A young child with long, wavy brown hair is shown in profile, covering their face with both hands. They are wearing a dark blue t-shirt. The background is a blurred forest scene with green foliage and a path of purple flowers. The text 'ATTENTION DEFICIT DISORDERS' is overlaid on the left side of the image in white, bold, sans-serif capital letters.

ATTENTION
DEFICIT
DISORDERS

Housekeeping

- Schedule
- Questions

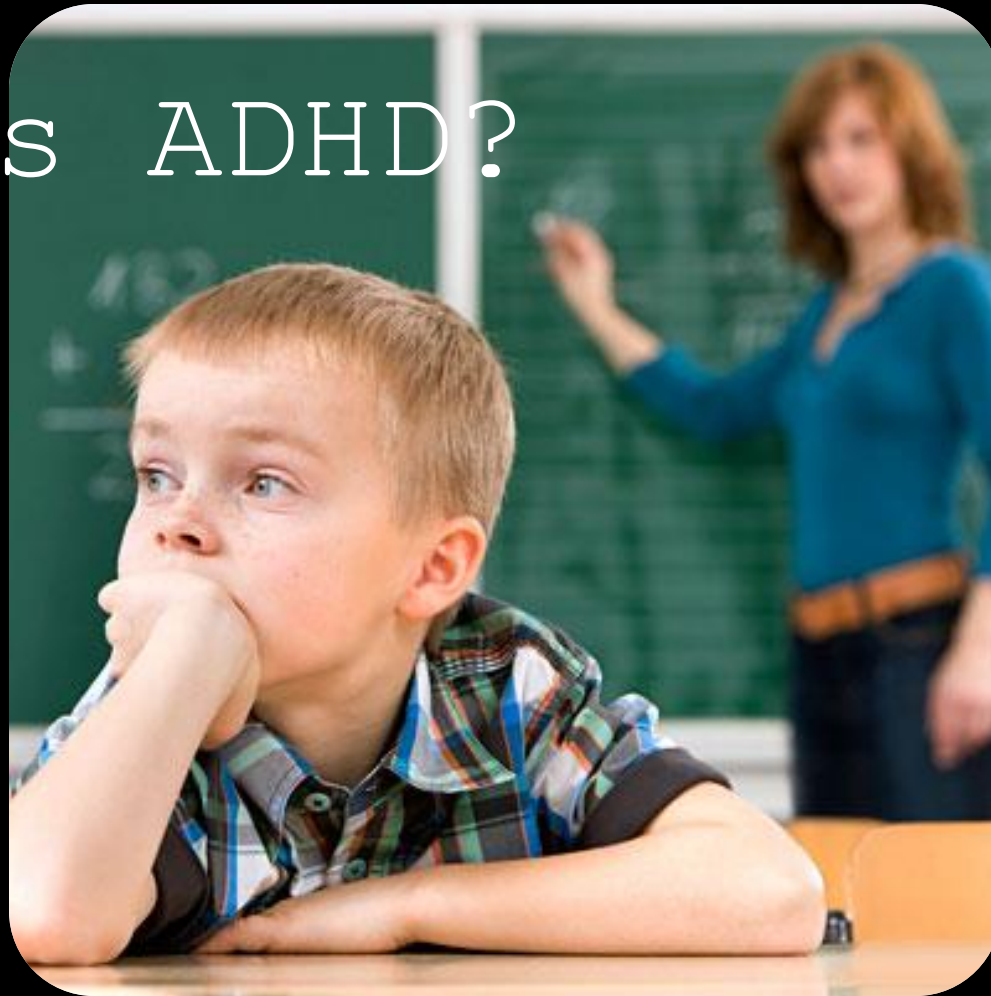


No greater
blessing in
the life of a
child with
ADHD than
adults who
understand
ADHD.

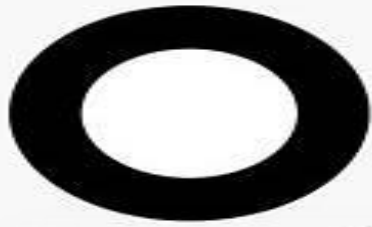


Myths & lack of deeper understanding of ADHD results causes us to treat people with ADHD in ways that can only hurt them.

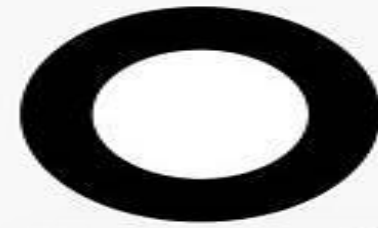
What is ADHD?



It's when someone
has trouble
paying attention



...and some are hyper
and some are just
ADD.



A person wearing a dark suit, white shirt, and dark tie is holding a light gray rectangular sign in front of their face. The sign has the word "NO" written on it in large, bold, black, sans-serif capital letters. The person's hands are visible at the bottom corners of the sign, gripping it. The background is plain white.

NO

What is ADHD/ADD?

- *Common* disorder (3-6%). Cross-cultural, but differences in *diagnosis* rates
- Cause? Genetics & multiple environmental factors
- *Extensively* researched with broad agreement

What is ADHD/ADD?


- Treatable, but can be a serious chronic disorder
- As a rule, without treatment, ADHD contributes to lots of problems, extending into adulthood
- At least half of childhood cases will need longterm treatment.

What is ADHD/ADD?

Problems with

- Focus & attention
- Impulse control / hyperactivity (in most cases)
- Emotional regulation
- Other associated problems

Official TYPES of ADHD

- **Inattentive Type (“ADD”)**
 - **Hyperactive/Impulsive Type**
 - **Combined Type**
- 

ADHD

- **Inattentive Type:** Problems with focus. Common to have associated features, but no significant problems with impulsivity or hyperactivity
- Hyperactive/Impulsive Type
- Combined Type

ADHD

- Inattentive Type
- **Hyperactive/Impulsive Type: H/I symptoms are more significant than inattention symptoms**
- Combined Type

ADHD

- Inattentive Type
- Hyperactive/Impulsive Type
- **Combined Type:** Problems with focus AND problems with associated features, and impulsivity /hyperactivity.

