Learning Disabilities: ADHD/ADD
Dr. Wilfred Johnson
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Prevalence of ADHD/ADD

- ADHD/ADD is the most common childhood psychiatric disorder.
- Conservative estimate of prevalence is 2%; liberal estimate of prevalence is 30%.
- Most commonly-accepted prevalence rate is 3% to 5%.
- The wide variations in prevalence reflect problems with definition and identification.
- More boys than girls are identified as having ADHD/ADD.
- Girls and students from minority families may be under-identified.
DSM-IV Criteria for ADHD/ADD

Primary ADHD/ADD Symptoms:
- inattention
- hyperactivity
- impulsivity

Types of ADHD/ADD:
- ADHD/ADD, Predominantly Inattentive Type
- ADHD/ADD, Predominantly Hyperactive-Impulsive Type
- ADHD/ADD, Combined Type
- ADHD/ADD, Not Otherwise Specified

ADHD/ADD is distinguished from Conduct Disorder and Oppositional Defiant Disorder.

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ADHD/ADD Characteristics (Barkley, 1998)

- Limited sustained attention or persistence of attention to tasks
- Reduced impulse control or limited delay of gratification
- Excessive task-irrelevant activity or activity poorly-regulated to match situational demands
Basic Concepts about ADHD/ADD

- ADHD/ADD is an invisible, hidden disability.
- ADHD/ADD is not hard to spot in the classroom.
- Many ADHD/ADD behaviors may be misinterpreted as lazy, disorganized, and even disrespectful.
- In the majority of cases, ADHD/ADD is a developmental disability that becomes apparent before the age of seven.
- ADHD/ADD continues to be problematic for most individuals during adulthood.
- ADHD/ADD may have a negative impact on a student’s academic and social success.
- ADHD/ADD occurs across all cultural, racial, and socioeconomic groups.
- ADHD/ADD affects students and adults with all levels of intelligence.
Common Difficulties Exhibited by Students with ADHD/ADD

- Working Memory Difficulties
- Time Estimation Problems
- Difficulties Using Internal Language
- Lack of Self-Discipline
- Following Rules or Instructions
- Situational Variability in Performance
- Low Performance on Repetitive or Tedious Tasks
Adult Outcomes

- Only 20% to 35% of students with ADHD/ADD will not be impaired as adults.
- Adults with ADHD/ADD are likely:
  - to be fired more often.
  - to change jobs more frequently.
  - to receive more traffic citations and accidents.
- Outcomes are better for adults with ADHD/ADD who receive treatment.
Causes of ADHD/ADD

- For most students, the precise cause of ADHD/ADD is unknown.
- Some studies suggest that ADHD/ADD is inherited.
- Possible causes of ADHD/ADD include:
  - Neuroanatomical (related to brain structure)
  - Neurochemical (related to chemical imbalance in the brain or a deficiency in chemicals that regulate behavior)
  - Neurophysiological (related to brain function)
  - Neuropsychological (related to dysfunction of the frontal lobes)
ADD/ADHD/ADD and the College Student

- In the past decade, public awareness about ADHD/ADD has increased.
- The legal basis for services and protections against discrimination for ADHD/ADD come from the IDEA and Section 504.
- Unsuccessful efforts were made in 1990 to add ADHD/ADD as a separate disability category under the IDEA.
Students with ADHD/ADD may be served in special education categories such as:

- Learning disabilities
- Emotional or behavioral disorders
- Mental retardation

A sizeable number of students with ADHD/ADD are not qualifying for special education services under the IDEA.

- Many of these students receive accommodations under Section 504.
Section 504

Section 504 has been and may continue to be the primary legal basis for services to this population.

Section 504 is not a special education law. It is a civil rights law.

Section 504 provides for a larger group of students with disabilities and differs in many respects from the IDEA.
For years, the diagnosis of ADHD/ADD was considered the sole responsibility of psychologists, psychiatrists, and physicians.

Today, school personnel have some legal responsibilities to assess students suspected of having ADHD/ADD.

Although assessment is performed primarily by trained school personnel, teachers play an important role in the assessment process.
Steps in the Assessment Process

Step One: Preliminary Assessment and Child Study Meeting

Step Two: Formal Assessment Process: Follow-Up Meeting of the Child Study Team

Step Three: Collaborative Meeting for Strategy Development

Step Four: Follow-Up and Progress Review
Typical Components in an ADHD/ADD Assessment Battery

- Observations
- Interviews with child, parents, and teachers
- Review of intellectual and academic assessments
- Rating scales completed by teachers, parents, and student
- Medical examination
Role of Medication

- Many students with ADHD/ADD are prescribed medications by physicians.

- Teachers need to understand:
  - the types of medications used;
  - commonly-prescribed medication dosages;
  - the intended effects of medication; and
  - potential side effects of medication.
Desired Medication Outcomes

- Increased Concentration
- Completion of Assigned Tasks
- Increased Work Productivity
- Better Handwriting and Motor Skills
- Improved Social Relations with Peers & Teachers
- Increased Appropriate Behaviors & Emotional Control
- Reduction of Inappropriate Disruptive Behaviors
- Increased Self-Esteem

In 70% to 80% of the cases, students respond positively to stimulants.
Psychostimulants

Psychostimulants are the most commonly-prescribed medication for students with ADHD/ADD.

