

Welcome to VMAP ECHO Deeper Dive

Preschool ADHD

25 May 2023

Our session will begin promptly at 12pm

*Please enter your name in the chat box;
include any guests attending with you*

1

Important information...

Patient-provider relationship:
Project ECHO case consultations do not create or otherwise establish a provider-patient relationship between any VMAP clinician and any patient whose case is being presented in a Project ECHO setting.

Video recording:
For educational and quality improvement purposes, we will be recording this session.
By participating in this clinic you are consenting to be recorded. We appreciate and value your participation.

2

Important information...

Respect Private Health Information

To protect patient privacy, please only display or say information that doesn't identify a patient or that cannot be linked to a patient.

- Names: Please do not refer to a patient's first/middle/last name or use any initials, etc.
- Locations: Please do not identify a patient's county, city or town.
- Dates: Please do not use any dates (dob) that are linked to a patient. Instead, please use the patient's age.
- Other common identifiers: Patient's family members, friends, co-workers, phone numbers, e-mails, occupation, place of employment

3

Welcome + introductions

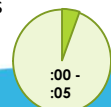
Let us know you're here!

Please enter your name + any guests into the ZOOM "chat box" so we have a record of your attendance

Agenda:

:00 - :05	Welcome + introductions
:05 - :30	Didactic: Preschool ADHD
:30 - :55	Case presentation, discussion + recommendations
:55 - :00	Wrap-up

Our next session is scheduled for:
Thurs., Jun. 22 at 12:00 to 1:00 PM
Trauma + ACEs



4

VMAP Early Childhood Line

Now accepting calls!



1-888-371-VMAP (8627)

Consultations with early childhood specialists!

Such as **developmental/behavioral pediatricians** and **early childhood child psychiatrists**

In the next year, VMAP plans to expand its early childhood program to increase coverage and types of early childhood specialists available to PCPs via the VMAP line. This will include early childhood care navigation to help PCPs, patients, and families navigate and find referrals for services.

5
















VMAP ECHO QI Project Timeline

Date	Action	Your Next Step(s)
03.01.2023	<ul style="list-style-type: none"> Receive project descriptions Receive baseline chart review instructions and link 	<ul style="list-style-type: none"> Complete baseline chart review based on February visits; chart review due March 15 Start screening!!
03.28.2023	<p>QI Session #1 @ 5:30 – 6:30 PM</p>	<ul style="list-style-type: none"> Maintain a folder or other system for dated screeners – this will help you with your upcoming chart reviews
05.01.2023	<ul style="list-style-type: none"> Receive Chart Review #2 instructions and link 	<ul style="list-style-type: none"> Complete chart review based on April visits; Chart review due May 12 Continue screening!
05.23.2023	<p>QI Session #2 @ 5:30 – 6:30 PM</p>	<ul style="list-style-type: none"> Improve your workflow? Add to your recommendations?
07.03.2023	<ul style="list-style-type: none"> Receive Chart Review #3 instructions and link 	<ul style="list-style-type: none"> Complete chart review based on June visits; Chart review due July 14
07.25.2023	<p>QI Session #3 @ 5:30 – 6:30 PM</p>	<ul style="list-style-type: none"> Review individual and cumulative results; this will help with the self-reflection portion of the attestation.
11.15.2023	<ul style="list-style-type: none"> Attestation link sent from UVA CME office 	<ul style="list-style-type: none"> Email will come from Kathleen Meneses (virginia.edu) Attestation due December 1

6

VMAP ECHO 2023 Deeper Dive Cohort Members












slide 1 of 2

					
	Suzanne Alonso, MSN, CPNP-PC Lynchburg Pediatrics, Forest	Susan Ashton-Lazaroae, MD ALL Pediatrics Lorton	Lelia Binder, MD Sterling AllCare Pediatrics Potomac Falls	Deana Buck Richmond	Brittany Butler, PA-C Tri-Area Community Health Ferrum
					
	Walter Chun, MD The Pediatric Center Glen Allen	Robin Church The Arc of Virginia Richmond	Ashley D'Angelo, CPNP-PC Children's Medical Associates of Northern VA, Alexandria	Chrystal Doyle, APRN, FNP-BC, PMHNP-BC Cumberland Hospital	Jadig Garcia, PhD The Pediatric Center Richmond
					
	Jennifer Herrera, MD UVA Neurodevelopmental Behavioral Pediatrics	Vicki Holmes Providence Forge	Morgan Honickel, LCSW Petersburg	Nadia Islam, PhD The Pediatric Center Glen Allen	Stephanie Konkus, MD Town Pediatrics Leesburg