ADHD, Combined Type

Has both sets
of
characteristic
s: (Inattention
AND
Hyperactivity



Diagnosis: Always
compare child to peers.

Starts in early childhood.
Most do NOT "grow out of it."

Persists into adulthood but
can become less disabling,
especially with treatment.

“Growing out” of ADHD

- Meta-analysis (Roy, et al. *J. of American Acad. of Child & Adolescent Psychiatry*, Nov 2016, Vol 55, # 11)
- 450 subjects, average age 25, diagnosed with ADHD as children.
- About 50% no longer had significant impairment. 50% did.

ADHD: The Core Deficits

- ATTENTION
- BEHAVIORAL INHIBITION
(IMPULSIVITY /
HYPERACTIVITY)
- EMOTIONAL REGULATION

ADHD: The Core Deficits

- ATTENTION
- BEHAVIORAL INHIBITION
(IMPULSIVITY /
HYPERACTIVITY)
- EMOTIONAL REGULATION

Disorder of age-inappropriate behavior in two (or three) neuro-behavioral areas:

Inattention

- Poor *persistence* toward goals or tasks
- Distractible
- Trouble re-engaging after distraction
- Impaired working memory

What is ADHD?

(notes about paying attention)

- Attention span is often ***fine*** in activities child finds interesting & fun.
- Q: Can child pay attention to *not-s interesting & fun*
- Good days/bad days



ADHD: The Core Deficits

- ATTENTION
- **BEHAVIORAL INHIBITION
(IMPULSIVITY /
HYPERACTIVITY)**
- EMOTIONAL REGULATION

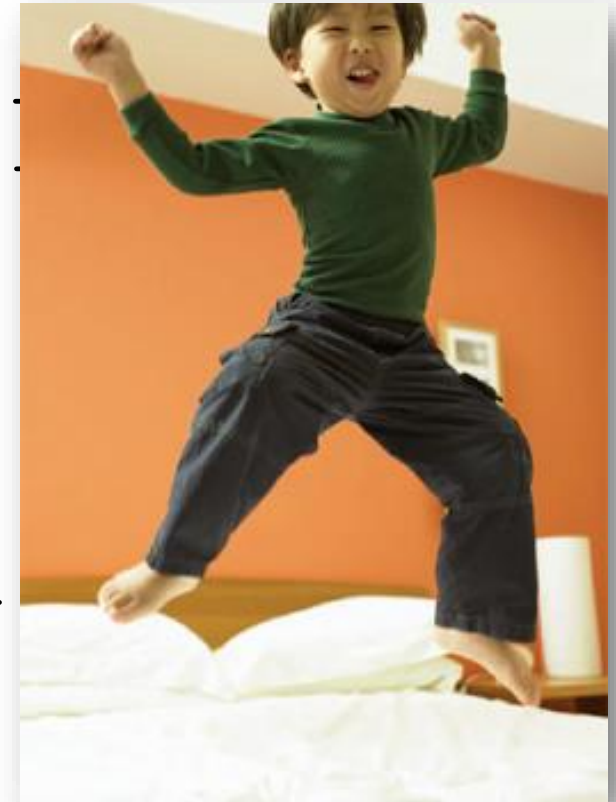
Civilization requires that most people, most of the time, inhibit their impulses.

No one can function, or survive, without this ability.

That ability is (often)
RELATIVELY lacking in ADHD.

Hyperactivity-Impulsivity (Inhibition)

- Moving around too much
- Blurting things out
- Acting before sufficiently thinking
- Fidgeting, squirming, running, climbing



ADHD: The Core Deficits

- ATTENTION
- BEHAVIORAL INHIBITION
(IMPULSIVITY /
HYPERACTIVITY)
- **EMOTIONAL REGULATION**

EMOTIONAL DYSREGULATION in ADHD

- Quick anger/hostility
- Even POSITIVE emotions tend to be poorly controlled.]
- Difficulties offsetting a negative emotion with a positive one

ADHD: The Core Deficits

- ATTENTION
- BEHAVIORAL INHIBITION
(IMPULSIVITY /
HYPERACTIVITY)
- EMOTIONAL REGULATION







**“ADD WITHOUT
HYPERACTIVITY”
ADHD, Predominately
Inattentive Type**

“ADD WITHOUT HYPERACTIVITY”

- Not nearly as well researched or understood
- Confusing terminology: “ADD,” “Just ADD,” “ADHD WITHOUT HYPERACTIVITY,” **“ADHD, PREDOMINANTLY INATTENTIVE TYPE”**

“ADD”

- Associated with significant impairment, social & academic, & for adults, occupational problems.
- Risk for anxiety & depression
- Stimulant use common.

- Shy, reticent, withdrawn
- Daydreamy, sluggish
- No impulsivity (motor or verbal) or behavior problems
- Poorly organized
- Passive in school

ADD

- Rarely aggressive. Rarely act-out.
- More prone to anxiety & depression
- Parents generally less stressed (so may be less motivated to treat)
- Parents more concerned about academics
- Symptoms may actually increase slightly with age
- Later age of diagnosis typical

ADD

Treatment implications

- Less likely to respond *as robustly* to stimulant medications (but still treatment of choice.)
- Treatment of anxiety or related OCD often needed.

Back now to ADHD in general...

ADHD: More common features

- 2-3 year delay in overall maturity common.
- Prone to other conditions (2 out of 3):
Depression, anxiety, and especially learning disabilities.
- Problems with sense of time.
- Academic problems common.
- Impulsivity a major source of problems & complications.

Causes?

