

# Welcome to UVM/AHEC ECHO: Children's Mental Health

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- RECORDING OF SESSION TO BEGIN



# What to do when first line treatments are not successful: ADHD

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# Agenda

- Introductions
- Objectives
- Didactic Presentation (15-20 min)
- Case presentation
  - Clarifying questions
  - Participants – then faculty panel
- Discussion
- Recommendations
- Summary
- Closing Announcements
  - Submission of new cases
  - Completion of evaluations



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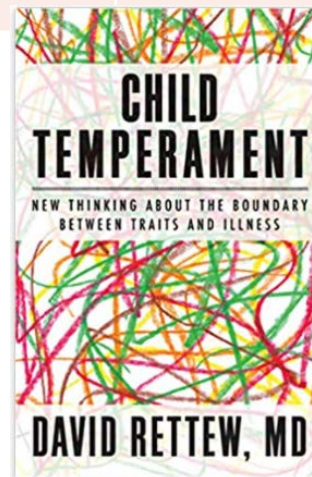
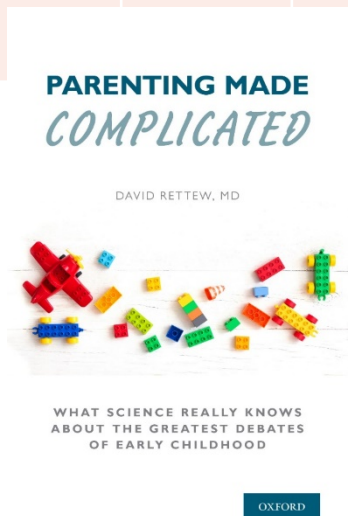
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# Disclosures of Potential Conflicts

## David Rettew

Source	Research Funding	Advisor/ Consultant	Employee	Speakers' Bureau	Books, Intellectual Property	In-kind Services (example: travel)	Stock or Equity	Honorarium or expenses for this presentation or meeting
WW Norton & Company					X			
NIMH	X							
Psychology Today					X			
Oxford University Press					X			



# Series Objectives

- By the end of this series, the learners should be able to:
  - Feel more comfort and confidence in **identifying, treating, and referring** a variety of complex children's mental health presentations.

# Session Objectives

- By the end of this activity, the learners should be able to:
  - Be able to continue the treatment process for children who do not respond to first round ADHD treatment



A Medication Trial Alone  
Does NOT Count as First  
Line Treatment

## Put Your STAMP on Treatment

- School
- Therapy
- Atmosphere (Environment/Wellness)
- Medications
- Parents



# “Differential” Diagnosis

- Sleep disorder (OSA)
- Absence seizures
- Hearing impairment
- Learning disorder
- Sensory impairment
- Autistic spectrum
- Anxiety
- Lead toxicity
- Hyperthyroidism
- Encephalopathy
- Prenatal Alcohol Exposure
- Trauma/PTSD (does not necessarily negate ADHD diagnosis)
- TBI



# 11 Reasons the “Meds are Not Working” in ADHD (combinations likely)

1. They are working but wearing off
2. Poor sleep (obstructive sleep apnea)
3. Other types of behavioral problems (anxiety, oppositional)
4. Parental psychiatric disorders and chaotic family life
5. For adolescents, substance use (cannabis)
6. Child not taking medications (diversion?)
7. Lack of exercise and too many screens
8. Learning disorder
9. Poor nutrition (eating breakfast?)
10. Dose too low
11. Wrong kind of therapy



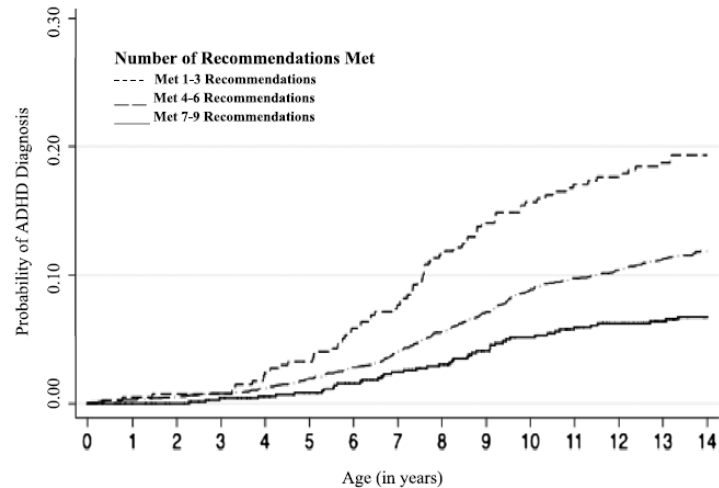
# Comprehensive Treatment for ADHD (not all apply to every child)

