

Myths and some countervailing facts about ADHD

Louise Porter, PhD, Child Psychologist

Another paper on this website details the nature, causes, and treatments of the two main forms of the attention deficit disorders: ADD (inattentiveness) and ADHD (attention deficit with hyperactivity). This brief paper examines some of the myths and known facts about these conditions.

MYTH: ADHD IS A NEW FAD

Some dismiss the attention deficits as being a new fad. However, the conditions were first identified in 1902, when they were referred to as a lapse in 'volitional control'. They have subsequently been variously called minimal brain dysfunction, hyperkinesis and hyperactivity (Anastopoulos & Barkley 1992; Campbell et al. 2000). The recent label is an effort to distinguish inattentiveness and impulsivity (ADD) from ADD with hyperactivity.

MYTH: ADHD DOES NOT REALLY EXIST

Some writers (e.g. Jacobs 2005) claim that ADD and ADHD do not exist at all and that the labels are simply a form of oppression whereby those with power (namely, parents, teachers and doctors) try to enforce child compliance and, when they cannot, will do so chemically. Jacobs is not alone in arguing that it is not children's noncompliance which is the problem, but society's intolerance of diversity (Conrad 2006).

It certainly is the case that we misunderstand and do not accept children's natural activity levels. But there is also strong evidence that the conditions represent a cluster of disabling and distressing learning impairments (Karatekin 2004; Olson et al. 2002). Extensive research is concluding that the learning difficulties underpinning ADD or ADHD are deficits in the brain's executive functions (Glanzman & Blum 2007). (These processes control or regulate our thinking and problem solving, deficits in which produce inattention, lack of self-awareness, and poor planning, judgment, organisational skills, reflection and coordination abilities.) Children's attention difficulties have been identified from as early as their first weeks of life (Auerbach et al. 2005), at which ages environmental causes and inappropriate expectations cannot be the cause.

MYTH: ADHD IS JUST MIDDLE CLASS HYSTERIA

When awareness of the new labels for the conditions emerged in the 1980s, middle class children were diagnosed first. This caused some to accuse these parents of a form of hysterical over-diagnosis. It is true that the middle class first learned of the conditions because they read more, but after five years or so, the condition occurred equally across socioeconomic groups (Barkley 1988). Nevertheless, it is the case that children from middle-class families may be rated more poorly by their teachers because of being compared to a more capable peer group (Lonigan et al. 1999).

MYTH: ADHD IS OVERDIAGNOSED

There are wildly fluctuating prevalence rates around the world, spanning from 3 to 5 percent in Australia, New Zealand and the US at school age (Spira & Fischel 2005)., through 8 percent in Japan, up to a staggering 19.8 percent for boys in Columbia. This last rate strongly suggests a lack of understanding about normal childhood exuberance, while the very demanding education system in the likes of Japan result in normal children not being able to meet unrealistic expectations for their level of functioning and, rather than seeing the expectations as abnormal, the children are labelled as being abnormal.

Thus, over-diagnosis is a real issue. However, under-diagnosis is also a concern, especially among girls. This can come about because within a mixed-sex group they may stand out less (Arnold 1996). Yet affected girls are more out of tune with their female peers and, therefore, are more likely to be rejected or neglected by their same-sexed peers.

MYTH: ADHD IS SO VARIABLE AS TO BE MEANINGLESS

Two children with the same diagnosis can present very differently, causing some to question whether the diagnosis is accurate in both cases, or whether the label is a catch-all category that means little. Notwithstanding the above discussion, variability is the nature of these conditions, because attention processes themselves vary. Children can show deficits in any or all six forms of attention, namely:

- *arousal/alertness*;
- *focus*: the ability of focus attention;
- *concentration span*: the ability to sustain attention;
- *selective attention*: the ability to filter out distractions;
- *alternating attention*: the ability to shift focus back and forth between aspects of a task;
- *divided attention*: the ability to divide their focus so that children can, say, plan one task while finishing another, or listen to instructions without interrupting their activity.

Hence, one child with ADHD can be overly alert; another can have appropriate arousal levels but a short concentration span; another's main problem may be the inability to filter out distractions. Thus, three children with the same diagnosis can indeed have a different constellation of difficulties that are manifested variously in different learning environments.

MYTH: ADHD IS A RESULT OF POOR PARENTING

Some observe parents of children with ADHD using punitive parenting methods and conclude that these methods cause the conditions. It is true that coercive discipline is likely to exacerbate children's *behavioural* problems – although it has little impact on their *attentional* difficulties (Hinshaw 2006).