- Neurobiological basis
 - Precise nature unknown
 - (FDA has allowed marketing of a diagnostic system based on EEG. Calculates ratio of brain wave frequencies.)
- Strong genetic connection
 - *Genetic contribution to ADHD is almost as strong as the genetic contribution to height.*
- Sometimes related to nervous system damage
 - Birth, accidents, severe illnesses

**No greater blessing in the life
of a child with ADHD than
adults who understand ADHD.**

ADHD: The Core Deficits

- ATTENTION
- BEHAVIORAL INHIBITION
(IMPULSIVITY /
HYPERACTIVITY)
- EMOTIONAL REGULATION

Adult Complications of untreated ADHD

- School underachievement/failure
- Depression, self-harm, suicide
- Poor relationships, including marriages (divorces)
- Substance abuse
- Job problems

Adult Complications of untreated ADHD

- Financial problems (Lower SES, underemployment & financial mismanagement)
- Incarcerations
- Unplanned pregnancies
- *ACCIDENTS (driving, head injury)*

Impulsivity: A critical factor

- 3 types?
 - Motor
 - Drives hyperactivity; accident risk; social difficulties; high-risk behavior
 - Verbal
 - Social difficulties, problems in classroom.
 - Emotional

ADHD (NOT the medication) creates added risk of substance abuse

- 2011 analysis of 30 studies.
- Children with ADHD at risk for developing
 - Alcohol use disorder by early adulthood (but not a HUGE added risk)
 - Tobacco use by middle adolescence (considerably higher risk)
 - Risk for other substance abuse problems not as clear

ADHD and Executive Functioning

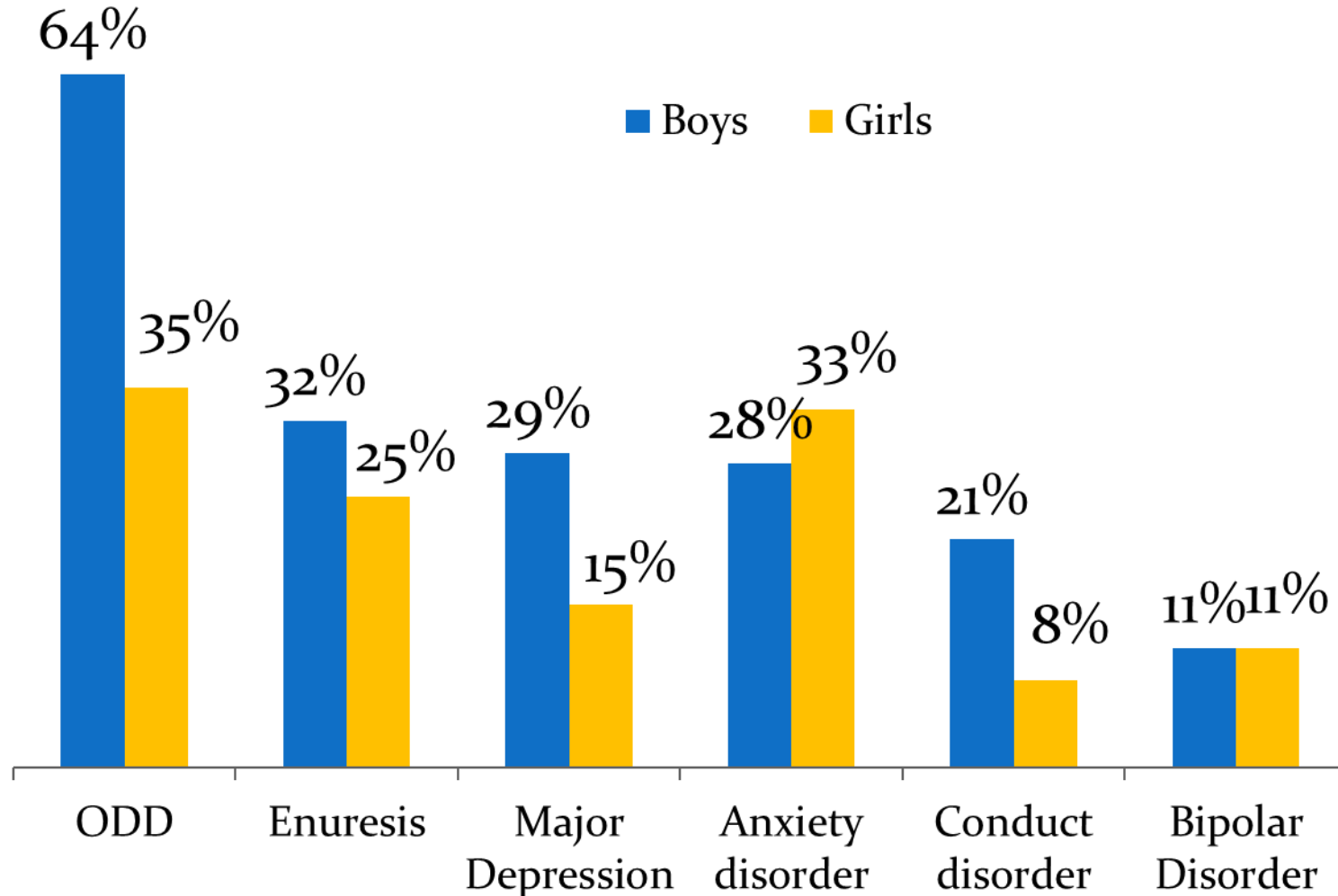
- Working memory
- Time management
- Regulation of emotions
- Planning
- Forethought
- Learning from consequences
- Organization

Common co-occurring disorders

Perhaps as many as 70% of people with ADHD will qualify for another diagnosis at some point.

Lifetime Prevalence in Pediatric Population with ADHD

(Biederman, 2004)



ADHD & Girls: New Study (UCLA, PEDIATRICS, Oct 2016)

2000 girls between 8-13

Co-occurring disorders	ADHD GIRLS	Non-ADHD GIRLS
Anxiety Disorder	38%	14%
Depression	10%	3%
Oppositional/Defiant	42%	5%
Conduct Disorder	13%	<1%

Girls with attention deficit hyperactivity disorder are at higher risk than girls without ADHD for multiple mental disorders that often lead to cascading problems such as abusive relationships, teenage pregnancies, poor grades and drug abuse.