- Medications as appropriate
- Individual therapy and/or coaching
- Parent behavioral training
- Good night's sleep
- Regular exercise
- Good nutrition
- Screen limits
- Regular reading
- Mindfulness practice
- School-based skills and accommodations



# ADHD and Healthy Behaviors

(Loween et al, Psychsom Med, 2020)

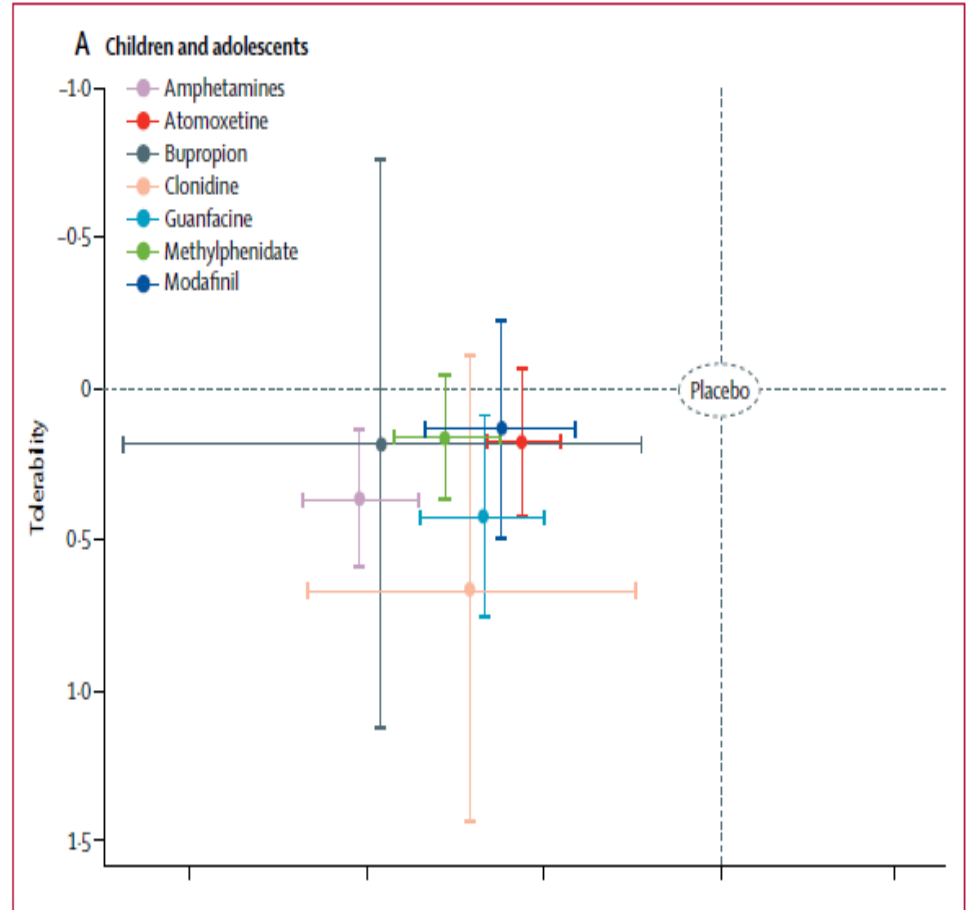


- Average child meets 5/9 healthy behavior recommendations (sleep, physical activity, screens, nutrition, etc.)
- Those meeting 6-9 guidelines 62% less likely to receive ADHD diagnosis than those meeting 1-3
- Divergence in diagnosis by guidelines evident early in life