7

VMAP ECHO 2023 Deeper Dive Cohort Members


slide 2 of 2

					
	Paula Labriola, MD Woodbridge	Nair Maya, MD Capital Area Pediatrics Herndon	Marina McBee, CPNP Capital Area Pediatrics Herndon	Ayanna McCray, MD New Heights Pediatrics King George	Nithiyakalyani Panneerchelvam, MD Fairfax
					
	Maria Sacoto, MD Sacoto Pediatrics Falls Church	Liv Gorla Schneider, MD The Pediatric Center Glen Allen	Lowry C. Shropshire, MD Pediatric Associates of Alexandria	Allison Siegel, MD Capital Area Pediatrics Falls Church	Tracy Walters Virginia DBHDS Richmond
					
	Jackie Winkelvoss, RN Capital Area Pediatrics Oakton				


8

Hub Faculty


Questions?
projectecho@vmap.org




Beth Ellen Davis, MD
Moderator




Jacqueline Cotton, MD
Pediatrics




Mary Margaret Gleason, MD
Child Psychiatry




Michael Mintz, Psy.D
Psychology



Polly Panitz, MD
Developmental Pediatrics



Tammy Taylor-Musoke, LCSW
LMHP

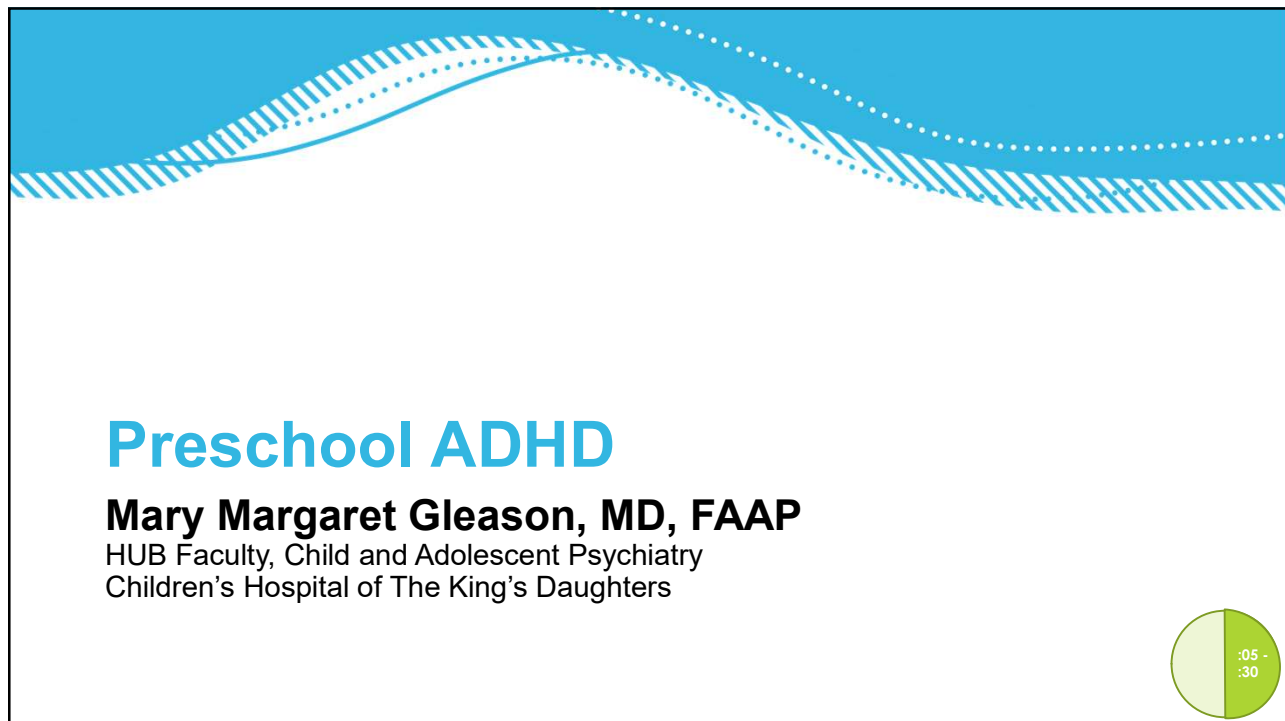


Robin Cummings, MSHA
Program Coordinator

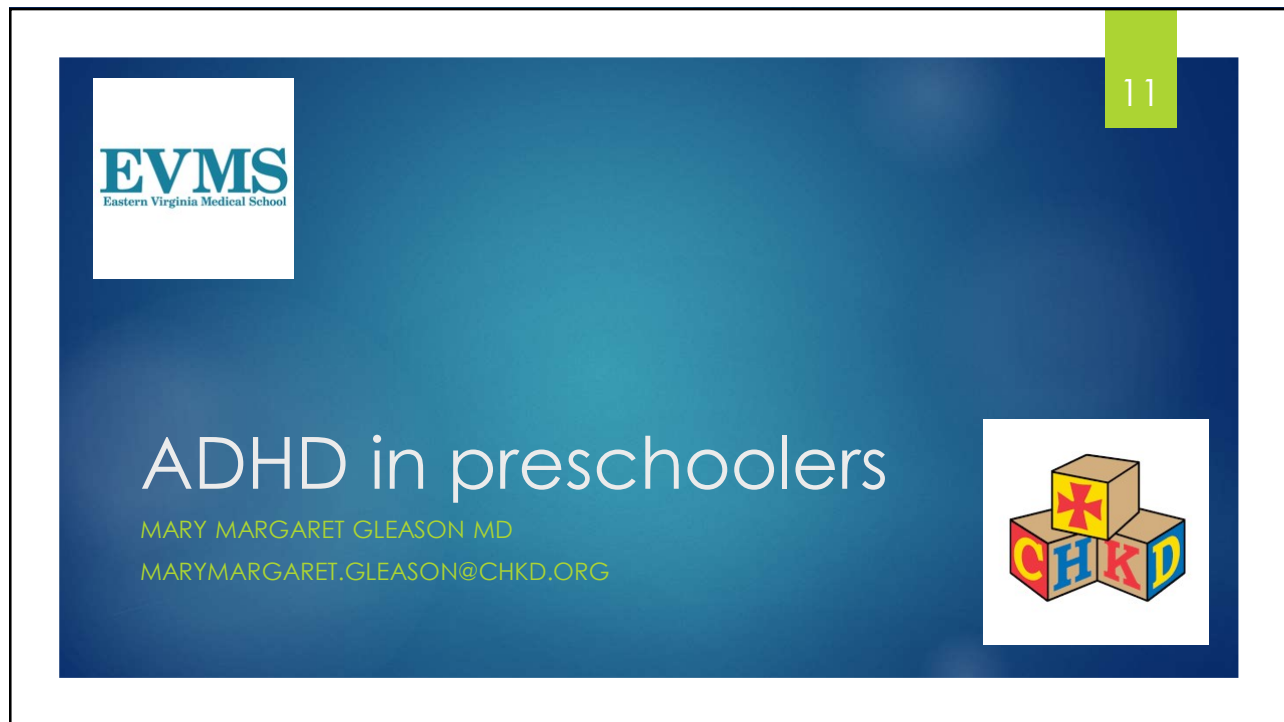
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Preschool ADHD

Mary Margaret Gleason, MD, FAAP
HUB Faculty, Child and Adolescent Psychiatry
Children's Hospital of The King's Daughters



