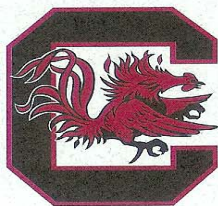


# What is ADHD? Learning to Identify, Assess, and Treat Students with Attention- Deficit/Hyperactivity Disorder

By

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U N I V E R S I T Y O F  
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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
- DSM-IV-TR (2000)

# Myths of ADHD

- [http://www.telosnet.com/review/adhd\\_1.htm](http://www.telosnet.com/review/adhd_1.htm)  
[l#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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