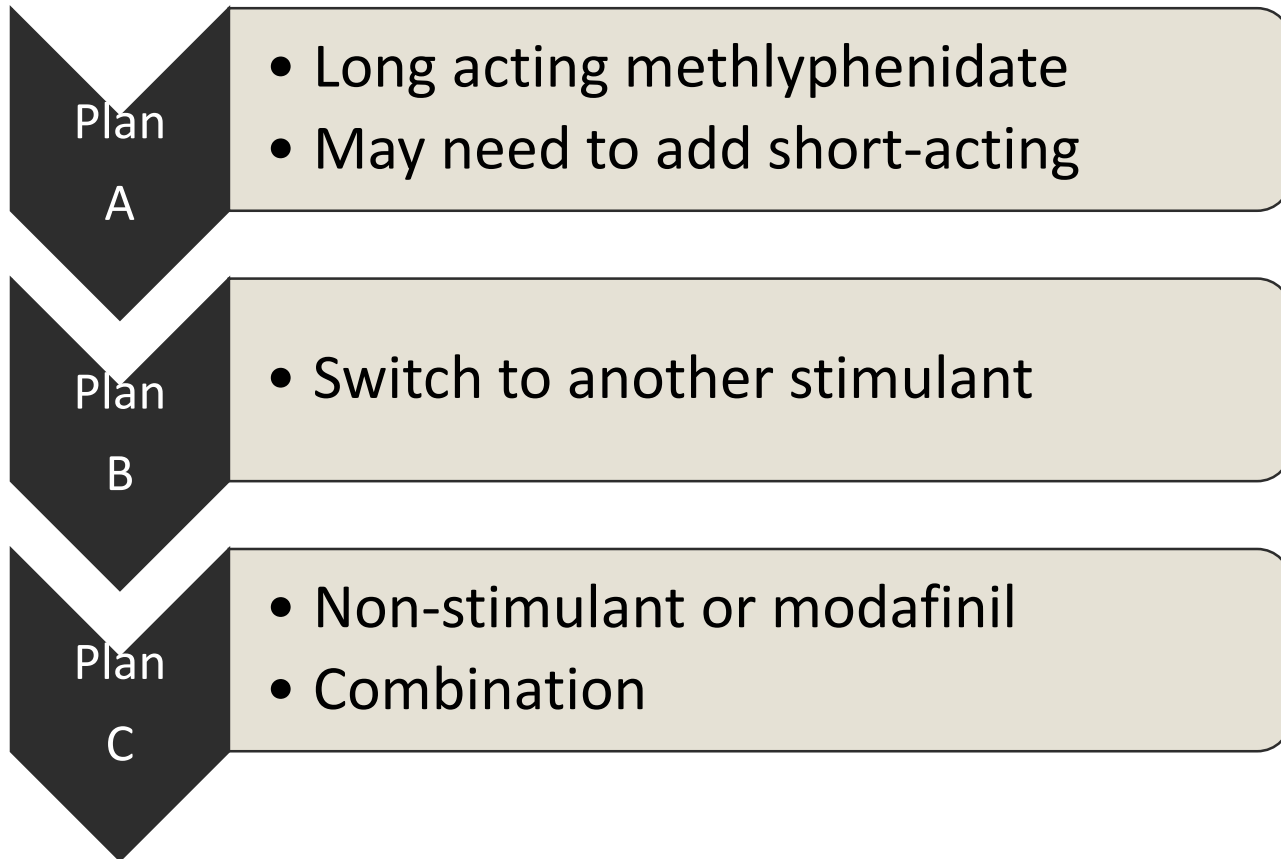


# First Line Medication

- Meta-analysis of 133 clinical trials (Cortese et al., Lancet Psychiatry, 2018)
- Concluded that methylphenidate preparations had best efficacy to tolerability profile for youth



# Rational Medication Plan



Adapted from CMAP Texas Algorithm Project

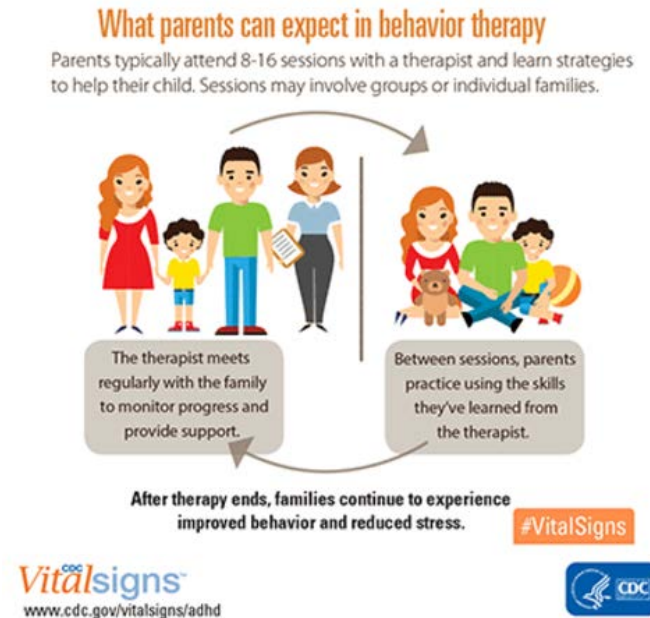
# Medications Considerations

- Aggression: consider guanfacine/clonidine
- Anxiety: consider guanfacine/clonidine/atomoxetine
- Substance use: Vyvanse, nonstimulant, supervised medication taking
- Don't forget about modafinil