ADHD is NOT merely a person who has trouble paying attention, who may or may not be hyperactive.



An example of ADHD complexity



ADHD patients require more dental care. Why?

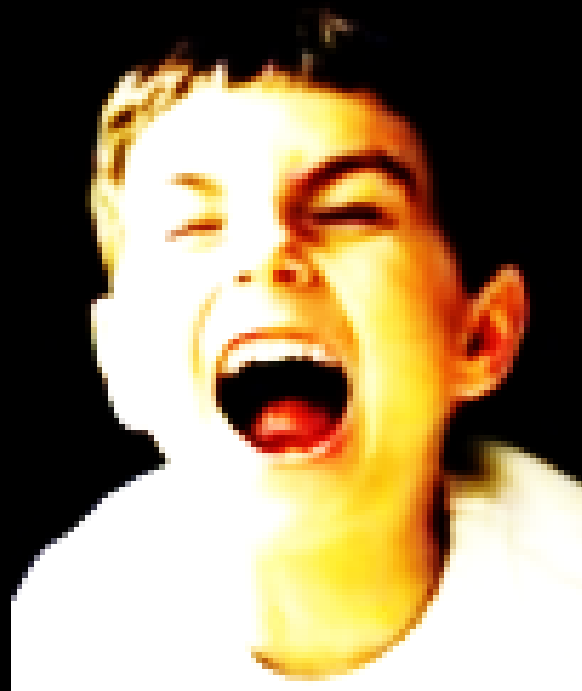
An example of ADHD complexity



ADHD patients require more dental care. Why?

1. Impulsivity = accidents = dental trauma
2. Poor hygiene
3. Grinding teeth
4. Genetics: thinner enamel?
5. Genetics: less resistance to oral bacteria

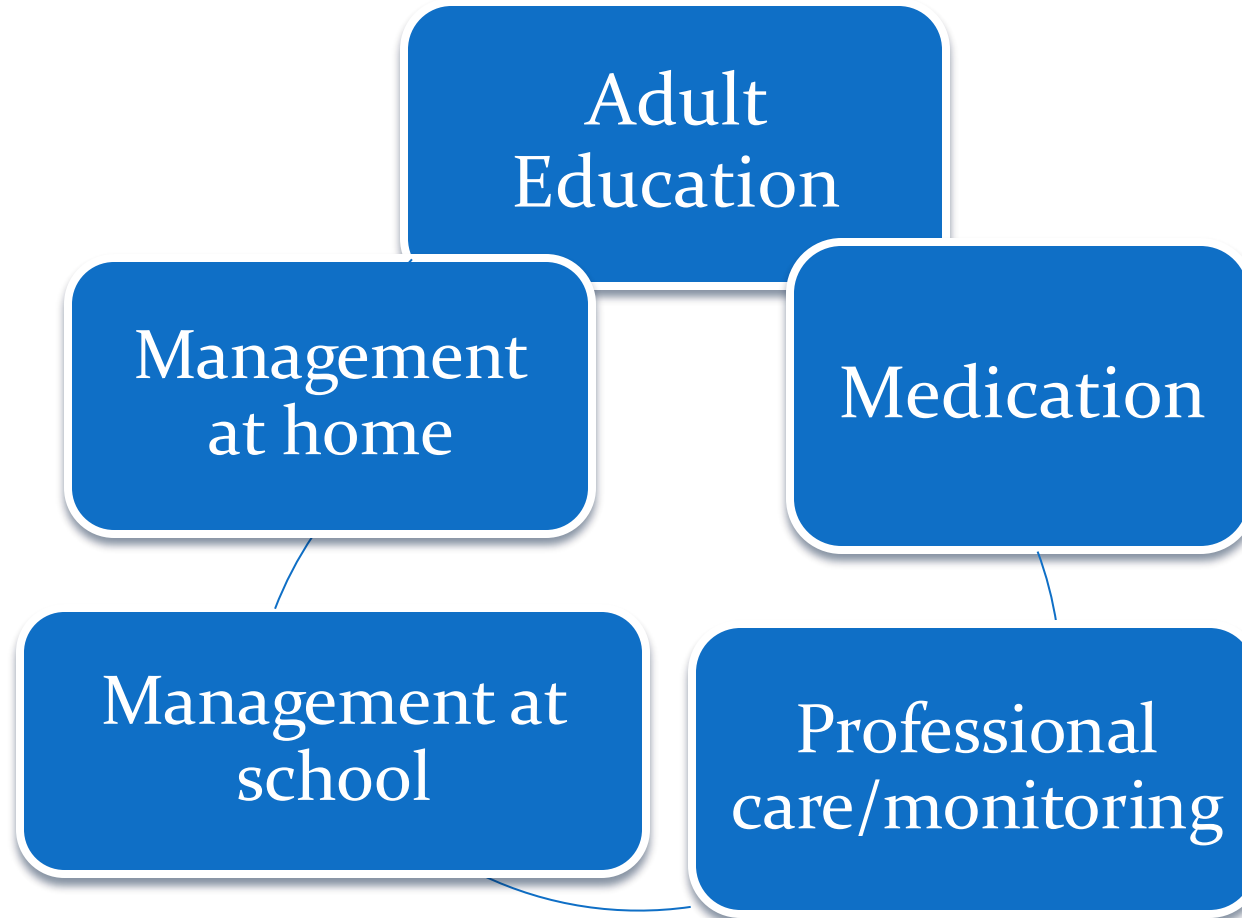
Treatment



Life of the child with ADHD

- Often inadequate medication treatment.
 - Low doses
 - Try 2, then quit
 - Poor persistence of treatment, even when it works
- Behavioral treatments helpful but require lots of it, so rarely done adequately.
- Most adults in child's life don't understand the disorder. Myths and misunderstandings abound.
- Judgments made about child's character.
- Get fussed at *all* the dang time.

