

ADHD, EXPLOSIVE OUTBURSTS, ANXIETY, PTSD, AND ATTACHMENT ISSUES


Lindsey Tweed MD MPH
Medical Director
Edmund Ervin Pediatric Center
MaineGeneral Health

DISCLOSURE

↓ I have no relevant financial relationships to disclose.



TODAY'S OUTLINE

- ↓ Thank you for participating! Thank you for all your efforts to help Maine youth and their families
 - ↓ ADHD and Associated Challenges
 - ↪ Emotion Dysregulation/Explosive Outbursts
 - ↪ Anxiety
 - ↪ PTSD
 - ↪ Hx of Relationship Disruption/Attachment Issues
 - ↓ Treatment
 - ↪ Psychosocial
 - ↪ Medication
 - ↓ We can talk about recent NYT article if anyone wants to
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EMOTION DYSREGULATION IS A CORE COMPONENT OF ADHD

- ⤵ That's the title of the 3rd Chapter of Russell Barkley's ADHD: Clinical Handbook of Dx and Tx 4th Ed.
- ⤵ Emotion Dysregulation/Explosive Outbursts (EO's) are always Biopsychosocial. ADHD is the most common Bio driver
- ⤵ If ADHD is present, ADHD Meds help all 4 symptoms. Effect Size for Aggression in the context of ADHD is large
- ⤵ But here's a challenges:
 - ↪ Stimulants usually help ADHD with EO's
 - ↪ But sometimes stimulants make EO's worse

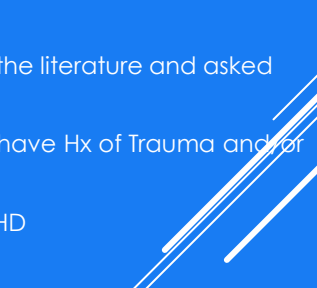
ADHD AND ANXIETY

- ↓ With ADHD, it's best to think "Both/And"; many, many clinical mistakes flow from "Either/Or"
- ↓ ADHD and Anxiety Disorders often co-exist
- ↓ In the Multimodal Tx of ADHD Study (MTA) study, children receiving methylphenidate (MPH) had mildly reduced anxiety compared to those on placebo
- ↓ How do we know if all the distractibility is coming from Anxiety
- ↓ The most common forms of Anxiety Disorder are Separation and Social
 - ↪ Is the child distractible at home, when Separation and Social Anxiety are not active
- ↓ Most youth who meet criteria for both ADHD and an Anxiety Disorder will need ADHD med and SSRI

ADHD AND TRAUMA

- ↓ Many youth who meet criteria for ADHD will have, tragically, suffered Trauma.
 - ↪ Sometimes they meet criteria for PTSD; often they don't
 - ↪ This is no surprise: ADHD has a very substantial genetic component, and many/most parents who neglect or physically abuse are very impulsive and have terrible frustration tolerance
 - ↪ The Evidence Based Treatment (EBT) for Post Traumatic Stress is Trauma Focused CBT

TREATMENT OF ADHD WITH HX OF TRAUMA

- ↩ If both are there, treat both. Think Both/And, not Either/Or. Dr. Boris Birmaher: Trauma makes everything worse
 - ↩ Treating the ADHD first will facilitate/improve the outcome of the TF-CBT
 - ↓ It's super hard to do TF-CBT when the youth is distractible, impulsive, and is emotionally dysregulated.
 - ↓ Give the youth the best chance you can to heal in TF-CBT
 - ↓ Stabilize; then Heal
 - ↩ Won't Stimulants dysregulate youth with Hx of Trauma and/or PTSD?
 - ↓ No study—tragically!!!—has ever addressed this. I have searched the literature and asked many experts in person (at AACAP)
 - ↓ My experience is no: youth who both meet criteria for ADHD and have Hx of Trauma and/or PTSD respond to stimulants just as well
 - ↩ Don't add to the Traumatized Youth's problems by not treating their ADHD
 - ↩ Trauma doesn't protect from ADHD
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ADHD, RELATIONSHIP DISRUPTIONS, AND ATTACHMENT PROBLEMS

- ↪ Many youth with ADHD and EO's—many of whose parents also have ADHD and EO's—have suffered multiple relationship disruptions. This is no surprise.
- ↪ Many youth with EO's have had multiple foster placements: a very tragic feed forward cycle
- ↪ Please remember: EO's are Biopsychosocial; Both/And, not Either/Or
- ↪ What is the best way to treat Attachment Issues:
 - ↓ Stabilize this right here, right now relationship; prevent further relationship disruption
 - ↓ What is the biggest threat to the current relationship: EO's with physical aggression