Common Psychostimulants

- Dexedrine (dextroamphetamine)
- Ritalin (methylphenidate)
- Adderall (amphetamine salts)
Antidepressant Medications

- Prescribed less often than psychostimulants
- Generally used when stimulants are ineffective OR when the individual is also depressed
- Long-term use of antidepressants has not been studied extensively
- Types of antidepressants commonly used to treat ADHD/ADD:
  - Tofranil (imipramine)
  - Nopramin (desipramine)
  - Elavil (amytriptyline)
Antipsychotic Medications

- Much less frequently used than stimulants or antidepressants

- Types of Antipsychotic Medications Used to Treat students with ADHD/ADD:
  - Mellaril (thioridazine)
  - Thorazine (chlorpromazine)
  - Catapres (clonidine)
  - Eskalith (lithium)
  - Tegratol (carbamazepine)
Teacher Considerations Regarding ADHD/ADD Medications

- Handle the dispensing of medication discreetly, but according to school policy.
- Make sure the medication is given as prescribed.
- Avoid placing too much blame or credit for the child’s behavior on the medication.
- Monitor the behavior of the child, watching for any medication side effects.
- Communicate with the school nurse, parents, and/or the physician.
Alternative Therapies for ADHD/ADD

✓ These therapies are offered as “quick fixes” and have not been validated scientifically.

✓ These therapies include:
  ✓ Megavitamins
  ✓ Diet Restrictions (e.g., sugar or additives)
  ✓ Caffeine
  ✓ Massage Therapy
  ✓ Chiropractic Skull Manipulations
  ✓ Biofeedback
  ✓ Play Therapy
  ✓ Herbs

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The U.S. Department of Education suggests that the most appropriate placement for many students with ADHD/ADD is the general education classroom, with adaptations.

This means that teachers of students with ADHD/ADD must:

- understand this condition.
- implement effective strategies.
- collaborate with special educators to develop education plans.
A Section 504 plan serves as legal documentation detailing agreed-upon services.

General educators may need to write Section 504 plans for students with ADHD/ADD.

Recommendations for writing a 504 plan:
- Plan should be developed by a team.
- Areas identified as causing significant limitations should be addressed in the plan.
- Plan should include how school personnel will administer and monitor medication.
Modifying the Curriculum

- Students with ADHD/ADD need a curriculum adapted to “focusing on doing” and one that avoids long periods of sitting and listening.

- Examples:
  - Experience-Based Learning
  - Problem-Based Learning
  - Varied Assessment Techniques

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Test Adaptations

Extra Time

Frequent Breaks

Taking Exams in a Distraction-Reduced Environment

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Students with ADHD/ADD need novelty and excitement in their learning environment because they are not stimulated very easily.

Students with ADHD/ADD have particular difficulty with nonstimulating, repetitive activities.

Therefore, teachers should:

- Vary activities.
- Allow and encourage movement that is purposeful and not disruptive.
- Give frequent breaks.
- Let students stand as they listen, take notes, or perform other academic tasks.
Behavioral Supports

- Positive Reinforcement for Desired Behavior
- Premack Principle ("Grandma’s law")
- Contingency Contracting
- Cueing or Signaling
Organizational Tactics

- Students with ADHD/ADD often have difficulty organizing their work and developing effective study skills.

- Organizational strategies include:
  - Designating space for materials
  - Establishing a routine for writing down assignments (e.g., assignment notebook)
  - Providing notebooks in different colors for each subject area.
Teaching Study Skills

- Teachers may need to teach study skills such as:
  - Listening
  - Outlining
  - Notetaking

- Teachers may need to teach students how to break a complex task into smaller components.

- Teachers may need to teach students time management skills.
Learning Strategies

- A learning strategy is an “individual approach to a task.”

- A learning strategy includes how an individual thinks and acts when planning, executing, and evaluating performance.

- The learning strategy approach combines cognition (what is going on in one’s head) with behavior (what one is actually doing).
Self-Regulated Strategies

- Self-regulated strategies are interventions, initially taught by the teacher, that the student will eventually implement independently.

- Self-regulated strategies address the core problems of ADHD/ADD (e.g., impulsivity, problem-solving, and self-regulation).
Types of Self-Regulation

Self-Assessment
Student determines the need for change and monitors personal behavior.

Self-Monitoring
Student attends to specific aspects of behavior.

Self-Instruction
Student cues self to inhibit inappropriate behaviors or to express appropriate ones.

Self-Reinforcement
Student administers reinforcement for appropriate behaviors.
Self-Management

Primary Goal Is to Help Students:

- Be aware of their own thinking processes
- Use task-approach strategies
- Take responsibility for their own reinforcement

Advantages of Teaching Self-Control

- Saves teacher time
- Increases the effectiveness of an intervention
- Increases maintenance of skills over time
- Increases a student’s ability to use the skill in a variety of settings