Treatment



Consider adding **complementary interventions**

March 2024 review of research (Pediatrics)

LARGE IMPROVEMENT	MODERATE IMPROVEMENT	LOW (but some) IMPROVEMENT
Amphetamines (the Adderall family)	Methylphenidate (the Ritalin family) Non-stimulant meds (FDA-approved)	Psychosocial treatment Parent support Neurofeedback Cognitive training Nutritional interventions
Available, lower cost Side effects (appetite chief among them)	Available, lower cost Side effects (appetite chief among them)	Far less available, more costly, more time-consuming. No adverse effects (other than time/money!)

Surprisingly...

Combination therapies, such as medications plus psychosocial, were not more effective than either alone.

“Clinical guidelines currently advise treatment of youth >6 years of age with FDA-approved medications, which the findings of this review support. Furthermore, FDA-approved medications have been shown to significantly improve broadband measures...(and) have been shown to improve disruptive behaviors, suggesting their clinical benefits extend beyond improving only ADHD symptoms.”

Bradley, Peterson, et. al. “Treatments for ADHD in Children and Adolescents: A Systematic Review” PEDIATRICS. 2024: 153(4)

ADHD: Medication categories

- **Stimulants (short-acting/long-acting)**
- **Non-Stimulants specifically for ADHD (Strattera)**
- **Non-Stimulants, devised and used for other disorders, but also used for ADHD (Intuniv, Kapvay)**

Complete, updated listings

<http://www.adhdmedicationguide.com/>

Stimulants

- Most common
- Short acting vs. Long acting
- Could say short, medium, long
- In and out
- Side effects
- Addiction?



Some newer ADHD medications, methyphenidate (Ritalin) family

Cotempla XR-ODR	Time release, melts in mouth
Aptensia XR	Time release capsules. All day
Quillivant XR	Liquid, all day
Quillichew ER	Chewable, all day
Adhansia XR	Capsules, all day, high dose
Jornay PM	Take at night, delays release for 10-12 hours, so patient wakes up with medicine fully in bloodstream.

Some newer ADHD medications, Adderall family

Adzenys XR-ODT	Time release, melts in mouth
Adzenys ER	Liquid, all day
Dyanavel xR	Liquid, all day
Mydayis	Chewable, all day
Evekeo	Another short-acting Adderall
Evekeo ODT	Melts in mouth, short acting
Zenzedi	Another short-acting Adderall, at different doses than previously available
ProCentra	Liquid, short acting

Stimulant controversies

Does stimulant treatment of ADHD lead to substance abuse?

- No. Accumulating evidence *ADHD* puts people at risk for substance abuse.
- Metastudy published in 2003 suggested stimulant Rx *reduced* subsequent risk of substance abuse.
- More recent and larger metastudy (2013) found no link between stimulant treatment & subsequent risk of substance abuse.

Growth suppression

- Greatest in first year of treatment.
- Decreased in 2nd year of treatment.
- Absent in 3rd year.
- Total growth suppression on average was less than 1 inch in the first two years, none after that. Awaiting longer-term follow-up.

Strattera (atomoxetine HCl)

- Non-stimulant
- 2-4 weeks to get going & stays in system
- Some (low) risks of allergic reaction, heart problems, liver disease.
- When it works, it works.

Alternative Therapies

Uncle Dale's rule of Some:

- *Some* studies show *some* ADHD people may get *some* better on *some* alternative treatments.
- No alternative treatments work as well as medication (on a group basis)
- Rarely will an alternative treatment be adequate alone (without medication).
- Look for *research basis*, not individual success stories.
- Consider the cost/benefit.

Alternative treatments with inadequate or no scientific support

- Diet supplements*
- Herbal supplements
- Multivitamins
- ADHD Diets (some modest success with extremely strict & limited diets)
- Food dyes-modest effects on small number of people
- Homeopathy
- Chiropractic
- Visual (eye) exercises
- Psychotherapy to get at “root of the problem”

Alternative treatments with best evidence of helpfulness

EXERCISE/MOVEMENT

(strong evidence)

Increased OMEGA FATTY ACIDS

(moderate evidence)

Alternative treatments with best evidence of helpfulness

EXERCISE/MOVEMENT

(strong evidence)

Doesn't matter what kind of exercise.

Being outside ("Green Therapy")

Martial Arts often a good choice.

Diet

- *Some* studies suggest *some* patients do *some* better on **very strict** elimination diets
- Three European studies indicates good results from a “strictly supervised” “few-foods” elimination diet.
 - Typical diet:
 - **Rice, turkey, lamb, vegetables, fruits, margarine, vegetable oil, tea, pear juice.**
 - **No red meat, fish, dairy, pasta, bread, sugar, artificial additives, etc.**

Diet

- A minority of individual children *may* respond to smaller and more specific dietary changes.
- There is some support for reducing artificial dyes and sodium benzoate.
- Science and I say you can't fix ADHD with diet.

Diet

- We would ALL do well to eat a wholesome, organic diet. Just not clear how much more ADHD patients would benefit from benefit we would ALL get.
- Look for signs of reactions to food additives. Try reducing those. Balance the benefit against the stress it causes you and your child.

Omega-3 Fatty Acids

Bloch and Qawasmi (2011) reviewed the literature & performed meta-analysis of studies to date.

