Students Diagnosed with ADHD: Gender Differences and Misdiagnoses*

Normality and exceptionally (or deviance) are not absolutes; both are culturally defined by particular societies at particular times for particular purposes.
Ruth Benedict

Attention Deficit Hyperactivity Disorder (ADHD) has surged for some time and is one of the most commonly diagnosed mental disorders among children and adolescents. Those diagnosed are seen as having problems at school and at home and as are performing poorly academically.

Studies suggest that the surge in ADHD diagnoses of students is the result of multiple, converging factors. These include the ease with which differential diagnostic criteria and assessment procedures are applied, biases of practitioners, advocacy from special interest groups (including pharmaceutical companies and ADHD organizations), promotion of ADHD through advertising and social networking media, and growing consumer demand (parents seeking help, a desire to qualify for accommodations by older students).

Gender Differences

Available data indicate that one in nine youngsters are so diagnosed. Boys are diagnosed with ADHD more than girls (i.e., 12.9% of boys; 5.6% of girls). This difference is attributed to boys generally being more active, disruptive, and annoying than girls. Researchers have reported that physical aggression and other externalizing behaviors are higher in boys. Girls diagnosed as having ADHD are reported as more likely to manifest internalizing behaviors (e.g., inattentiveness, daydreaming, verbal rather than physical aggressiveness, somewhat higher rates of depression and anxiety, lower self-efficacy, poorer coping strategies).

Because of the behavior differences, girls are less likely to be referred for treatment than boys, and they tend to be diagnosed at older ages. As more attention has been given to the gender differences, concerns have been raised about gender bias in the referral and diagnostic systems.

False Positive Diagnoses

As the number of youngsters diagnosed with ADHD has increased exponentially, misdiagnoses have become a major concern. Special attention has been directed at false positive diagnoses because the percentage of special education students diagnosed as ADHD far exceeds reasonable estimates.

It is not surprising that false positive ADHD diagnoses are frequent given the prevailing bias to label problems in terms of personal rather than social causation. This bias is bolstered by factors such as (1) attributional bias – a tendency for observers to perceive others' problems as rooted in stable personal dispositions and (2) economic and political influences – whereby society's current priorities and other extrinsic forces shape professional practice.

At schools, the problem is exacerbated because reimbursement for special education interventions is only available for youngsters assigned labels that convey significant pathology. The reality is that the learning, behavior, and emotional problems manifested by most youngsters are not initially caused by internal pathology. For instance, the behaviors leading to a diagnosis of ADHD may stem from an education system that does a poor job in accommodating students' differences and needs or any of a variety of other factors that constitute situational barriers to learning and teaching.

Technically, misdiagnosis of ADHD is propagated because (a) common developmental lags and situation-caused behaviors are similar to the symptoms listed for ADHD, (b) differential diagnostic criteria and assessment procedures have significant limitations, and (c) practitioner biases often favor the diagnoses.

*The material in this document reflects work done by David Kashanirokh as part of his involvement with the national Center for Mental Health in Schools at UCLA.

The center is co-directed by Howard Adelman and Linda Taylor in the Dept. of Psychology, UCLA,
Email: smhp@ucla.edu Website: http://smhp.psych.ucla.edu Send comments to ltaylor@ucla.edu

Negative Consequences of False Positive Diagnoses

It is evident that strong images are associated with diagnostic labels connoting a "mental disorder," and people act upon these images. In all cases, diagnostic labels can profoundly shape a person's future. Often people see only the diagnosis, not the person. This makes false positive diagnoses dangerous.

For example:

- A diagnostic label may come to negatively define the individual by focusing on problems and downplaying many positive personal characteristics. The many negative stereotypes about people diagnosed with ADHD can lead to stigmatization and low expectations. Stigmatization refers to negative and unfair beliefs about the student's characteristics, attributes, and behaviors (e.g., studies report that teachers and peers have negative attitudes toward youngsters diagnosed as ADHD). And teachers may expect less from a student labeled as ADHD and thus limit his or her opportunities to learn and perform.
- Medications with aversive side effects may be prescribed. Indeed, medications are often the first-line of treatment for ADHD. All medications are recognized to have side effects (some of which can quite debilitating). For instance, stimulants commonly used to treat ADHD may cause insomnia, suppressed appetite and growth, and other side effects affecting child and adolescent development.
- Implications for policy and practice drawn from research are compromised when misdiagnosed individuals are included in studies.

Concluding Comments

Most differential diagnoses of student's behavior problems are made by focusing on identifying one or more disorders (e.g., attention-deficit/hyperactivity disorder, oppositional defiant disorder, adjustment disorders), rather than first asking: *Is there a disorder?*

Overemphasis on classifying problems in terms of personal pathology skews theory, research, practice, and public policy. To counter biases in thinking about students' learning, behavior, and emotional problems, it helps to approach all diagnostic procedures guided by a broad transactional perspective about what determines human behavior.

At schools, the irony is that school practitioners understand that most problems in human functioning result from the interplay of person and environment. And many understand that available evidence underscores that internal disorders are not the cause of the problems manifested by many students diagnosed as ADHD.

Resources Used in Preparing This Resource

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Related Center Resources

For more on ADHD, see the Center's Quick Find on the topic. It provides links to resources from our Center and others. Below are some examples of the Center resources:

>*Questions Parents Ask and Some Concerns About Attention Deficit/Hyperactivity Disorder* – http://smhp.psych.ucla.edu/pdfdocs/adhdpar.pdf

>*A Sociological View of the Increase in ADHD Diagnoses* http://smhp.psych.ucla.edu/pdfdocs/sociol.pdf

>*Arguments About Whether Overdiagnosis of ADHD is a Significant Problem* http://smhp.psych.ucla.edu/pdfdocs/overdiag.pdf

>*Schools and the Challenge of LD and ADHD Misdiagnoses* http://smhp.psych.ucla.edu/pdfdocs/ldmisdiagnoses.pdf

>*Labeling Troubled and Troubling Youth: The Name Game* http://smhp.psych.ucla.edu/labeling.htm

>*Common Psychosocial Problems of School Aged Youth: Developmental Variations, Problems, Disorders and Perspectives for Prevention and Treatment* http://smhp.psych.ucla.edu/pdfdocs/psysocial/entirepacket.pdf

>*Determinants of Students' Problems* – http://smhp.psych.ucla.edu/pdfdocs/determinants.pdf

>*Countering the Over-pathologizing of Students' Feelings & Behavior: A Growing Concern Related to MH in Schools* -- http://smhp.psych.ucla.edu/pdfdocs/practicenotes/pathology.pdf

>*Just a Label? Some Pros and Cons of Formal Diagnoses of Children* http://smhp.psych.ucla.edu/pdfdocs/diaglabel.pdf