10




11

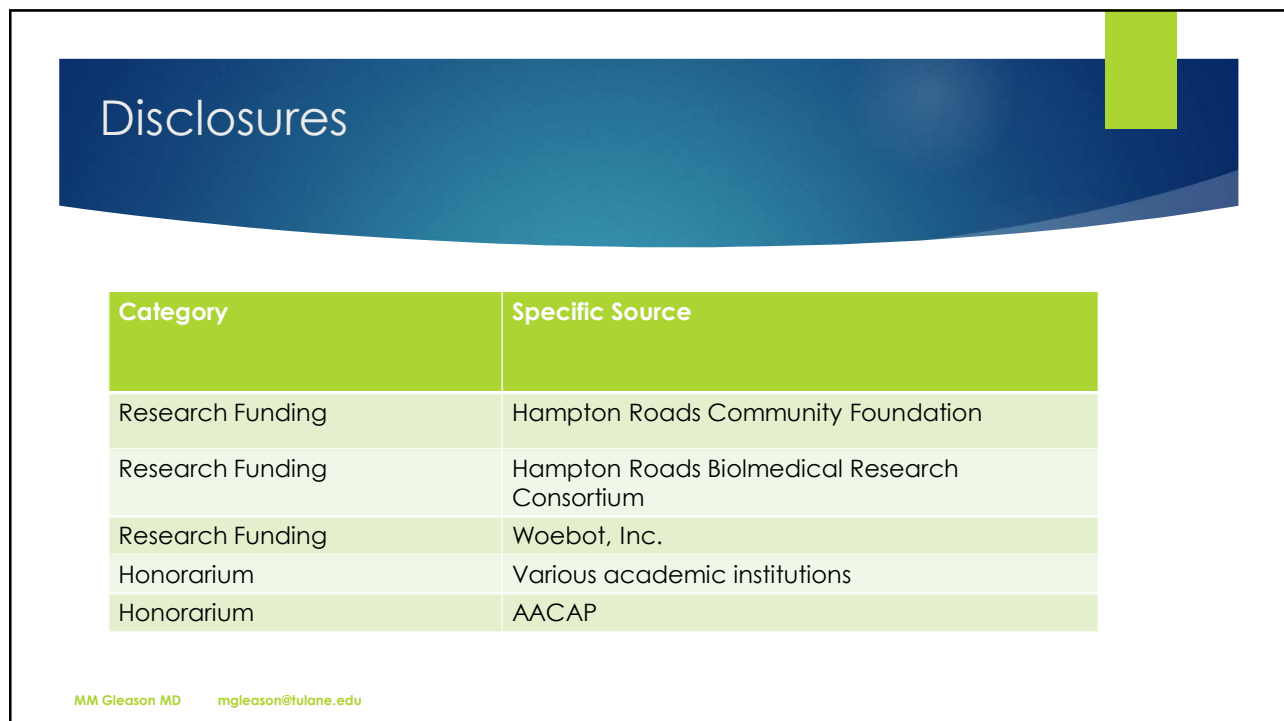
EVMS
Eastern Virginia Medical School

ADHD in preschoolers

MARY MARGARET GLEASON MD
MARYMARGARET.GLEASON@CHKD.ORG



11



Disclosures

Category	Specific Source
Research Funding	Hampton Roads Community Foundation
Research Funding	Hampton Roads Biomedical Research Consortium
Research Funding	Woebot, Inc.
Honorarium	Various academic institutions
Honorarium	AACAP

MM Gleason MD mgleason@tulane.edu

12

ADHD in preschoolers: Does it exist?

YES

2-6% preschoolers meet criteria

Children who meet criteria

have similar patterns of co-occurring problems as other children

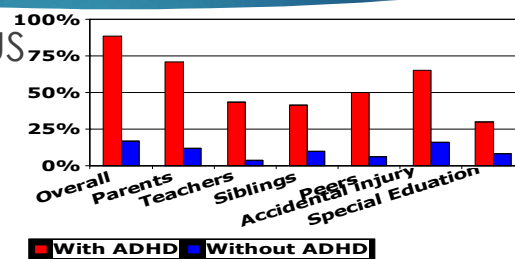
Have more difficulties with peer relationships, hyperactivity by actigraphy, frontal EEG differences, and caudate size

13

Impairment associated with preschool ADHD

14

- ▶ High expulsion rates in US
- ▶ Physical injury
- ▶ Emergency visits
- ▶ Unintentional injuries
- ▶ Poorer school readiness
- ▶ Peer relationships
- ▶ Overuse of health care system



Schwebel 2002; Egger 2007; Gadow et al. 2001; Kadesjo et al. 2001; Lahey et al. 2004; Tandon et al. 2009; DuPaul 2001; Rappley 2002; Egger et al., 2007; Lahey 2004

14

15

Is it a phase?

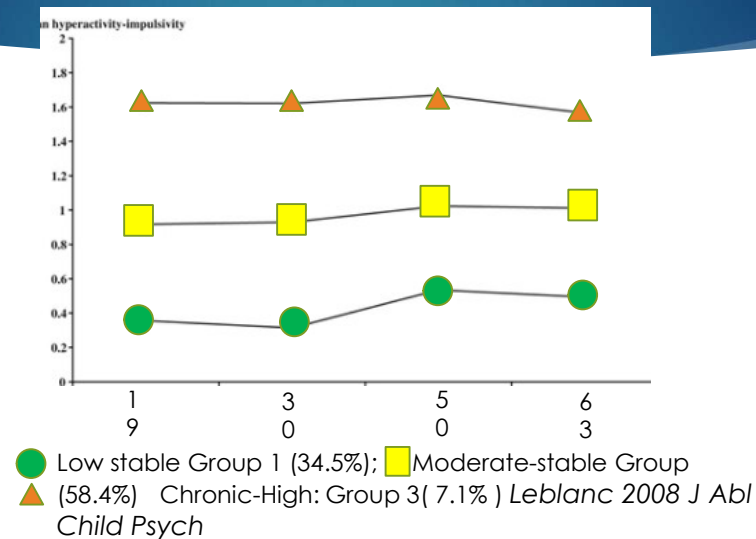
- ▶ Poor stability of subtypes
- ▶ At least moderate stability from preschool to school age
 - ▶ **72% of children followed up in in 2 years have ADHD**
 - ▶ Higher in older preschoolers