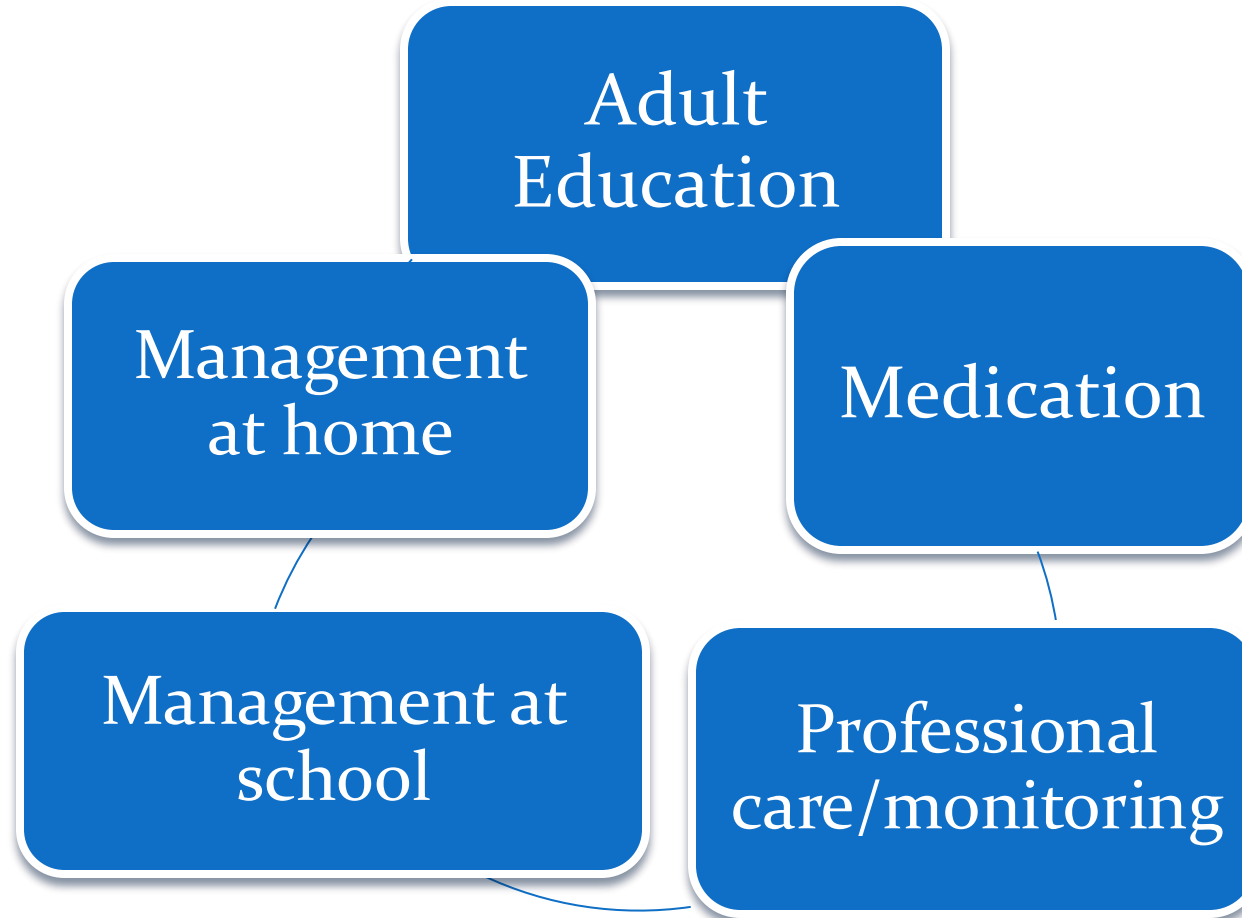
- 699 subjects in various studies, all children & youth.
- “Small, but significant” overall effect.
- Higher doses of particular Omega-3, eicosapentaenoic acid (EPA) most effective.
- Authors recommended against substituting these for ADHD meds.
- Consult doctor.

ADHD Medications

... are relatively safe
and relatively effective.

... there are no absolutely safe
and absolutely effective
medications.

Treatment



School and ADHD

The *ideal* educational program

- **Education about ADHD** to student, parents, and educators
- Better understanding of **strengths, weaknesses, impairments**
- **Reasonable goals**, with balanced life in mind, monitored and revised
- **Skills** to address executive function deficits

Just know...

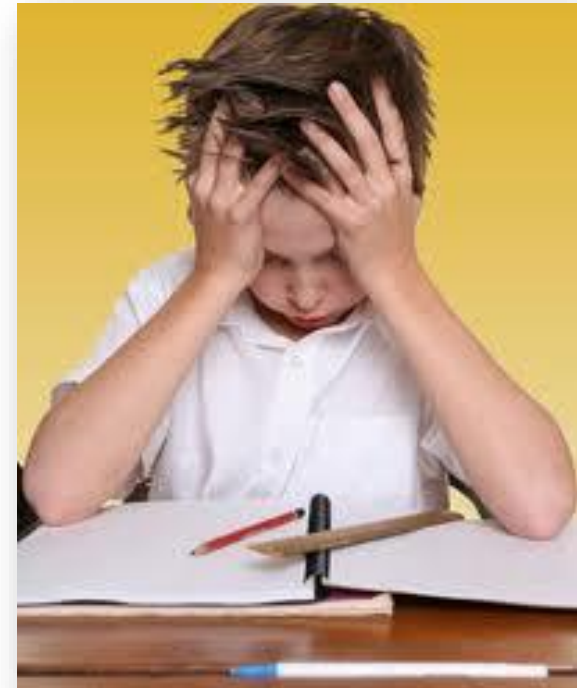
- You have to advocate for your child.
- Number of students with disorders and disabilities has expanded rapidly.
- Range of measures we are expected to take for each child has expanded.
- Resources, and funding, have *not* expanded.

Things to discuss with school

- Staff training on ADHD. (When was the last time & how much?)
- What is our plan for this student with ADHD?
- Section 504 and Special Education
- Reduction of homework
- Consideration of role of impulsivity in disciplinary matters.

The curse:

Almost no one the student encounters truly understands the disorder.



Homework

- Reduce as much as you are able and willing, provide more time **WITH PROMPTS** and support.