ATTACHMENT ISSUES AND THE DSM

- ↩ The best data on Attachment Issues come from the Strange Situation studies by Dr. Mary Ainsworth
- ↩ Secure; Avoidant; Resistant; Disorganized. Lots of great research to show these are very important risk factors
- ↩ But DSM doesn't include risk factors...
- ↩ Reactive Attachment Disorder in DSM
 - ↓ Irritability not the major criterion; aggression not mentioned
 - ↓ "Seen relatively rarely in clinical settings...occurring in less than 10% of neglected children, even in cases of severe neglect"
 - ↓ "Less is known about the clinical presentation of RAD in older children, and the diagnosis should be made with caution after age 5"
 - ↓ The only RCT for RAD showed foster home better than institution
- ↩ I do understand the frustration of the very important roles of relationship disruption and attachment not being captured in DSM

GENERAL ALGORITHM FOR ADHD WITH EO'S

- ↩ Psychosocial Treatments are crucial. Stabilization with meds greatly helps psychosocial treatment. Both/And!!
- ↩ Maximize effect of Dopamine Reuptake Inhibitors (aka Stimulants)
- ↩ Maximize effect of alpha 2 agonists
 - ↓ Guanfacine ER; greatest effectiveness at 1mg/kg
 - ↓ Clonidine ER
- ↩ Avoid Serotonin and Dopamine Receptor Antagonists (aka 2nd Generation Antipsychotics) if you can
 - ↓ Big risk of weight gain. (And we already have a childhood obesity epidemic.)
 - ↓ BUT: less risky than the child losing their placement
 - ↓ Watch weight gain very carefully. Most youth will need adjunctive metformin

ASSESSING THE EFFECTS OF STIMULANTS

↓ Pay close attention to time response.

- ↩ On a non school day: what was your child like before he took meds
- ↩ You did or did not notice a change an hour or so afterwards. If yes, please describe the change
- ↩ If you noticed a change, you did or did not notice the change wear off? If yes, that was or was not a problem?
- ↩ And of course the input of school is crucial. Big problem in assessment is teacher does not come to the appointment. Vanderbilts are most common tool.

ASSESSING THE EFFECTS OF STIMULANTS: PART II

↓ Determining whether stimulant increased irritability

- ↪ We always start low; low dose probably won't be enough to treat SED/EO; so, low dose stimulant associated with ongoing SED/EO.
- ↪ "EO has got better, worse, or stayed the same on this dose?" If not sure, take the next step
- ↪ If EO a problem, is it when meds are in system or out?
- ↪ Please remember: stimulants far more likely to treat irritability (in context of ADHD) than to cause it
- ↪ Irritability more common if youth also has ASD
- ↪ Review article on stimulants and irritability in References. MPH vs AMP

↓ Stimulants, on average, decrease anxiety (see reference); but sometimes increase it. Usually that's agitation

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Presidential Address: Emotion Dysregulation in Children and Adolescents

Gabrielle A. Carlson, MD

DOI: <https://doi.org/10.1016/j.jaac.2019.11.004>

Supplemental Material

References

Article Info


Related Articles

I am both excited and proud to become president of our Academy of Child and Adolescent Psychiatry for the next 2 years. In addition to working with an incredible organization, I have had the privilege and pleasure of serving and collaborating with our immediate past presidents including Drs. Drell, Joshi, Fritz, and Wagner. In thinking about how I wanted to focus my energy and some of AACAP's resources over the next couple of years, I've looked at the breadth of past initiatives. These have included prioritization within the organization and the field (Back to Project Future¹), expanding our relationships with other countries and cultures (Partnering for the World's Children²),


CLINICAL PICTURE

- ↓ Most children get frustrated by similar types of circumstance
 - ↪ Directed by adult (parent figure, teacher) to do something not inherently reinforcing. E.g., a chore. Please pick up your Legos.
 - ↪ Directed to stop a reinforcing activity. Please come inside; please turn off screen.
 - ↪ Given a limit. Told the word “no”.
- ↓ Children vary in ability to modulate frustration
- ↓ What do children in top 5% of anger dyscontrol look like?
 - ↪ In addition to being loving, creative, funny, and delightful...


