What is ADHD? Learning to Identify, Assess, and Treat Students with Attention-Deficit/Hyperactivity Disorder

By

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Presentation Outline

• Etiology of ADHD
• Identifying ADHD in Adolescents and Adults
• Treatment of ADHD
• Making Sense of the NCAA Legislation
Questions for Thought

• What is the relationship between academic performance and ADHD?
• Do all individuals with ADHD need medicine?
• Do all individuals with ADHD do poorly in school?
• Should all individuals with ADHD use disability services?
• Are there effects of ADHD that go beyond academic performance? How do we treat those symptoms?
What is ADHD?

• Attention-Deficit/Hyperactivity Disorder
  – A persistent pattern of inattention and/or hyperactivity-impulsivity that is more frequent and severe than expected for one’s age (DSM-IV-TR)
  – Considered to be a neurological disorder
  – Three subtypes: Inattentive, Hyperactive-Impulsive, and Combined
History of ADHD in Adults

- Still (1902) – “immediate gratification”
- Most research began in the 1960s
  - Minimal Brain Dysfunction (MBD)
  - Disorder of the lifespan
  - Family heritability
  - Central nervous system deficits
- Wood et al. (1976) – stimulant medication
History of ADHD in Adults

- DSM-II (1968) – childhood hyperactivity
- DSM-III (1980) – attention deficit disorder
- Wender (1995) – 7 symptoms of adult ADHD
  - (1) Inattentiveness, (2) hyperactivity, (3) mood lability, (4) irritability and hot temper, (5) impaired stress tolerance, (6) disorganization, & (7) impulsivity
Myths of ADHD

• [http://www.telosnet.com/review/adhd_1.htm](http://www.telosnet.com/review/adhd_1.htm#adhd6)
  
  – Too much TV
  
  – Food allergies
  
  – Excess sugar
  
  – Poor home life
  
  – Poor schools
  
  – Brain damage/head trauma
What Causes ADHD?

- Lower brain activity in the areas of the brain related to attention (Frontal cortex, caudate)
- Stimulant drugs (e.g. cocaine) alter brain receptors
- Toxins such as lead
- Heritability
Prevalence of ADHD in Adults

• 34% to 70% of children with ADHD continue to have difficulties in adulthood (Barkley et al., 2008)
• 3%-7% of school aged children suffer from ADHD (DSM-IV-TR, 2000)
• Barkley et al. (2008) estimates 3.3% to 5.3% of adults meet a diagnosis of ADHD
• DSM criteria likely underestimates ADHD!
• More common in males 2:1 to 9:1
Signs and Symptoms of Adolescent and Adult ADHD

• Barkley’s symptoms (2008)
  – Impulsive decision making
  – Difficulty stopping activities or behavior when he/she should do so
  – Prone to daydreaming when he/she should be concentrating
  – Difficulty planning ahead or preparing for upcoming events (procrastination)
  – Can’t persist at uninteresting things (e.g. homework)
Signs and Symptoms of Adolescent and Adult ADHD

• Barkley’s executive functioning items (2008)
  – Impulsive decision making
  – Difficulty stopping activities or behavior when he/she should do so
  – Starts projects without reading or listening to directions carefully
  – Poor follow-through on promises
  – Trouble doing things in proper order
  – Drives with excessive speed
Signs and Symptoms of Adolescent and Adult ADHD

• Barkley adds 3 DSM-IV-TR symptoms
  – Often leaves seat in classroom or in other situations in which remaining seated is expected
  – difficulty sustaining attention in tasks or play activities
  – Often has difficulty organizing tasks or activities

• Students who have several of these symptoms likely need referral for testing
Other Recommended Criteria

• Symptoms present before 16 years of age
• Affects two or more settings
• Clinically significant impairment in social, educational, domestic, occupational, or community functioning
• Symptoms are not better explained by another disorder
Differential Diagnosis

• Many disorders have related attention deficits
  – Depression
  – Anxiety
  – Learning Disabilities
  – Bi-Polar
  – Schizophrenia
  – Obsessive-Compulsive Disorder
  – Various Personality disorders
Other Symptoms to Look for

• Reading ability
• Quality of writing
• Forgetfulness
• Organization
Comorbid Disorders (Goldstein & Teeter Ellison, 2002)

- Oppositional Defiant Disorder/Conduct Disorder
- Generalized Anxiety Disorder
- Major Depressive Disorder
- Obsessive Compulsive Disorder
- Substance abuse (e.g. alcohol, marijuana, smoking, etc.)
Other Findings