Parenting

Books

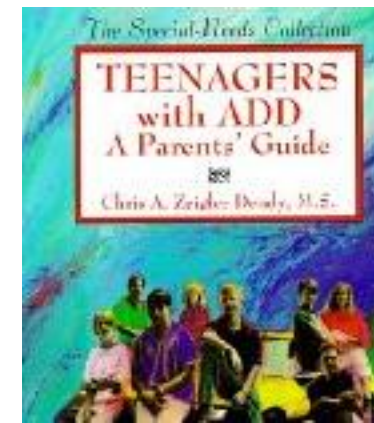
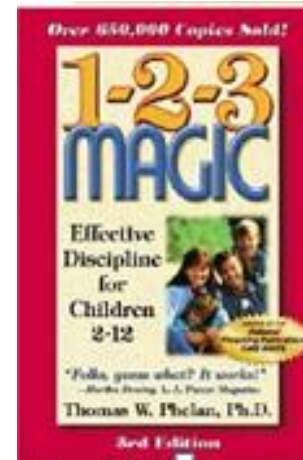
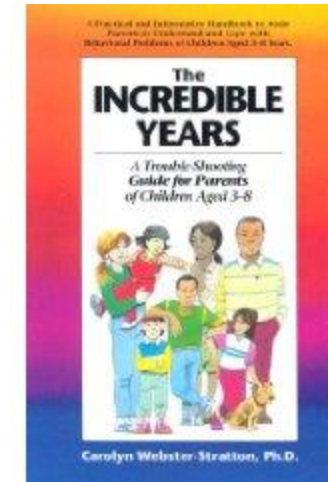
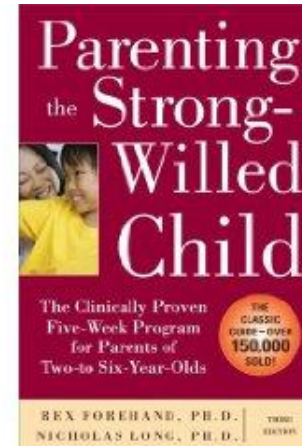
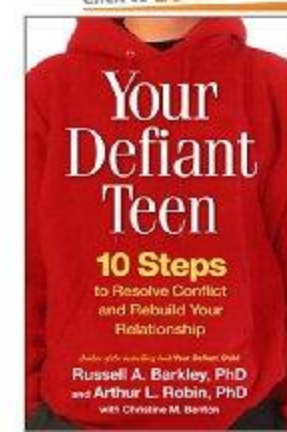
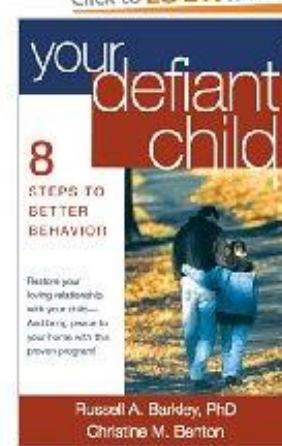
Russell Barkley: *Your Defiant Children and Your Defiant Teen*

Rex Forehand: *Parenting the Strong-Willed Child*

Carolyn Webster-Stratton: *The Incredible Years.*

Thomas Phelan: *1-2-3 Magic.*

Chris Zendy: *Teenagers with ADD.*



THIRD EDITION Over 300,000 in print!

"This is not just another book. This is a great book....Although aimed at parents, [it] has something for everyone involved with ADHD kids: teachers, psychologists, doctors, and family."

—*Pediatric News*

Taking Charge *of* ADHD

The Complete,
Authoritative Guide
for Parents



RUSSELL A. BARKLEY, PhD

The ADHD family

- ADHD, among other things, is about trouble with focus & attention, impulsivity and hyperactivity, and poor regulation of emotions.
- ADHD is very often hereditary, meaning an excellent chance at least one parent may have it, maybe a sibling or two.

ADHD FEATURE	Family impact
Inattention/Focus	Pay attention! How many times have I told you? You never mind me! You're so smart, what's with these grades?!
Hyperactivity/ Impulsivity	How could you have done that?! What were you thinking?!
Emotional Dysregulation	Calm down! (No, YOU calm down!) <i>Lots of frustration, conflict, shouting, fussing-at.</i>
Hereditary nature	<i>Parent with ADHD has trouble following through and being consistent, and has trouble controlling emotional reactions to child's behavior.</i>

Parenting

- **It's hard.**
- **No shortcuts or easy answers.**
- **Keeping disability perspective.**
- **Avoid judging your child's character or motives.**

Russell Barkley's Principles (modified)

- Give child more feedback & consequences, more frequently.
- Use larger and more powerful consequences.
- Use incentives before punishment.
- Help with keeping up with time.

Russell Barkley's Principles (modified)

- Strive for consistency.
- Act, don't yak.
- Plan ahead for problem situations.
- Don't personalize your child's problems.
- Practice forgiveness.
- Take care of yourselves.
- Use a solid discipline program

a discipline program

- Appropriate use of time-out (up through puberty)
- Shifting balance of positive and negative interactions
- Acknowledging good behavior. Fuss less.
- Avoid corporal punishment
- Parental control of parental anger



- Define age-appropriate, attainable goals
- Systematically reward each *small* achievement until behavior becomes routine.
- By rewarding positive behavior (rather than punishing negative behavior), you help your child feel successful — and further increase his motivation to do the right thing.

“discipline”

related to our overall relationship
with child

it must change as child develops

based on mutual respect

children differ in how much they
need “discipline.”

Effective “discipline”

occurs only when we have a handle on our own personal and emotional lives.

occurs only when we have no ax to grind with child.

requires a balance of negative and positive.

Effective discipline

isn't *always* effective.

requires planning, patience, and not
operating on the fly.

Discipline *harder* with ADHD

- More trouble attending to “commands.”
- More trouble persisting when trying to respond to commands.
- Rewards tend to wear off.
- Punishment not as effective.
- Spanking, at best, a waste of time.
- The “bad kid” role: “You NEVER listen. You NEVER mind.”

