Co-Occurring Autism Spectrum Disorder & Attention-Deficit/Hyperactivity Disorder: Treatments That Work & Tips for Home and School

Jason Fogler & Paul Hammerness
June 14, 2017
Co-Occurring Autism Spectrum Disorder & Attention-Deficit/Hyperactivity Disorder (ADHD): Treatments That Work & Tips for Home and School

Jason Fogler, MA, PhD
- Co-Director, ADHD Program Developmental Medicine Center
- Instructor in Psychiatry, Harvard School of Medicine

Paul Hammerness, MD
- Medical Director Outpatient Psychiatry Service
- Assistant Professor, Harvard School of Medicine

Wednesday, June 14th, 2017 6 to 8 p.m.
Folkman Auditorium, Enders Building,
Boston Children's Hospital
Goals

• This presentation will address the common problems of hyperactivity, impulsivity, inattention and “executive dysfunction” in children with Autism.

• We will discuss medical and behavioral strategies for these symptoms or disorders.
Disclosures

Dr. Hammerness

- Receives royalties from the following publications:
  - *ADHD, Biographies of a Disease*, Greenwood Press, 2009;
  - *Organize Your Mind, Organize Your Life*, Harlequin Press/Harvard University, 2012;
- Receives royalties from Massachusetts General Hospital, owner of a copyrighted questionnaire (*Before School Functioning Scale*) co-developed with Dr. Tim Wilens, licensed to Ironshore Pharmaceuticals
- In the past 2 years Dr. Hammerness has received a speaker fee from Neos Therapeutics.

Dr. Fogler - No disclosures
"I thought you couldn’t have both…?"

- Prior to 2013 ASD & ADHD were *mutually exclusive categories* under DSM-IV

<table>
<thead>
<tr>
<th>ASD</th>
<th>ADHD</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Deficits in Reciprocal Social Communication</td>
<td>• Inattentive Symptoms (Distractibility)</td>
</tr>
<tr>
<td>• Restricted and Repetitive Behavior (&amp; Interests)</td>
<td>• Hyperactive/Impulsive Symptoms</td>
</tr>
<tr>
<td>– “Compulsive &amp; asocial”</td>
<td>– “Hypersocial &amp; on the go”</td>
</tr>
</tbody>
</table>
Diagnosis is in the Eye of the Beholder

Is this child:

a) Distracted by sounds outside the room?
b) Repeating a script from his favorite show over and over?
c) Having trouble reading the letters?
d) a & b but not c…?
Social
Cognition
Language
Motor

Observed Behavior
Overall, “Comorbidity” is common

• It is very common to have an additional condition or diagnosis
  – Autism *plus* Anxiety
  – Autism *plus* Tics
  – Autism *plus* ADHD

• Clinicians choose the type of treatment (and prioritize what to do when) depending on the relative impact of each condition

DSM-5, American Psychiatric Association 2013
Considering the Relative Severity of ADHD symptoms

- Symptoms can affect every aspect of functioning
  - School/Work
  - Home
  - Social
  - Other (e.g. driving, health care)
- Can interfere with access to supports or services
6 yr old boy with Autism
Hyperactive
Impulsive
Social conflicts

“he is constantly on the go… I mean always!”

“I wish he would sit still, then maybe he would make some eye contact”
Approach to the Diagnosis of ADHD in Autism

**ASD:**
- “Inattention” when faced with abstract tasks only
- “Not listening” to others when just doesn’t pick up social cues
- “Fidgety” and compulsive when doing stereotypical behavior/stimming

**ASD and ADHD:**
- Inattention, Hyperactivity/Impulsivity across subject matter, across settings – an underlying presence
- Unfocused with all tasks, conversations
- Restless, fidgety “bored” always
Complicating factors in ADHD

• ADHD Plus “Executive Dysfunction”

• ADHD Plus Moodiness
ADHD Plus “Executive Dysfunction”

- Problems with complex thinking – planning, memory, judgement – “executive functioning” are common throughout childhood disorders

- May be particularly common in ADHD
- Yet, is not as responsive to medications
- Thus, particularly important to identify and ensure supports and build skills
ADHD Plus Moodiness

- Problems with moodiness, irritability, emotional reactivity are also common throughout childhood disorders

