Overlooked and Undertreated?

Inattentive AD/HD

Despite the serious difficulties these children experience, relatively few are identified or referred for treatment.



WHEN ETHAN BROUGHT HOME his first fourth grade report card, he knew his parents would not be pleased. In addition to grades that ranged between B and D, the teacher had commented, just as his third grade teacher had, "If Ethan would just focus on his work and try harder, he could do so much better!"

hallmarks of the Inattentive subtype of AD/HD. The type tend to annoy others with their provocative, in-Predominantly Inattentive type (IN) of AD/HD without hyperactivity or impulsivity— has been known as a disorder since 1994. Unlike children with the more commonly recognized "Combined" (CB-inattentive, hyperactive and impulsive) form of the disorder, children with IN are not behaviorally disruptive and typically are not difficult for parents or teachers to manage. Children with IN may appear to be underactive, sluggish or daydreamers, but their problems with attention are just as severe as those with CB-type AD/HD. Instead of working on their math problems, they might be gazing into space. When the teacher calls on them, they may have no idea of what is being discussed. Since they don't absorb new information well or produce the same caliber of work as their classmates, children with IN may be mislabeled as "slow learners" or "learning disabled"—often on the basis of group-administered tests where they had difficulty concentrating. They often just quietly underachieve with no one fully aware of their true potential.

In addition to their academic difficulties, children with IN often have very significant social problems. Their classmates see them as "tuned-out," or not "with it," and they are more likely to be ignored and friend-

One recent study suggests that the social problems of children with the IN and CB subtypes of AD/HD may have different causes and different results.

Lack of concentration and apparent lack of effort are (Maedgen & Carlson, 2000). Children with the CB trusive and sometimes aggressive behavior. As a result, these children are more likely to be socially rejected. When asked directly, however, these children with CB are able to state clearly and accurately how they should and should not behave with other children. In the heat of the moment, however, they are unable to exercise the behavioral self-control to follow through. Children with IN, however, were more likely to lack the knowledge of social skills. This may include knowing how to handle such everyday social interactions such as joining a group of children already at play, resolving a dispute or initiating a friendship. In part, these difficulties may be due to a failure to pay attention to the social nuances—the nonverbal cues or "body language"-which are an important part of social communication.

A Prevalent and Impairing Condition

Survey studies suggest that the IN form of AD/HD may be at least as common in schools as the betterknown CB type. In these large-scale studies, hundreds of teachers were each asked to rate all the children in their classes on a checklist of behaviors reflecting the three core symptoms of AD/HD: inattention, hyperactivity and impulsivity.

The survey data also showed an interesting distribution between the sexes. Whereas the CB type is about four times more common among boys than

28 attention@chadd.org / August 2002 August 2002 / attention@chadd.org **29** girls, the IN type is more evenly distributed between the sexes with a boy:girl ratio closer to 2:1. In fact, if a girl has AD/HD, she is more likely to have the IN type. (Wolraich, Hannah, Pinnock, Baumgaertel, & Brown, 1996).

In the survey studies, teachers were also asked to rate how "impaired" students were in the three most important areas of functioning in school: academic, social and behavioral. The percentages of children rated by teachers as being "impaired" are shown below for the three currently recognized subtypes of AD/HD: IN, CB, and Predominantly Hyperactive-Impulsive (HI).

Percent of children rated by teachers as being "impaired"

	IN	СВ	HI
Academic	76 %	82%	23%
Social	59 %	82%	53%
Behavioral	58%	90%	80%

Because inattention is the primary symptom of IN and the tell-tale signs of impulsivity and hyperactivity are absent, a good clinician will take particular care to rule out other "silent" problems, such as anxiety and depression, which can also impair concentration and effort, before diagnosing IN.

These findings showed that a high percentage of children with IN were suffering academic difficulties—in fact, the percentage almost equaled that for the CB type. Sizeable percentages also had behavioral and social difficulties.

Despite the serious difficulties that children with IN experience, relatively few are identified or referred for treatment. Children with IN also account for up to 25 percent of all children with AD/HD who are seen at mental health centers. One likely reason is that since they are quieter and far less disruptive than children with CB, they are less likely to create headaches for teachers or parents, and therefore more likely to be overlooked.

Another important finding emerging from the survey studies was that the IN type of AD/HD may have a later age of onset than the other types. Although all subtypes must have an onset by age seven in order to meet current DSM-IV criteria for AD/HD, these more recent studies suggest that many cases of IN type may not actually become apparent until age nine, and that impairment may not be significant until age 11. (Applegate et al., 1997).

Assessment

Like all good psychological assessments of children, the assessment for AD/HD begins with parental interviews concerning the details of the child's current difficulties, including time of onset, frequency, duration and severity. Behavioral questionnaires, completed by parents and teachers, are also very helpful in determining the nature of the child's difficulties and their seriousness when compared to the behavior of other children of the same age and gender in the general population. During this interview, the parents will also be asked about the child's physical, mental and emotional development from birth to the present. A good assessment will also inquire about the development of the *family* in order to identify any stressors or other problems that may affect the child's functioning.

The child is interviewed individually in order to get the "child's-eye" view of the challenges, satisfactions and stressors in his or her life at school, home and with peers. It also provides an opportunity to informally observe and assess the child's attention, language, self-control, self-confidence and relational skills.

When there are concerns about a child's general learning ability or specific "information-processing" skills (as is often the case in all types of AD/HD), a set of tests may be administered to more precisely examine the child's intellectual functioning, as well as his or her current level of educational achievement in major subject areas. Neuropsychological tests—which assess brain-based functions in the areas of memory, language, attention and motor skill—may also help to identify underlying causes of the child's difficulties. Because inattention is the primary symptom of IN and the tell-tale signs of impulsivity and hyperactivity are absent, a good clinician will take particular care to rule out other "silent" problems, such as anxiety and depression, which can also impair concentration and effort, before diagnosing IN.

Treatment

Studies involving treatment plans that are specifically effective for children with the IN type of AD/HD are limited. Research is underway at the Mount Sinai



AD/HD Center, supported by grants from the National Institutes of Health (NIH), to investigate the effectiveness of stimulant medications in children with IN. Other research in this program is investigating the unique difficulties children with IN have with orienting and focusing, immediate and short-term memory and in "executive" functions, such as self-stopping, organization and planning. The most recently funded study will examine the use of functional Magnetic Resonance Imaging in identifying unique patterns of brain activation in children with IN. It is hoped that a better understanding of these differences will lead to the development of educational and psychological treatment approaches that address the specific needs of children with IN.

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Suggested Reading

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