FREQUENT EXPLOSIVE OUTBURSTS ARE VERY IMPAIRING

- ↵ Childcare/Preschool Expulsion
 - ↵ Impaired Family Relationships
 - ↵ Impaired Peer Relationships
 - ↵ Less community/family participation; more restrictive settings
 - ↵ Self-contained classroom
 - ↵ Day Treatment
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IMPAIRMENT PART II

- ↵ Emergency Department (ED) visit
 - ↵ Psychiatric Hospitalization.
 - ↵ Residential Treatment
 - ↵ Out of State Residential Treatment
 - ↵ Extended Emergency Department Stays
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GENERAL PRINCIPLES

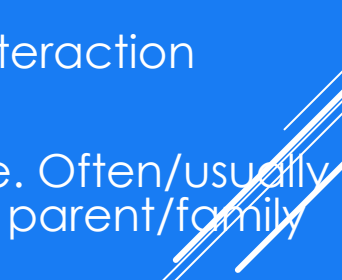
- ↵ Multifactoral Etiology. There is almost never only one cause
 - ↵ The Causes are Biopsychosocial; and the Treatment must also be Biopsychosocial
 - ↵ Both/And thinking will be more effective than Either/Or thinking.
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PSYCHOSOCIAL TREATMENT FOR PREADOLESCENTS

↴ Specialized Parenting Skills

- ↵ Parenting skills that may work for 90-95% of kids may not work for 5-10% of kids with most difficulty modulating emotions.
- ↵ Parents may not have caused the problem; but they will need to be big part of the treatment
- ↵ The Challenge: how to recommend Parenting Skills without making Parents feel blamed

SPECIALIZED PARENTING SKILLS PART II

- ↓ Individual therapy in preadolescents not as effective as working through parents
 - ↓ Two approaches to Specialized Parenting Skills:
 - ↪ Teach parents in office; they practice at home. Positive Parenting Program (Triple P) and Incredible Years
 - ↪ Live parent coaching. Parent Child Interaction Therapy (PCIT).
 - ↪ These can be office based or in home. Often/usually need to be embedded in working on parent/family level problems.
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BROADER ASPECTS OF BIOPSYCHOSOCIAL TREATMENT PART I

- ↓ Troubles run in families.
- ↓ Troubles are passed down environmentally and genetically; by nature AND nurture
- ↓ Parents may not have caused all of this problem, but they will have to be a big part of the treatment
 - ↪ Adverse Childhood Experiences (ACE's) are prevalent.
 - ↪ Poverty is a risk factor for disruptive behavior
 - ↪ Parental mental health and/or SUD problems are common.
 - ↪ Both these can interfere with specialized parenting skills
 - ↪ Prominent parental/family challenges can prevent parenting skills; TCM/BHH necessary
- ↓ Blaming the parents is not, generally, clinically effective


BROADER ASPECTS OF PSYCHOSOCIAL TREATMENT: PART II

↓ Many youth will need a case manager


- ↪ Targeted Case Management (TCM) or Behavioral Health Home (BHH)
- ↪ If private insurance, office based care manager may need to help with Katie Beckett
- ↪ TCM/BHH can submit application for intensive in-home treatment (Home and Community Based Tx, or HCT). For some families, office based tx won't work.
- ↪ TCM/BHH can help advocate for appropriate school program

BCB office well served by close working


PSYCHOSOCIAL TREATMENT FOR ADOLESCENTS

- ↴ Combination of family and individual therapy
 - ↴ In Home EBP's include Multisystemic Therapy (MST) and Functional Family Therapy (FFT)
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THE MOST COMMON “BIO” DRIVER: ADHD

- ⤵ Dr. Carlson states that, in her data, 75% of youth with SED/EO have ADHD as a component
 - ⤵ Dr. Russel Barkley’s Clinical Handbook of ADHD (4th ed): Chapter 3 is entitled “Emotion Dysregulation is a Core Component of ADHD”
 - ⤵ Reviews of studies of stimulant medication for aggression in the context of ADHD show significant effect sizes.
 - ⤵ With SED/EO, strongly consider screening with Clinical Interview and Parent and Teacher Vanderbilt Scales
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OTHER COMMON “BIO” DRIVERS OF SED/EO

- ↓ Depression. Check for DSM-5 Criteria
 - ↓ Anxiety: when urge to avoid is blocked. Not generally a cause of SED/EO at home.
 - ↓ PTSD
 - ↓ Borderline Personality Features can begin at puberty; Interpersonal Hypersensitivity; Emotional Sensitivity/Invalidating Environment
 - ↓ Developmental Disabilities Can Play a Role: Autism Spectrum; Speech/Language; Learning Disability; Fine/Gross Motor Delay; FASD.
 - ↓ There is frequent comorbidity. Please remember Both/And, not Either/Or
 - ↓ The medication aspect of Biopsychosocial Treatment involves treating the underlying disorder.
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THE ROLE OF TRAUMA

- ↓ Many youth with SED/EO have experienced Trauma; some have not.
- ↓ In Trauma Focused CBT (TF-CBT), the first phase is stabilization: specialized parenting skills, emotion regulation skills
- ↓ Stabilize; then Heal
- ↓ Youth with severe SED/EO will have great difficulty going directly to TF-CBT
- ↓ Please remember your Both/And thinking. It's often Nature Plus Nurture. Problems run in families for both environmental and genetic reasons.