▶ Gurevitz 2014; Lavigne 2004; Willoughby 2012

15

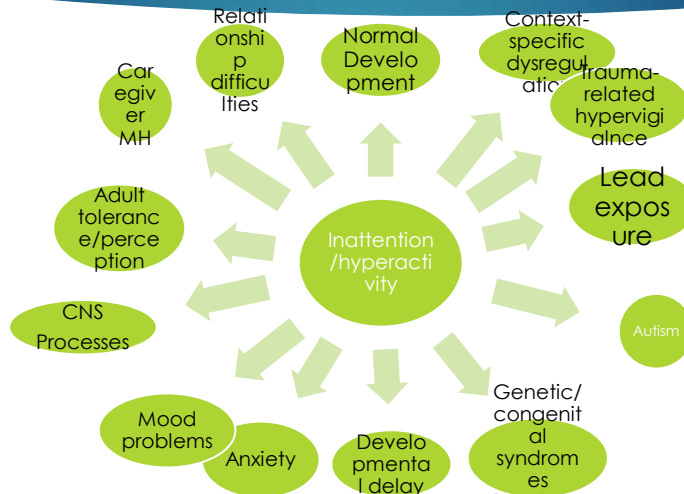
16

When does it start?



16

Differential diagnosis of impulsivity and hyperactivity



17

Assessment: Taking the history

- ▶ Symptom history
- ▶ Past medical history
 - ▶ Prematurity
 - ▶ Lead exposure
 - ▶ Head trauma/LOC
 - ▶ Other CNS process
- ▶ Developmental history
- ▶ Social history
 - ▶ Trauma exposure
 - ▶ School history
- ▶ Family history
 - ▶ History of ADHD, substance abuse, mood disorder
 - ▶ (biological or adopted/foster)



18

Examples of adjustments in developmental examples in the DC: 0-5

- ▶ *Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).*
- ▶ *Is usually not careful and is inattentive to details in play, activities of daily living, and/or structured activities (e.g. makes developmentally unexpected accidents or mistakes)*
- ▶ *Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily sidetracked).*
- ▶ *Often gets derailed when attempting to follow multi-step instructions and does not complete the activity*
- ▶ *APA 2013*

19

Assessment: Using a measure

- ▶ Because of broad differential, ADHD-specific screen not recommended (not specific enough)
- ▶ Use measure to guide further assessment/differential
- ▶ More than 1 caregiver!!
- ▶ Vanderbilt validated in children 6 and up

20

Brief Early Childhood Screening Assessment

Feelings and behavior are important parts of health and wellness. Please complete the questions below, so your child's pediatric provider can take the best possible care of your child.

Child name: _____ Date of Birth _____

Your name _____ Date _____

Please circle the number that best describes your child compared to other children the same age. The last 2 items are about you as a parent.

AND, please circle the "+" if you are concerned and would like help with the item (please circle a number as well)

	Rarely/ Not true	Sometimes/ sort-of true	Almost always/ very true	I want help with this
1. Seems sad, cries a lot	0	1	2	+
2. Is difficult to comfort when hurt or distressed	0	1	2	+
3. Loses temper too much.	0	1	2	+
4. Avoids situations that remind of scary events	0	1	2	+
5. Hurts others on purpose (biting, hitting, kicking)	0	1	2	+
6. Doesn't seem to listen to adults talking to him/her	0	1	2	+
7. Battles over food and eating	0	1	2	+
8. Is irritable, easily annoyed.	0	1	2	+
9. Argues with adults	0	1	2	+
10. Breaks things during tantrums	0	1	2	+
11. Is easily startled or scared	0	1	2	+
12. Has trouble interacting with other children	0	1	2	+
13. Fidgets, can't sit quietly	0	1	2	+
14. Is clingy, doesn't want to separate from parent	0	1	2	+
15. Seems nervous or worries a lot	0	1	2	+
16. Blames other people for mistakes	0	1	2	+
17. Has a hard time paying attention to tasks or activities	0	1	2	+
18. Is always "on the go"	0	1	2	+
19. Reacts too emotionally to small things	0	1	2	+
20. Is very disobedient	0	1	2	+
21. Has unusual repetitive behaviors (rocking, flapping)	0	1	2	+
22. Doesn't seem to have much fun	0	1	2	+
23. I feel little interest or pleasure in doing things parent	0	1	2	+
24. I feel down depressed or hopeless	0	1	2	+

Are you concerned about your child's emotional or behavioral development? Yes Somewhat No

Any comments you want to share:

Parent Screening Questionnaire A Safe Environment for Every Kid (SEEK)

Dear parent or caregiver: Being a parent is not easy. We want to help families have a safe environment for kids. We are asking everyone these questions. Please answer the questions about your child being seen today for a check-up. They are about issues that affect many families. If there's a problem, we'll try to help.

