Understanding Girls with AD/HD - Part I

Improving the Identification of Girls with AD/HD

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Much of what we know, at present about girls with AD/HD, is based on clinical experience rather than research. Although AD/HD is the most highly researched childhood psychiatric disorder, fewer than 50 published research articles focus on girls. Over the years, girls with AD/HD have been overlooked because experts were focusing on the classic symptoms of hyperactivity and impulsivity. With the advent of DSM-IV and the preceding field trials, it became apparent that AD/HD, without these classic symptoms of hyperactivity and impulsivity, does exist and that more girls are found in that subgroup. In these trials, girls made up 20% of the hyperactive/impulsive group, 27% of the inattentive group, and 12% of the combined type group (Lahey & Carlson, 1991). However, even this study probably under represents the numbers of girls with AD/HD.

Children without hyperactivity are more difficult to identify, however. One study (Epstein et al., 1991) reported that clinicians correctly diagnosed non-hyperactive AD/HD only about half the time. More training of teachers, parents, and professionals is needed to help them to identify these less obvious patterns. Screening instruments are needed that focus more on inattentive patterns, and that allow children to self-report less observable phenomena, such as shyness, school related anxieties, and difficulty staying focused while reading.

Checklists commonly used by schools, pediatricians, and psychologists to identify children with AD/HD continue to emphasize hyperactive/impulsive behavior—patterns more typical of boys. Because girls are more likely to be inattentive and forgetful than hyperactive, these checklists often lead parents and professionals to overlook girls with attentional problems. And even hyperactive girls may look very different than boys - tending toward being hyper-talkative, and emotionally hyper-reactive rather than demonstrating the rough and tumble behavior of boys.

As long as we continue to use the current questionnaires that emphasize the “externalizing” behaviors more typical of boys (aggression, defiance, and other behavior management problems), as long as we

use current DSM-IV diagnostic criteria, then many girls with AD/HD will be overlooked, or seen as pale shadows of their male AD/HD counterparts. Those girls who are referred for treatment may be only the most severely afflicted (Gaub & Carlson, 1996). Some researchers in the field of AD/HD have called for gender specific norms for diagnosing AD/HD (McGee & Feehan, 1991). However, at the present time we must rely on the current diagnostic criteria that were developed primarily through the observation of boys.

Different referral patterns

McGee and Feehan found that often girls overlooked by their teachers were identified by their parents as having many AD/HD characteristics. They speculated that parents may have been comparing their daughters to other girls, while teachers may have been comparing them to their classmates, half of whom are boys. By comparing girls to their male counterparts, teachers may tend to dismiss the less obvious signs of AD/HD in girls. Biederman and colleagues (1999) write that the problem of under-detection of girls derives from the fact that disruptive behaviors (more typical of boys) "drive clinic referrals." The issues of male-based diagnostic criteria and male-dominated clinic referral patterns may very easily lead to false conclusions about characteristics of "typical" girls with AD/HD. Issues of gender-referral bias have been raised before, but must be truly addressed before we can make more meaningful gender comparisons.

Those girls least likely to be identified and helped are the group of girls, typically very bright, who expend most of their energy working to compensate for their undiagnosed AD/HD. They may seem driven, or anxious, or over-focused on their studies. Their high grades mask the extreme effort that has been required to achieve them. These girls may frequently study all night to prepare for exams or to complete papers. Their hyper-focus on academics and their drive helps them to achieve, but at a very high cost. Such girls may eventually "hit the wall" when the academic demands for reading, writing, and recall increase in college and beyond. Often such girls socialize very little and don't date during high school years. They may continue to socially isolate themselves in college, unable to balance academic pursuits with social and recreational activities.

Do girls with AD/HD struggle with different issues than boys?

Girls are biologically and neurologically different; they socialize and verbalize differently, and they are raised according to very different social expectations. In light of these well-documented and widely accepted gender differences, it would be very surprising if girls didn't face different struggles and manifest different behaviors than do boys with AD/HD. Parents, teachers, pediatricians, psychologists, and all of the other adults who work with girls with AD/HD need to become familiar with these differences in order to diagnose girls accurately and to provide treatment that is more appropriate to their special needs.