# Non-pharmacological treatment

- Parent Behavioral Training
- Other types of therapy not found to be less useful such as play, supportive therapy
- ADHD coaching can help for strategies to help with forgetfulness, losing things, disorganization,



# Video Game Treatment?



- First “digital therapy” EndeavorRX approved by FDA in 2020 after several clinical trials (Kollins et al., 2020)
- Protocol is to use for about 25 minutes per day, 5 days per week for 4 weeks
- Amount of improvement modest and some methodological problems (use of computer test as primary outcome)



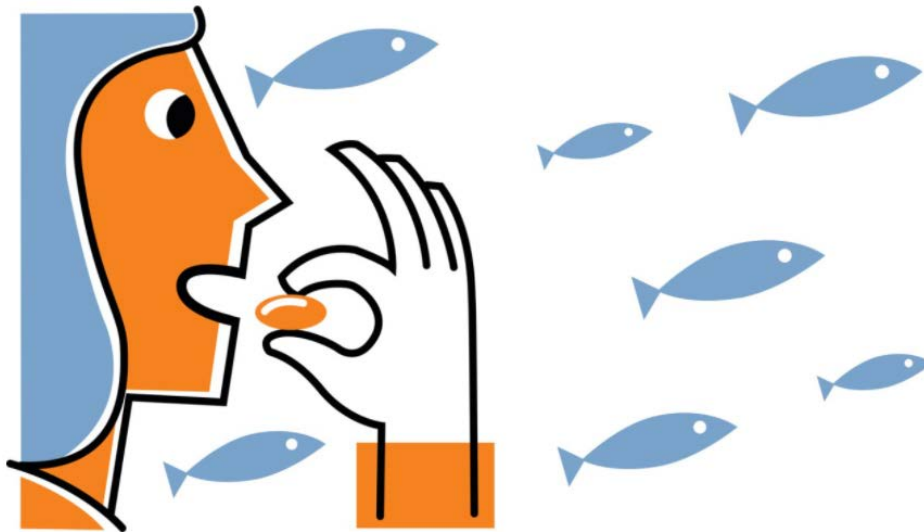
# Possible Lab Testing in ADHD

- Iron and ferritin – growing body of work showing important role of iron in brain functioning and relations to ADHD and other disorders
- Lead – often checked early but may be missed
- Vit D – some research linking with ADHD but research not yet conclusive
- Other minerals (Mg, Zinc) also linked in some studies



# Omega-3 Supplement Studies

- Positive meta-analysis, although small effect (Block and Qawasmi, JAACAP, 2011)
- Studies suggest EPA dose of over  $>500\text{mg}$  and ratio of EPA to DHA of around 4



- RECORDING TO BE STOPPED FOR CASE PRESENTATION



# Cases/HIPAA

- Names
- Address
- DOB
- Phone/Fax #
- Email address
- Social Security #
- Medical Record #



The discussion and materials included in this conference are confidential and privileged pursuant to 26VSA Section 1441-1443. This material is intended for use in improving patient care. It is privileged and strictly confidential and is to be used only for the evaluation and improvement of patient care.



# Case



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# Questions and Concerns/Discussion



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# Conclusion

- Volunteers to present cases (this is key to the Project ECHO model)
  - Please submit cases to [Michael.Hoffnung@uvmhealth.org](mailto:Michael.Hoffnung@uvmhealth.org)
- Please complete evaluation survey after each session
- Claim your CME at [www.highmarksce.com/uvmmed](http://www.highmarksce.com/uvmmed)
- Please contact us with any questions, concerns, or suggestions
  - [Michael.Hoffnung@uvmhealth.org](mailto:Michael.Hoffnung@uvmhealth.org)
  - [Julie.Cole@uvm.edu](mailto:Julie.Cole@uvm.edu)
  - [ahec@uvm.edu](mailto:ahec@uvm.edu)