ISN'T SED/EO ALWAYS A SIGN OF BIPOLAR?

- ⤵ Several years ago, some felt non-episodic severe anger dyscontrol was a symptom of Bipolar Disorder. Research disproved this.
- ⤵ Bipolar Disorder is an episodic illness; it has episodes. It can cause episodic SED/EO.
- ⤵ Disruptive Mood Dysregulation Disorder (DMDD) was put into DSM-V to prevent the overdiagnosis of childhood Bipolar Disorder
 - ↪ Criteria wrong though: most with SED/EO are happy, not irritable, if events going their way
 - ↪ Most youth with DMDD have ADHD as one of their problems.

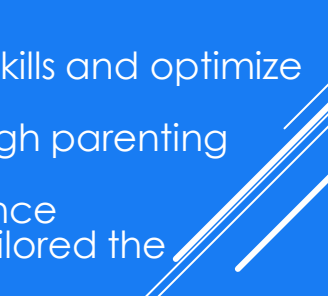
IS REACTIVE ATTACHMENT DISORDER A CAUSE OF AGGRESSION?

- ↓ DSM-5 describes RAD as an internalizing disorder with depressive symptoms and withdrawn behavior (in introduction to Trauma and Stressor Related Disorders).
 - ↪ Doesn't seek comfort and/or isn't comforted
 - ↪ Unexplained irritability, sadness, or fearfulness in interactions with caregivers
 - ↪ "The disorder is seen relatively rarely in clinical settings."
 - ↪ "Less is known about the clinical presentation of RAD in older children, and the diagnosis should be made with caution in children older than 5."
- ↓ Is attachment important for all people? Yes! Have youth with SED often had relationship/attachment disruptions? Often
- ↓ Anxious, avoidant, and disorganized attachment are significant risk factors
- ↓ Should RAD be considered the sole driver of aggression in a youth? No.
- ↓ Both/and, not either/or
- ↓ Best way to help youth improve attachment is to prevent further relationship disruptions; i.e., treat and reduce SED/EO

SOME CHALLENGES IN TREATING ADHD WITH EXPLOSIVE OUTBURSTS

- ⤵ Will meds only work? No!
- ⤵ Can effective meds support emotion regulation and enable an effective psychosocial program (Parenting Skills, TF-CBT)? Yes
- ⤵ “Stimulants”
 - ↪ Unfortunate name; we are trying to change to Dopamine Reuptake Blockers
 - ↪ They do, however, stimulate self-control center in the brain
 - ↪ Significant effect size on aggression in the context of ADHD
 - ↪ Missing a stimulant response leads to bad outcomes

A RESEARCH STORY

- ↓ Leading med researchers wanted to see which meds—Risperidone vs Divalproex—would be more effective in stimulant/parenting skills resistant ADHD with aggression
 - ↓ They only let in kids who were on stimulants—to increase proportion of stimulant resistance
 - ↓ Recent or current treatment with stimulant medication at a minimum daily total dose equivalent of 30 mg of methylphenidate (MPH) (eg, 15 mg of mixed amphetamine salts (MAS) or dextmethylphenidate, 40 mg of lisdexamfetamine) for at least 30 days but still aggressive.
 - ↓ First phase: give everyone Specialized Parenting Skills and optimize stimulants
 - ↓ The majority responded! It took years to get enough parenting skills/stimulant resistant youth to do the study.
 - ↓ Never got enough study subjects to find a difference
 - ↓ They were careful and methodical in how they tailored the stimulant treatment
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Completed an “Inconclusive” Trial: Optimize, Adjunctive, or Discontinue Psychostimulant Treatment

