

SEAC Meeting February 17, 2011

Robin Rumsey, University of Minnesota, Presenter [rumse002@umn.edu](mailto:rumse002@umn.edu) [www.help4adhd.org](http://www.help4adhd.org)

- ADHD most commonly diagnosed neurobehavioral disorder in children...don't outgrow but develop more control over their environment
- School isn't always the most interesting- if not intrinsically motivated, can't focus but can on things that interest them (i.e. hyper-focusing on video games, computer, other activities of interest)
- 4%-6% of adults have ADHD
- Usually hereditary but if not then other causes are:
  - Prenatal exposure to alcohol/tobacco
  - Premature
  - Low birth rate
  - High lead levels
  - TBI
- Child needs to display symptoms before age 6 to get a true diagnoses. 1<sup>st</sup> grade is most common time to diagnose; the inattentive type of ADHD is typically diagnosed in 4<sup>th</sup> grade

3 Types of ADHD (newest DSM identifies disorder as only ADHD, not ADD)

1. ADHD predominately **inattentive** (9 criteria – need to meet at least 6)
  - a. With this type people often display challenges in math, have mood disorders and processing issues
  - b. Typically diagnosed later
2. ADHD predominately **hyperactive/impulsive** (9 criteria – need to meet at least 6)
  - a. Common signs-
    - Sitting still
    - Interrupting
    - Talks a lot
    - Body moves like a motor driven
    - Social issues
3. ADHD **combined** (meet 6 in each of the aforementioned categories)

Diagnostic Criteria

- At least 2 areas before age 7
- 60%-80% co-morbidity with
  - Mood or anxiety disorder ( 1 in 4)
  - Increased risk of substance abuse and criminal behavior – lower if on stimulate meds
- 21%-60% co-morbidity with ODD-may go away with stimulant meds
  - Depression (10% - 30%)
  - Anxiety (25%)
  - Bipolar ( ½ of girls and ¼ boys also meet this criteria)
  - Conduct (25%-40%)- stealing, criminal behavior, running away
  - Learning Disability (50%)

- Speech (34%-78%)
- Medications – Typically try stimulant medications first because non-stimulant medications aren't as effective (more for depression)
  - Two types of stimulants: Adderall (dextroamphetamine) and Ritalin or Concerta (methylphenidate); work on the neurotransmitter Dopamine
  - Non stimulants: Strattera; work on the neurotransmitter Norephenerine
  - Doesn't recommend off/on("medication vacations") due to side effects possibly becoming worse (stomach, headache); after someone has been on the medications for awhile some side effects subside; if you stop the meds and start again, even after the weekend, the side effects may become stronger again

### Evaluation

- No single test
- Need comprehensive evaluation to rule out other possible explanations
  - IQ
  - Achievement
  - Parent interview
  - Parent and teacher- behavioral and emotional checklists
  - TOVA-continuous performance test (22 mins)
  - Executive function measure

### Metacognition effected

- Skills need to be taught – won't learn on their own
  - Planning
  - Organizing
  - Working memory
  - Monitoring/checking work
  - Time management

### Behavioral Regulation effected

- Inhibit impulses
- Control emotions
- Flexibility
- Task initiation
- Goal –directed persistence

### Treatment

- Multi modal approach-
  - Parent training
  - Behavioral intervention strategies
  - Appropriate educational program
  - Education regarding ADHD

- Medication

\*\*Medication is shown to be the most effective treatment strategy above behavioral therapy only, diet changes, etc. Medication, combined with behavioral therapy, is the best approach to successful treatment (based on a longitudinal research study involving 579 participants)

Omega 3 fatty acid supplements have been shown to improve focus/attention in some patients and is safe for children.