Cognitive differences

Studies of girls report contradictory findings regarding neurocognitive differences between girls and boys with AD/HD. An analysis of many studies of girls with AD/HD suggests that girls with AD/HD have greater intellectual impairment than boys (Gaub & Carlson, 1997). However, it has been speculated that the girls referred for evaluation of AD/HD are those who have more school-related difficulties, due to lower IQ and/or learning disabilities, and may not be a truly representative sample of girls. In contrast, another study found that girls with AD/HD have fewer problems with "executive functioning" (organizing, planning, following through) than do boys with AD/HD (Seidman et al., 1997). And to confuse matters more, very recent study of girls with AD/HD (Biederman et al., 1999)

reports no differences between girls and boys in their patterns of academic and cognitive impairments. We may not yet have a clear picture of cognitive differences and similarities between boys and girls with AD/HD because comparisons are clouded by the unavoidable influence of referral bias. What is clear, however, is that AD/HD is a significant issue for girls that can have a large, negative impact upon their academic achievement if it goes unrecognized and untreated.

Peer issues

Studies tend to demonstrate that girls with AD/HD experience more peer rejection than do boys with AD/HD (Gaub & Carlson, 1997). One such study (Brown et al., 1991) found that as girls with AD/HD get older they are rated as less popular with their peers. Another study (Berry et al., 1985) found that social rejection for girls with AD/HD began as early as preschool, where they were rejected or avoided by their peers more often than were boys with AD/HD. This makes sense when we think about some of the interpersonal traits commonly associated with AD/HD. Studies of girls' interactions show that girls, from a very early age, relate in a highly verbal, socially interactive manner. Cooperation and sensitivity to others are necessary to interact appropriately in typical girl-girl interactions. Because girls tend to be so socially interactive, we can expect that the difficulties with verbal expression and verbal control that some children with AD/HD experience will have a more negative impact on girls.

Boys relate more through shared activities rather than through verbal interaction. Competition, dominance, physical competence, exploration, risk-taking, and a high activity level are typically involved. Even in more passive activities, boys are more likely to gravitate to computer games requiring eye-hand coordination rather than to primarily verbal interactions. Boys with AD/HD who experience difficulties with verbal expression and with reading social cues will be much less affected in their activity-oriented social world. AD/HD traits such as risk taking, high activity level, and even aggression can be viewed as positive in many boy-boy interactions, but are outside the range of acceptable behavior for girls.

Oppositional defiant disorder/ Conduct disorder

All studies seem to be in agreement that girls with AD/HD show significantly fewer conduct disorders or oppositional defiant disorders than do boys (Biederman et al., 1999; Arnold, 1996). This is a positive finding since children with AD/HD and behavior disorders tend to experience the most negative outcomes. However, there is a downside as well. This lower level of behavior problems seems to lead to a lower rate of teacher referral, penalizing girls who may have significant problems with inattention, but who do not draw attention to themselves through defiant behavior.

Hyperactivity

Likewise, there is general agreement across studies that girls with AD/HD are less hyperactive than are boys (Arnold, 1996). But, one question that has yet to be raised is whether hyperactivity is the same in boys and girls. For example, clinical observation suggests that hyperactivity in girls may be manifested more through hyperverbalization and emotional excitability, which are more difficult to measure and quantify than is motoric hyperactivity.

Depression

Among women who are ultimately diagnosed with AD/HD, the most common prior diagnosis they have received is that of depression. One study (Brown et al., 1989) found that girls with AD/HD had more "internalizing symptoms" such as anxiety and depression, and were more socially withdrawn than boys with AD/HD. There is evidence that symptoms of anxiety and depression become more

pronounced in girls with AD/HD after puberty (Huessy, 1990). Girls with AD/HD who are shy, timid, withdrawn, and lacking in self-confidence as young girls may later develop depression. While the depression is important to recognize and to treat, it is critical that the professional community becomes aware of the possibility of underlying AD/HD in these girls and women.

A more recent study (Biederman et al., 1999) found no differences in rates of anxiety and depression in girls and boys. However, this finding may be due to the strict criteria Biederman established for rating a girl as "anxious" or "depressed." Whereas other researchers refer to moodiness and dysphoria in girls, Biederman and colleagues used much more stringent measures. To be included in that group of girls suffering from depression they had to show "marked impairment," "persistent disruption in major role functioning," or hospitalization, and to qualify as "anxious," girls in Biederman's study had to show signs of not just one, but "two or more anxiety disorders." Biederman and colleagues acknowledge in this same article that girls who are referred for treatment of AD/HD are more likely to show signs of mood and anxiety disorders than are boys.