Novins, MD

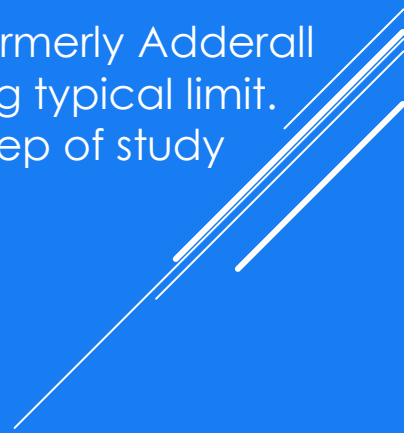
0.1016/j.jaac.2020.03.009 •



Check for updates

¹ report the results of a double-blind randomized controlled trial (RCT) aimed at the tolerability of adjunctive risperidone (RISP), valproex sodium (DVPX), or placebo (PBO) in children (6–12 years) with attention-deficit/hyperactivity disorder (ADHD) and comorbid conduct disorder (CD), as well as a prior history of psychostimulant treatment that was persisting after an open-label optimization of psychostimulant medication. Sessions of family-based behavioral treatment were offered during both treatment

STUDY TITRATION METHOD

- ↓ Boys and girls 6-12 years old
 - ↓ Began with MPH ER (OROS; formerly Concerta). Raise 18mg/week up to 72 based on Conners CGI, Retrospective Modified Overt Aggression Scale (R-MOAS), side effect scale. 1-2mg/kg is traditional limit.
 - ↓ If insomnia or appetite problems, could switch to biphasic MPH (Ritalin LA) up to 60mg
 - ↓ Insufficient or adverse response: MAS-XR (formerly Adderall XR), 5mg per week, up to 35mg. 0.5-1 mg/kg typical limit.
 - ↓ 64% responded and could not go to next step of study
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NON-STIMULANTS

- ↓ Alpha 2 Agonists FDA approved on own or combo with stimulants
 - ↪ Guanfacine ER. Experts report best effect reached at 1mg/kg. Can adjust by 1mg/week. FDA approved up to 7mg in adolescents.
 - ↪ Clonidine ER. More likely to cause sedation. Can adjust by 0.1mg/week; limit of 0.2 twice a day
 - ↪ Effects on aggression not well studied; but this is my 2nd line
- ↓ Second generation antipsychotics (aripiprazole; risperidone) only if all else fails.
 - ↪ Many youth on ARI will need metformin
 - ↪ Short term gain vs long term risk
 - ↪ It can definitely help; it's better than losing your placement
 - ↪ Please try everything else first. If you miss stimulant responses, you will over rely on antipsychotics.

ADDRESSING SED/EO IN PRESCHOOLERS

- ↓ With such a serious public health problem, we want to maximize Early Intervention
 - ↓ The most aggressive two year olds are, on average, the most aggressive when older
 - ↓ American Academy of Pediatrics ADHD Guidelines state meds are 2nd line before age 6.
 - ↓ DHHS/CBHS working to make Triple P available; parents of 2-5 year olds with SED/EO is a great place to intervene.
 - ↓ PCIT very effective but less available
 - ↓ Some families will need in-home
 - ↓ Early Childhood Consultation Partnership. All the relevant adults will need to skill up.
 - ↓ "Ferrari Brains with Bicycle Brakes". These are wonderful children. Let's get ahead of this problem and help them thrive!
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REFERENCES

- ↓ Blader JC et al. Stepped Treatment for Attention-Deficit/Hyperactivity Disorder and Aggressive Behavior. *J Am Acad Child Adolesc Psychiatry*. 2021 Feb;60(2):236-251.
- ↓ Carlson GA. Presidential Address: Emotion Dysregulation in Children and Adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry* Volume 59 / Number 1 / January 2020
- ↓ Cortese S and Novins DK. Editorial: Why JAACAP Published an "Inconclusive" Trial: Optimize, Optimize, Optimize Psychostimulant Treatment. *J Am Acad Child Adolesc Psychiatry* 2021 Feb;60(2):213-215
- ↓ Coughlin CG, et al. Meta-Analysis: Reduced Risk of Anxiety with Psychostimulant Treatment in Children with Attention-Deficit/Hyperactivity Disorder. *J Child Adolesc Psychopharmacol*. 2015;25(8):611-617. doi:10.1089/cap.2015.0075
- ↓ Pringsheim T. Pharmacological Management of Oppositional Behaviour, Conduct Problems, and Aggression in Children and Adolescents With ADHD, ODD, and CD; Part 1. *Can J Psychiatry* 2015;60(2):42-51
- ↓ Stuckleman ZD et al. Risk of Irritability With Psychostimulant Treatment in Children With ADHD: A Meta-Analysis. *J Clin Psychiatry* 2017 Jun;78(6):e648-e655