- May be particularly common in ADHD
  - Deficient emotional self-regulation (“DESR”)
    - Hot temper, short fuse “then he is fine”
  - Important to identify and distinguish from a mood disorder, including Bipolar Disorder
    - Day to day mood disturbed – “always sad/angry”
Treatment approach for ADHD
ADHD Treatment Approach

• Education – understand the condition, understand the impact

• Medications - generally recommended as first line, safe and effective treatments for ADHD

• Therapies
  – Behavior Modification
  – Skills Training: Organization, social

• School/Learning supports/advocacy
ADHD Medications

• The first choice for ADHD medication is generally a FDA approved “stimulant”
  – Methylphenidate (e.g. Ritalin, Focalin, Concerta)
  – Amphetamine (e.g. Adderall, Vyvanse)
There are many stimulant types

Methylphenidate
- Older/Intermediate
  - Ritalin SR
  - Metadate ER
- Short Acting
  - Ritalin
  - Methylin
  - Focalin
- Newer/Long Acting
  - Concerta
  - Metadate CD
  - Ritalin LA
  - Focalin XR
  - Daytrana
  - Quillivant XR

Amphetamine
- Short / Intermediate Acting
  - Dexedrine/Spansule
  - Zenzedi
  - ProCentra (liquid)
  - Adderall
  - Evekeo
- Long Acting
  - Adderall XR
  - Vyvanse
  - Adzenys XR-ODT
  - Dyanavel XR
Increasing non-stimulant FDA approved medications

Approved

Strattera (atomoxetine)

Kapvay (clonidine XR)

Intuniv (guanfacine XR)

Not Approved

Tricyclic antidepressants
Wellbutrin (bupropion)
Effexor (venlafaxine)
Side effects of Stimulants

• Common side effects at any age
  – low appetite/GI upset, insomnia, headache
  – anxious, moody/angry, teary/fragile
  – at peak, wear off, or all day long

• Less is known about
  ▪ Long-term effects (>1-2 years)
  ▪ Within Autism or other condition

Pliszka. JAACAP 2007;46:894-921; The Cochrane Library
Balancing Benefit and Risk

- Always important to consider BOTH – how the medication may be helping AND how it may be hurting/causing side effects

- Benefit and Risk can happen at the same time

- In general, if mild side effects, can switch to a different medication

- **Mood changes on medication does not automatically = a new diagnosis (of Mood disorder)**

In part from Plizka, 2007; NICE, 2008; CADDRA 2007; Nutt, 2007
Behavioral Treatments

• Learning new skills is a multi-step process
• ASD & ADHD *complicate* but need not disrupt this process…
Decode Behavior with A-B-C

**Antecedent**
What are the circumstances?

**Behavior**
How does the child’s behavior make us feel/respond?

**Consequence**
The “payoff”, a.k.a. *contingency*

Can we make the situation less aversive/more fun?

Can we incentivize the preferred habit?
Managing Behavior at Home: The Token Economy
Token Economy: Common Pitfalls

- Too many tasks
- Too long a delay to reward new behavior
- Expecting perfection (we want sustained effort…)
- Not following through on promised payoff
- Including penalties/deductions for problem behavior (focus on the positive!)
- Weaning off reward systems too soon
“You mean I have to buy this kid an iPhone to make his bed?!!”

• NO! Maturity and internalization of a personal reward system will reduce the need for overt strategies
• But...these kids often need a strong “signal” and repetition to practice behaviors that don’t come naturally
Behavioral Principles Help Both Conditions

Treatments for ASD
- Applied Behavior Analysis
- Social Scripting
- Skills training (social)
- Assistive technology

Treatments for ADHD
- Contingency Management
- Therapeutic afterschool/camp settings
- Skills training (organization)
- Assistive technology

Neither condition is helped by talking about past events
Organization simplified....

Physical

• Where is my stuff?

• Where it always is!!!

Time

• When should I start?

• Now, plan ahead!!!

Routines, routines, routines
Summary

• Hyperactivity, impulsivity, inattention and “executive dysfunction” are common in children with Autism

• For some, this may indicate an additional diagnosis of ADHD

• Medical and behavioral strategies for co-occurring ADHD symptoms or disorders can be successful, and support ASD supports/services
QUESTIONS…?
SEND US AN EMAIL!
AUTISMCENTER@CHILDRENS.HARVARD.EDU

THANK YOU!