

ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

Approximately 2 million American children, or 3% to 5%, have Attention Deficit Hyperactivity Disorder (ADHD). To put this number in perspective, this means that in a typical classroom of 25-30 children, at least one of them will have ADHD (National Institute of Mental Health 2005). While the people with this disorder vary tremendously regarding personality type, environmental setting, and type of ADHD, they have one thing in common: they constantly struggle in school and at home to maintain a normal life.

ADHD is a condition that almost always becomes apparent in childhood during the preschool and kindergarten years. These children find behaving correctly and paying attention extremely difficult. There are three different types of ADHD. Some people are diagnosed with the predominantly hyperactive-impulsive type, some are predominantly inattentive, and some have symptoms of both and therefore are diagnosed with the combined type. Children diagnosed with the hyperactivity-impulsivity form of ADHD are plagued by several symptoms including (National Institute of Mental Health):

- Constantly “on the go” or in motion
- Talking incessantly
- Excessive fidgeting (wiggling feet, tapping a pencil, etc.)
- Taking on several tasks at once
- Inability to curb immediate reactions to events
- Blurting out inappropriate comments
- Problems waiting for their turn

Children diagnosed with the inattentive form of ADHD have several of these symptoms:

- Become easily distracted by sights or sounds
- Lack of attention to details
- Careless mistakes
- Often lose or forget things
- Skipping from one task to another
- Appear to daydream too often

Reviewing these symptoms brings up one interesting fact about ADHD diagnosis. Unlike many disorders, the symptoms of ADHD are common to some extent in almost all children. This may cause some people to be skeptical about the existence of ADHD, but the guidelines for the disorder contain specific requirements that must be met before official diagnosis such as; the behavior must be demonstrated to an inappropriate degree, it must appear early in life, continue for at least 6 months, not be caused by any obvious environmental factors (such as sudden family problems), and it must create a problem with functioning in at least two areas of the child’s life such as in school and at home.

While the specific causes of ADHD are unknown, there are several factors that influence a child’s susceptibility. Most causes of ADHD are either neurobiological or genetic. Some environmental factors may influence the course or severity of the disorder but environmental factors, such as parenting style, play little if any role in causing its initial onset. The two environmental agents that do appear to mediate ADHD to some degree are the use of drugs

during pregnancy, and levels of lead found in the bodies of preschool aged children. Unfortunately, both these factors are correlated with socioeconomic class, especially considering the lack of prenatal care and child development education in some low income communities, and the high levels of lead in paints used in older buildings (commonly found in government housing projects). Biological contributors to ADHD are numerous. They include injury to the brain, certain food additives and refined sugar, and especially genetics. Family and twin studies indicate that 25% of close relatives of ADHD children also meet diagnostic criteria for ADHD, compared to a rate of approximately 5% in the general population. While nothing can be done regarding genetic contributors to ADHD, more public education on environmental agents and the importance of maintaining a healthy lifestyle is needed (National Institute of Mental Health 2005).

There are many issues to be examined regarding the complications of ADHD. ADHD shows high rates of comorbidity with several other disorders. First and foremost, up to 30% of children with ADHD also have a specific learning disability. These disabilities include problems with reading (most commonly dyslexia), spelling, writing, and arithmetic. Other disorders are also found in children with ADHD such as; Tourette syndrome, oppositional defiant disorder, conduct disorder, anxiety and depressive disorders, and bipolar disorder (National Institute of Mental Health 2005).

Though ADHD is predominantly found in children, adults can be diagnosed with the disorder as well. Not much is known about ADHD in adults therefore diagnosing adult ADHD is difficult and often happens in an indirect way. Sometimes when a child is diagnosed with ADHD and the parent becomes familiar with the symptoms and treatment they find that they themselves have the same problems. In addition, many adults seek professional help for other disorders such as depression or anxiety and find that the root

cause of their problems is ADHD. Adults with ADHD usually have it as a child; between 30% and 70% of all children with ADHD continue to exhibit a significant number of the symptoms in their adult years. These symptoms often evolve and manifest themselves in different ways. For example, instead of constantly skipping from one task to another, an adult with ADHD may feel continuously restless and unsatisfied and have a hard time staying in a good mood (American Family Physician 2000).