Today's Date: ____/____/20__

Child's Date of Birth: ____/____/____

Sex of Child: Male Female

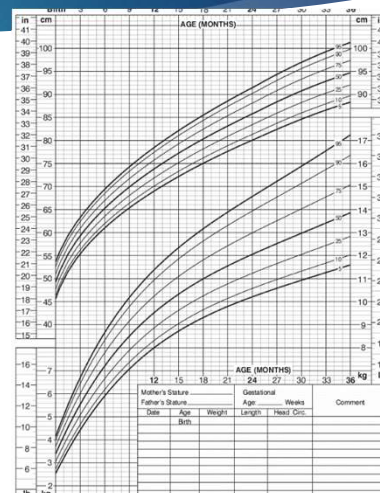
PLEASE CHECK

- Yes No Do you need the telephone number for Poison Control?
- Yes No Do you need a smoke alarm for your home?
- Yes No Does anyone smoke tobacco at home?
- Yes No Is there a gun in your home?
- Yes No In the last year, did you worry that your food would run out before you got money or food stamps to buy more?
- Yes No Do you worry that your child may have been physically abused?
- Yes No Do you worry that your child may have been sexually abused?
- Yes No Lately, do you often feel down, depressed, or hopeless?
- Yes No Do you often feel lonely?
- Yes No During the past month, have you felt little interest or pleasure in the things you used to enjoy?

21

Assessment: Physical examination

- ▶ Vital signs
- ▶ Dysmorphic features
- ▶ Social reciprocity
- ▶ Visual acuity and hearing
- ▶ Tonsillar hypertrophy
- ▶ Evidence of non-accidental injury
- ▶ Tics
- ▶ Caregiver-child interactions



22

ADHD vs. Anxiety Comorbid in 33% of ADHD

ADHD

- ▶ Pervasive across settings
- ▶ No acute onset
- ▶ Most obvious with activities that require concentration
- ▶ Avoid activities requiring concentration

Anxiety

- ▶ Often worse in specific situations/triggers
- ▶ Not specific to concentration-requiring tasks
- ▶ Avoid triggers

History of trauma or adversity

23

Disruptive Behavior Disorders Co-morbid around 50%

ADHD

- ▶ Pervasive
- ▶ Disobedience mostly impulsive
- ▶ Symptoms not worse around adults

DBDs

- ▶ Pervasive defiance with authority
- ▶ Frequent talking back
- ▶ Spiteful/provocative
- ▶ Can be calm when no demands placed
- ▶ Notable mood=irritable
- ▶ May be aggressive with limit setting
- ▶ May have family hx of conduct problems

24

Trauma-related symptoms

ADHD

- ▶ Pervasive across settings
- ▶ Does not require emotional

We don't know about trauma unless we ask.... And even then, we might not know!

Trauma-related patterns

- ▶ Exposure to adverse childhood events
- ▶ Exacerbation of sx's with triggers/reminders (may not be obvious)
- ▶ High variability of symptoms
- ▶ High level of emotional reactivity
- ▶ Hypervigilance