Substance abuse/Smoking

Biederman and colleagues (1999) report a very noteworthy finding that girls with AD/HD are at a significant risk for one or more substance use disorders, in contrast to an earlier study of boys (Biederman et al., 1992), with trends toward increased alcohol abuse and drug dependence in adolescence. Although more study is needed, Biederman writes that there may be a gender-specific risk of substance abuse for girls with AD/HD—that is, that adolescent girls with AD/HD may be even more susceptible than boys with AD/HD to developing a substance use disorder. Of additional concern, Biederman and colleagues report that girls with AD/HD have a four times greater risk of smoking in adolescence, compared to teenage girls without AD/HD.

Such worrisome reports will, one hopes, motivate more parents, teachers and other professionals to work toward a better diagnostic procedure that can identify girls with AD/HD in order that they can be diagnosed, treated, and thereby avoid some of these most damaging patterns associated with AD/HD in girls.

Self-blame and shame

Just as mothers are more critical of AD/HD behaviors in their daughters, girls with AD/HD tend to internalize this criticism, leading to a strong sense of shame and self-blame. Research suggests that women, after they have progressed beyond their impulse-driven adolescent years, are much more likely than men to feel a sense of shame or humiliation as they look back on their earlier impulsive behaviors (Johnson et al., 1986). This shame seems driven by two factors: first, by the tendency of women with depression to engage in self-blame; and second, by the double standard of the society in which they live. Many in our society react with humor, even admiration to impulsive exploits on the part of males, while condemning similar behavior in females. Recent research supports this observed difference, finding that women with AD/HD struggle much more with a negative self-image than do men with AD/HD (Arcia & Conners, 1998). Typically, it is this ingrained low self-regard and lack of faith in one's acceptability that results in the greatest long-term damage from AD/HD. With good self-esteem, the challenge of learning to manage problematic AD/HD traits can be greatly reduced.

Sexual risks

Many girls with AD/HD, either through impulsivity, efforts to seek acceptance, or both, tend to engage in sexual activity earlier than their peers without AD/HD. And teenage girls with AD/HD who are emotionally volatile, impulsive, and often hungry for peer acceptance are much less likely to weigh the potentially tragic consequences of sex without birth control than are their non-AD/HD

counterparts. As a result, girls with AD/HD are at much greater risk for teen pregnancy than are girls without AD/HD (Arnold, 1996).

Because girls with AD/HD run the risk of pregnancy, they potentially face much greater challenges than boys as they enter the uncharted territory of adolescent sexuality. Realistic planning and foresight are rarely among the strengths of adolescent girls with AD/HD. Yet many of them will be forced to choose among difficult decisions—to abort a pregnancy, to maintain a pregnancy, giving the child up for adoption, or to take on the responsibilities of motherhood, for which they are even less prepared than their non-AD/HD counterparts. Better treatment programs for adolescent girls with AD/HD could help reduce the risk of teen pregnancy.

Differing parental responses

Less concerned

Even with increased awareness of girls with AD/HD, boys are more likely to be identified and to receive treatment earlier. One study shows that in girls and boys with equal degrees of inattentiveness, parents of the boys were more likely to seek treatment for their male children than were parents of inattentive girls (McGee et al., 1987). The reasons for this are unclear, but one possibility is that parents and teachers alike continue to give a higher priority to the behavioral and academic functioning of boys.

Less accepting

When Russell Barkley studied parental responses to children with AD/HD, he found that mothers tend to be more critical of their daughters with AD/HD, than of their sons (Barkley, 1991). Mothers seem to find that AD/HD behaviors are more acceptable in boys, perhaps because they are more consistent with male sex role stereotypes. Girls who are messy, argumentative, explosive, or disorganized are less accepted. This finding has significant implications because patterns of frequent parental criticism and chronic rejection can result in lifelong low self-esteem and under-functioning.

Conclusion

Our definition and understanding of Attention Deficit/Hyperactivity Disorder has undergone many changes over the years, leading to modified nomenclature and diagnostic criteria. These changes have arisen from the scientific process of making clinical observations and from re-thinking the disorder based on those observations. We are offering our observations of girls with AD/HD to serve as a starting point for re-thinking the diagnostic criteria as they stand today. All of these observations deserve careful study, but we cannot wait for definitive answers before we begin to address the needs of girls with AD/HD. Let us begin where we are, with careful clinical observation, and work together, as clinicians, educators, physicians, and parents to help these girls become the best they can be.

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