There are several different treatments for ADHD that appear to work effectively for adults and children. The most effective treatment plan is long-term combination treatments that include behavioral therapy and medication. Most drugs approved for the treatment of ADHD are stimulants. The effectiveness of these drugs varies from person to person and it is best for the doctor and patient to experiment and see which one works best. The only non-stimulant treatment for ADHD approved by the FDA is Strattera (atomoxetine), which utilizes the brain's supply of norepinephrine rather than dopamine, the neurotransmitter manipulated by stimulants such as Ritalin. It is important to remember that medications can not cure ADHD; they can only help moderate the symptoms. Medications are most effective and long lasting symptom relief is more likely when accompanied by behavioral therapy, emotional counseling, and practical support. Behavioral therapy is the most effective form of therapy for people with ADHD and it includes simple behavioral interventions such as (National Institute of Mental Health 2005):

- Scheduling- having a structured and detailed routine to follow every day
- Organizing every day items- keeping everything neat and organized helps people suffering from ADHD not lose their possessions
- Using homework or notebook organizers- this helps children with ADHD not forget homework assignments at school

There are several controversial issues today regarding the diagnosis and treatment of

ADHD. Since the 1990's there has been a 700% increase in stimulant use in children in the U.S. (LeFever 2003). Some suggest ADHD is being over diagnosed so that parents can have access to drugs such as Ritalin to curb their child's behavior instead of giving them more attention and disciplining them adequately. One study found that the increase in stimulant use and ADHD diagnosis did not occur in all communities, however in some communities, ADHD is grossly over diagnosed causing the 700% increase in stimulant use. Additionally, some suggest that over diagnosis of ADHD in public schools is actually rewarded by federal laws such as the Individuals with Disabilities Education Act (IDEA). IDEA allocates funds to school districts based on the number of disabled children, therefore giving an incentive to label a disruptive child with ADHD. Others say the increase in ADHD diagnosis is due to more general problems in public schools such as a lack of mental health professionals and crowded classrooms accompanied by poorly trained teachers (HEALL 2000).

Though the cause of over diagnosis is not clear, the effects are concerning. Ritalin use varies tremendously, and in some communities, such as southeastern Virginia, the rate of Ritalin use is 100 times that of other communities. This is significant because when used ineffectively, Ritalin and other stimulants are correlated with things that are harmful to children. For example, in southeastern Virginia, students labeled with ADHD were 3 to 7 times more likely than their peers to experience adverse educational outcomes such as; being expelled, suspended, requiring special education services, and repeating a grade (LeFever 2003). Obviously some of these negative outcomes for students with ADHD could be due to their disorder not the label of the disorder or inappropriate stimulant use, but considering the

vast over diagnosis in this region these correlations should be taken seriously. Further research is needed to separate the true cases of ADHD from the over diagnosed and over medicated cases. This is particularly true in our area, because Texas has been ranked in the top third of the nation for child stimulant prescription claims (Utah Department of Health 2003).

There are several possible policy implications for communities when addressing people with ADHD. One possible change at a federal level would be to modify the IDEA so schools are not rewarded for diagnosing children with ADHD. In addition, individual communities can help stop over diagnosis and over medication by implementing a public health approach to ADHD that includes community-based interventions and also by addressing problems such as the lack of mental health professionals in public schools and large student to teacher ratios.

While the symptoms associated with ADHD can be quite distressing, some researchers point out that children with ADHD have many strengths when compared to their counterparts. Children with ADHD are naturally creative and excel in abstract tasks rather than educational systems that focus, especially in the early years, on the "regurgitation" of facts model. In addition, children with ADHD are often gifted, but their talents need to be cultivated by a patient and knowledgeable adult (Honos-Webb 2005). In conclusion, ADHD is associated with many problems such as debilitating symptoms and a vast over diagnosis and over medication in some areas. However, through behavioral techniques, carefully monitored medication, and creative and patient caregivers children with ADHD can overcome their disorder and find a successful niche in the real world.

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