25

Addressing hyperactivity and impulsivity in preschoolers in primary care

26

First line treatment

- ▶ Under 6 yo: Parent management training or other behavioral intervention

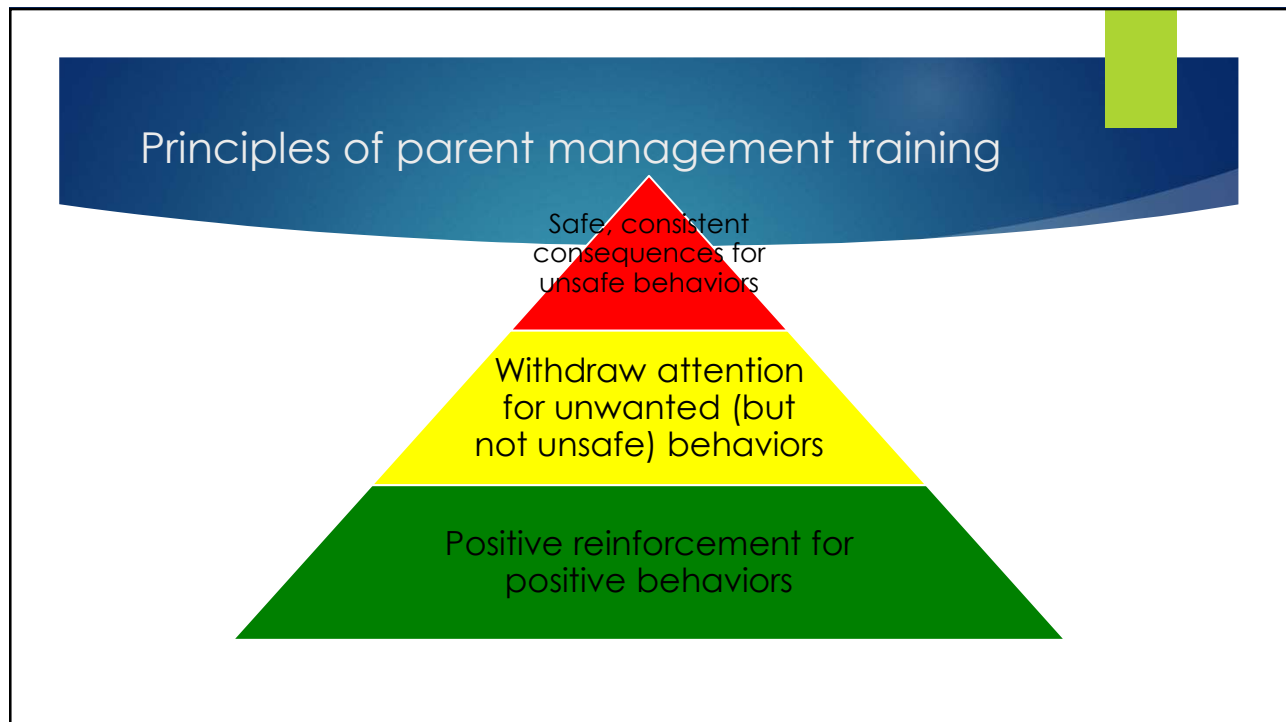
AAP 2017; AAP 2019

27

Supporting families even without therapy

- ✓ Consider **F**amily supports (including home visiting/MCIEHV)
- ✓ Safe, quality **O**ut-of-home child care (e.g., Head Start)
- ✓ Refer for **C**aregiver depression or MH concerns
- ✓ Reduce exposure to **U**nnecessary medications with behavioral side effects (e.g., Steroids)
- ✓ **S**leep hygiene
- ✓ Label **E**motions
- ✓ Link with **D**evelopmental supports including speech and language, OT (IDEA Part C or B)

28




29

Preschool ADHD Treatment Study

(Greenhill et al., 2006)

- ▶ Primary outcome
 - ▶ MPH > placebo in reducing symptoms of ADHD



Greenhill
2006

30

Preschool ADHD Treatment Study

(Greenhill et al., 2006)



- ▶ Smaller effect size than studies in older children
 - ▶ 21% children achieved remission at optimal dose
- Dose-related Adverse events
- Appetite loss
 - Sleep difficulties
 - Abdominal pain
 - Social withdrawal
 - Dull/tired/listless
- Drop outs: 14/169 (8%) because of adverse effects - mostly emotionality and irritability

31

Preschool ADHD Treatment Study: Preschoolers are Different

(Greenhill et al., 2006, Abikoff et al., 2007; Wigal et al., 2006)

- ▶ Metabolism
 - ▶ Higher peak serum concentrations than school age children
- ▶ Co-morbidity
 - ▶ No difference between placebo and MPH if > 3 diagnoses
- ▶ Functional impairment
 - ▶ No differences between placebo and MPH on parenting stress, social competence, social skills

32

Alpha agonists vs ADHD

	Stimulants	Alpha agonists
Response rate	78%	66%
Differences in side effects	Sedation (38%)	irritability (50%), appetite (38%), sleep (21%)

Harstad 2021 JAMA

33

When to consider psychopharmacologic treatment

- After ineffective trial of therapy (with ongoing therapy)
 - In conjunction with ongoing therapy
 - As “bandaid” for extreme dangerousness or risk of expulsion related to symptom
 - Time limited
 - Behavioral intervention as well (specialty or non)
 - Inability to access therapy (but need to try/need to continue to encourage)

Gleason 2017

34

ADHD Pharmacotherapy Treatment

- Start with 1 stimulant (MPH > MAS*)
 - Family history
 - Your practice preference
 - Formulation (“swallowability”)
- Increase dose weekly til effective or hit adverse effects
- Monitor
 - Symptom scale
 - Weight, HR, BP