• IQ may be lower but not impaired
• Lower working memory function
• Impaired sense of time
• History of behavior problems and suspensions
• Poor persistence in school
Other Findings

• Poor occupational performance and advancement – especially desk jobs
• Quit easily and impulsively
• Speeding and car accidents
• Earlier, promiscuous, risky sexual behavior
Treatment of ADHD

• Stimulant medication does not cure ADHD!
• Not all individuals with ADHD need medicine
• Not all individuals with ADHD respond to medicine
• Medicine affects attention and focus, but it is up to the individual to decide what to focus on
• A proper dose of stimulant helps everyone focus better, so response to medicine is not a way to affirm a diagnosis of ADHD
Medication

• Students have to help the physician understand their needs
• Long-acting
• Regular release
• Non-narcotic (i.e. Strattera)
• Side effects include sleep and appetite changes
ADHD Coaching

• A coach is someone who initiates weekly (or more often) contact with the patient to remind them of strategies to use to stay organized and motivated
• Contact can be by way of phone or email
• A learning specialist could seek out this training
• THEY ARE NOT TO DO PSYCHOTHERAPY!!!
Neurocognitive Psychotherapy

• Improve cognitive functions
• Develop internal and external compensatory strategies
• Restructuring the physical and social environment to maximize functioning
Improve Cognitive Functioning

• Medicine
• Exercise
• Sleep
• Good nutrition
• Reduced stress
Internal and External Strategies

• These strategies help with coping

• Strategies can include:
  – Behaviorally charting off-task behavior
  – Adjusting study times
  – Using a planner (either written or electronic)
  – Practice focusing (i.e. train attention span)
  – Set up reinforcement contingencies with smaller goals
Change Environment

• Remove distractions
• Reduce presence of stressors
• Reduce traveling time
• Uncluttering and organizing
• Reduce non-essential activities (less is more)
• Encourage better choices with time and social situation
Counseling

• Although not all individuals with ADHD need counseling, many will
• Low self-esteem
• Demoralization
• Shame and self-blame
• Anxiety
• Depression
Tutoring

• 1:1 ratio is best (fewer people to get off-task with)
• Work in short focused segments
  – 15 to 20 minutes with a 2 to 5 minute break
• Mix in passive and active studying
  – Reading and rehearsal are passive
  – Explaining, drawing, diagramming are more active
• Set reasonable, measurable objectives for the study session
  – Studying should not be like a jail sentence, it should be like practice
Goal Setting

• Delaying gratification is tough, so goal setting is tough
• Objective based assignments set for each day and each week
• Measurable/tangible goals
  – Ex: Read/highlight pages X-XX, memorize X vocabulary terms
  – Avoid vague goals like study
• Premack’s Principle
Problem Solving

• Discuss potential outcomes for decisions
• Reflect on previous outcomes for decisions
• Practice creating steps to solve problems
  – Decision trees
• Discuss hypothetical situations
The NCAA Gets Tough on ADHD

• Academic doping is probably as common as sports doping
• Stimulants help everyone focus better
• Better focus can mean better performance
• Positive tests by student-athletes has increased 3 fold
• Documentation is relatively poor
  – Most physicians prescribed the medication without proper training in assessment of ADHD and without requiring proper documentation
Who Conducts the Evaluation?

- Clinicians with experience/training in assessing ADHD
  - School Psychologists
  - Clinical Psychologists
  - Psychiatrists
  - Other MDs with extensive training in assessment of ADHD
The Paperwork

• A thorough clinical evaluation
  – ADHD rating scales (e.g. Brown ADD scales, BASC-2, Conners, etc.)
  – Physical exam (i.e. rules out medical conditions such as thyroid problems)
  – History of treatment and symptoms
  – A diagnosis
  – A treatment plan

• There is no time limit on the paperwork so long as it has the proper information
Pieces of the Evaluation

• Longitudinal/Past/Personal/Social History
• Family History
• Review of Systems (general, sleep, appetite, weight, suicide/homicide)
• Mental Status Exam
• Physical Exam
• Rating Scales
• Other Psychological Testing (as necessary)
Treatment Considerations

• MDs must list alternative non-stimulant medications that were considered and why they did not use those options
• Behavioral alternatives should be considered
• Appropriate behavioral and counseling interventions should be administered
• Student-athletes should not stop medication to await testing, but they should be tested promptly
References


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