false beliefs," which are often perpetuated by emotional or unexamined arguments, do more harm than good. They do little to advance our knowledge and do a lot to discourage individuals from seeking help and using effective treatments for AD/HD that have undergone rigorous scientific scrutiny.

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