35

Other supports

- ▶ Triple P online (\$80)
- ▶ Pocket PCIT (<https://www.pocketpcit.com/>)

36

Putting it together

- ▶ Appreciate the broad differential diagnosis
 - ▶ Assess symptoms, experiences, and relationships
- ▶ Use non-pharmacologic interventions first and with pharmacologic treatment
- ▶ Recognize limitations in pharmacologic treatment

37

Case Presentation

Liv Schneider, MD and Jadig Garcia, PhD
The Pediatric Center
Richmond



38

4 yo bilingual Hispanic male with speech delay, suspected ADHD, escalating tantrums	
Prior medical, MH dx	<ul style="list-style-type: none"> 41 weeks 4 days vaginal delivery after 39 hour ROM with meconium stained fluid, compound presentation (right hand). Typical newborn nursery course. newborn/ Hearing screen nl. Speech delay @ 4y
Symptoms	<ul style="list-style-type: none"> No developmental concerns prior to 12 mo 15mo: parent report tantrums, cries with high pitch, says no, can be overwhelming for mom <ul style="list-style-type: none"> Advised: chart, prevent, ignore, reassess. Punishment and discipline are not the same; reinforcement of good helps the most! Mom receptive. 18mo: tantrums increasing; discussed speech, primarily Spanish spoken at home. New brother. No concerns noted. 3yr 11mo: presents for behavioral concerns <ul style="list-style-type: none"> Both parents feel like he has a quick temper and will be mad for a while - then is fine again. Not angry or irritable at baseline. Likes other kids - plays well with all except cousins - they fight. Does well with sibling - baby boy. Worst behavior: tried to break GM's glasses; throws items; "flies off the handle if dad gets angry". Dad and sometimes mom spank; GP do not. Strengths: likes to play with toys and watch TV. He wants adult approval and makes good eye contacts. Talking with him calms him down. Speaks Eng and Spanish. Says a few words then babble then few more words. No hearing screen since infancy; dad thinks he hears well. Preschool screener flags ADHD; will f/u on speech, hearing, behavior mgmt plan with parents. 4yr: escalating behaviors, poor emotional regulation. Tantrums out of control; hurt self, throwing up. Behavioral interventions recommended. 4yr 2mo: still not understanding/speaking clearly. Big tantrums, lots of "no." Denied needs-based preschool due to income. OT/Speech in place. <ul style="list-style-type: none"> Given PSC17/preschool ADHD. Referred for Autism evaluation. School form given to have patient evaluated for IEP given ongoing OT/Speech as an outpatient. Mother's Morning Out and other lower cost options for preschool reviewed. To follow-up with Dr. Garcia.
Related family/ social hx	<ul style="list-style-type: none"> Cousin: ADHD; Cousin: Autism Shortages impacted preschool enrollment; now cared for by MGM, PGM, mom. Fights with his 5 yo cousin at MGM's.
Relevant screens/labs/tests	<ul style="list-style-type: none"> Prior to 12mo: no dev concerns - EPDS/NDDS normal 12mo: NDDS+ for not understanding simple requests, not yet 3+ words 15 mo: NDDS + for not making animal sounds; has 5+ words 18 mo: MCHAT at + for no pretend play; on discussion found that he did play imaginatively and properly with cars; NDDS < 20 words 24 mo: MCHAT+ for unusual finger movements near the face; NDDS - not joining 2 words together, "Doing well... at home." 36 mo: NDDS normal 3 yr 11 mo: preschool ADHD screener - 17 (14) inattention 17 (17) hyperactivity 34 (32) total. Hearing okay.
<p>CONSULT QUESTION: Effects of COVID? Transition to new standards of development? (Still would have been referred at 2 yo) What policies do people have for limiting sibling visits together? (This likely limited depth of 36 mo WCC) Bilingual speech delays or resources – any insight? I usually do refer, but was reassured by "growing" language skills here. Referral to autism r/o when lists are so long? (low concern at this point, but given FH seems prudent)</p>	

39

Wrap-up

Our next session...

Topic:	Trauma + ACEs
Date:	Thursday, June 22 @ 12:00 to 1:00 PM
Case presenter:	Jadig Garcia, PhD
Didactic presenter:	Jackie Cotton, MD

Today's session recording will be posted to the cohort webpage @ <http://www.virginiapediatrics.org/vmap/echo/>

VMAP ECHO 23 Deeper Dive → Password = 2019VMAP

40