Our Responsibilities

- Being clear in communicating rules & expectations.
- Controlling our emotions during disciplinary moments.
- Not fighting dirty, name-calling, being hurtful.
- Being more mature than our children.

What works?

- Planning, forethought, patience.
- Communicating effectively
- Controlling our emotions and impulses.
- Being self-confident and showing it.

What works?

- Not allowing ourselves to be ruled by children's emotions & desires.
- Logical & Natural consequences of behavior.
- Time-Out combined with “Time-In”
- Connecting behavior with privileges, naturally.

Teaching your child to listen (and mind)

Dale Wisely, Ph.D.

Which children have trouble listening and minding?



Why won't my child listen?

Don't take it personally.

It's a part of growing up.

It's a *process*.

Why won't my child listen?

Ability to listen & mind must...

- develop
- be learned (and taught)

It's a *process*. And kind of a *long* one

Why won't my child listen?

Testing limits is normal and necessary.

Can I make my own decisions yet?





Ineffective
communication
by parents.



Teaching
your child to
listen (and
mind)

#1. Be heard. Literally



Hailing

Call name, await response

Orienting

Eye contact

Phrasing

“Would you do Mom a favor and sometime do” x?

vs.

“Please do” x “right away.”

#2. Prepare the child for problem situations.



Here's what's going to happen.

Here's what I expect.

#3. Inform. Don't accuse.

Accusations REQUIRE people to defend themselves.

ACCUSATION	INFORMATION
You always leave your dirty clothes on the floor!	Dirty clothes belong in the hamper.
Stop yelling!	I hear you better with a calm voice.
HURRY UP!!	Time is short, please make your choice.

#4. Ask questions to prompt solutions.

NAG	QUESTION
How many times have I told you to wash your face!?	What can you do to get your face clean?
Take out the garbage!	What job did you agree to do earlier?
GET DRESSED!	What is the best way to get dressed so we can be on time?

#4. Ask questions to prompt solutions.

NAG	QUESTION
Don't eat that crap!	What are healthy food choices?
Why are you acting like this in the store?	How will you let me know you are tired and ready to go home?
You can't watch that show!	How can we be sure you are watching appropriate shows?



use of spanking as disciplinary tool–

- increases aggression in young children in long run
- is ineffective in teaching responsibility & self-control.

American Academy of Pediatrics

use of spanking as disciplinary tool–

- New evidence: may cause harm to child by affecting brain development
- Other methods that teach children right from wrong are safer & more effective.

American Academy of Pediatrics

- ▶ Acknowledging goodness
- ▶ Working on relationship: Trust, affection
- ▶ Spending no-agenda time together

POSITIVITY

A decorative graphic consisting of several parallel white lines of varying lengths, slanted upwards from left to right, located in the bottom right corner of the slide.

- ▶ Ackno
- ▶ Worki
- ▶ affect



▶ Spending no-agenda time together

POSITIVITY



Spending no-agenda time
together

- ▶ For children with developmental, medical, physical, behavioral, and emotional difficulties, parents should seek guidance from health care professionals with a professional relationship with their children.
- ▶ Nothing in this talk should take the place of professional consultation.
- ▶ Parents with difficulties controlling their anger when disciplining their children should seek professional guidance.

DISCLAIMER!

Why won't my child listen?

Parents inadvertently teach
child not to listen until
screamed at.





1. Did I hear something?

2. She's not mad yet.

I'm good.

3. She's not *that* mad yet.

I'm good.

4. Uh-oh. Getting close.

5. She's screaming, better
get up and do it.



BREAKING OUT OF THE SPIRAL.

1 directive

1 warning

1 consequence

A decorative graphic consisting of several parallel white lines of varying lengths, slanted diagonally from the bottom right towards the top right, located in the lower right quadrant of the slide.

*Begin with **preparation**.*

1 directive, given properly.

- ▶ Compliance?: Acknowledge, thank.
- ▶ No compliance?:

1 warning.

Warning: If you don't do what I say, then (consequence.)

- ▶ Compliance? Acknowledge, thank.
- ▶ No compliance:

Consequence applied.

When the warning is ignored, don't accept "OK, OK, I'll do it!"



**TIME-OUT DOES NOT WORK
WITHOUT TIME-IN!**



clear
DIRECTION

WARNING

CHILD
DOESN'T
MIND

WHAT TRIGGERS TIME-OUT?



CLEARLY
ESTABLISHED
RULE BROKEN

ESPECIALLY
AGGRESSION

WHAT TRIGGERS TIME-OUT?

- ▶ Calmly, confidently explain procedure *in advance* of starting your T-O program
- ▶ Be prepared to spend some time getting over “the hump”

GUIDELINES FOR *FIRST* USE

▶ **Purpose:** To remove child from reinforcement of misbehavior OR from what s/he is doing **INSTEAD** of what you directed them to do.

GUIDELINES

- ▶ **Announce time-out with as few words as possible**
- ▶ **Observe while in time-out**
- ▶ **No eye contact, no talking**

GUIDELINES

▶ **Child must not be doing anything: Isolate from others as much as possible. No interaction!**

GUIDELINES

- ▶ 1 to 5 minutes in time-out, with added time as needed to get calm (sad / angry OK, bad behavior not OK)
- ▶ Move on when it's over. Don't talk about it.

GUIDELINES

TROUBLESHOOTING?



What about adolescents /
teens?

- How do we deal with...disrespect, challenging, noncompliant behavior in an adolescent or teenager?
- Don't be reactive and impulsive. Take a longer-haul approach with consequences linked to behavior.

Does it really matter if I follow the rules?



What do we *owe* our kids?

The non-negotiables

Food & Water

Shelter

School

Healthcare

Clothing

Protection from (some) danger

Raising the unspoiled child?

- Provide your child's needs and make the rest a "deal".
- The deal: I, as your parent, will enrich your life in exchange for respect, civility, basic obedience, you taking care of your responsibilities, etc.