Nevertheless, negative parenting is usually the *result* of the demands of parenting challenging children. The constellation of difficulties experienced by children with ADD and ADHD generate family stress (Sheridan et al. 1997). Both parents and teachers are more negative in interacting with these

children, but become more positive when the children's behaviour improves, perhaps in response to medication (Whalen et al. 1981; Wodrich 1994).

Having acknowledged that the conditions contribute to adults' negative disciplinary styles, it must be said that the reverse is also true. Given the high genetic component of the conditions, many parents will themselves have elevated rates of symptoms and, perhaps, shorter fuses when parenting (Whalen et al. 2006). On the other hand, the fact that one child in a family can have ADHD and the other not (when both siblings are parented by the same parents) is evidence that poor parenting is not the cause of the condition.

A balanced conclusion is that, while negative parenting does not cause the conditions, it can perpetuate and exacerbate children's behavioural difficulties associated with poor impulse control.

MYTH: DRUGS ARE OVER-PRESCRIBED

A common criticism is that drugs are over-prescribed and used as a first or only treatment modality, rather than as a last resort. I agree: more than half of children on stimulant medication do not have ADHD. On the other hand, while it is clear that medication is over-prescribed, it is also denied to as many as 12 per cent of accurately diagnosed students who consequently receive no relief from their problems (Glanzman & Blum 2007). This condemns those children with severe symptoms to unhappy family and peer relationships, poor academic performance, low self-esteem and being subjected to coercive discipline.

Naturally, drugs should never be the first treatment option. The decision to use medication should depend on (Goldstein & Goldstein 1995):

- the severity of the condition;
- whether other treatments have been tried and have failed;
- the child's age;
- the child's and family's attitude to medication; and
- the ability of parents and caregivers or teachers to supervise a medication regime adequately.

For children aged over five years and those with moderate to severe symptoms, medication still appears to have more benefits than any other form of treatment (Anastopoulos & Barkley 1992; Barkley 1988; Fox & Rieder 1993; Goldstein 1995; Hinshaw 2006; Purdie et al. 2002). The majority of children and adolescents report that medication helps them to get along with peers and their parents (Moline & Frankengerger 2001; Purdie et al. 2002). There is some preliminary evidence that ADD (inattentiveness) responds better to medication than does ADHD (Kopecky et al. 2005).

However, medication produces no permanent improvements, while the secondary problems such as aggression seem least responsive to drug treatment (Hinshaw 2006). Medication does not completely ameliorate children's restlessness, impatience, talkativeness or inattention, or improve their educational outcomes (Moline & Frankengerger 2001; Purdie et al. 2002; Whalen et al. 2006). This means that educational interventions remain necessary, with or without accompanying medication.

MYTH: STIMULANTS ARE DANGEROUS

Almost 40 per cent of individuals using medication experience side-effects spanning fatigue, confusion, insomnia, appetite suppression (resulting in slowed growth), nausea, headaches, tremors and tics (Goldstein & Goldstein 1995; Levy 1993; Moline & Frankenberger 2001; Purdie et al. 2002), particularly at higher doses (Fox & Rieder 1993). Almost all of these symptoms reverse when the medication is adjusted, with the exception of children with a family history of Tourette's syndrome, whose tics may not abate even when the medication is ceased.

While around 75 per cent of those who are accurately diagnosed respond to an amphetamine, science is still uncertain about which children benefit most from medication, and at which doses (Levy 1993).

MEDICATION LEADS TO DRUG RELIANCE

Some fear that giving children drugs for ADHD could lead to their illicit drug abuse later in life. The reverse is true: a lack of suitable intervention for ADHD (which sometimes includes a medication regime) can lead to increased recreational drug use as a way of self-medicating.

CONCLUSION

Some of the generalisations about the attention deficit disorders discussed here have some truth to them. This is probably why they are so persistent. It is also true that we do not know whether the increased incidence of the conditions is a result of:

- a true increase in prevalence (presumably due to environmental factors);
- inflated expectations of children's levels of functioning that they cannot meet;
- improved recognition of what was always a common condition;
- simple over-diagnosis;
- or a combination of all of these.

The wisest response, then, is to examine each case on its merits, being as free as possible of preconceptions and open to the full gamut of interventions (– see the paper on this website about interventions).

FURTHER READING

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