Treatment of Anxiety Disorders in Children and Teens

Jessica Grant, MD, FAAP
Founder, Partner, and Pediatrician, Manhattan Valley Pediatrics, New York, NY
Project TEACH, Primary Care Champ









Jessica Grant, MD, FAAP

Founder, Partner, and Pediatrician, Manhattan Valley Pediatrics, New York, NY

Project TEACH, Primary Care Champ

Disclosures

Neither we nor our spouses/partners have a relevant financial relationship with a commercial interest to disclose.



Anxiety: Objectives for Primary Care

- Identify resources to help anxious children and their families
- Discuss the role of avoidance in anxiety disorders
- Understand the most utilized method of psychotherapy
- Identify CBT skills the general practitioner can implement in the office
- Understand the medication class of choice in pediatric anxiety disorders





Emily

- 8 yo girl who is brought in because of stomach aches
- Evaluated by GI and no medical condition identified
- Difficulties getting her to school since kindergarten (clingy, crying)
- In 2nd grade missed 10 days of school
- Now in 3rd grade, has missed 20 days of school to date
 - Goes to nurse often with stomach aches and leaves early
- No academic issues
- At home she appears comfortable
- Maintains friendships with small group of girls she has know since pre-K
 - Does not enjoy play dates or want sleepovers at friend's homes
- During office visit, she is quiet but smiles easily
- PE is unremarkable
- No known trauma/loss
- SCARED: 38



What treatment would you recommend?

- a. Write a letter for Home Instruction
- b. Refer for therapy and collaborate with the school
- c. Start a medication for anxiety
- d. Wait and monitor for now



Early Intervention: Anxious Temperament





Education of parents/teachers/doctors/others about all forms of anxiety

Goals of Early Intervention



Prevent the development of Anxiety Disorders in children with anxious temperament



Prevent generational transmission of Anxiety symptoms and impairment



Psychoeducation for Children

- What is Anxiety?
 - Anxiety is normal and helpful in small doses
- Why me?
 - Genes and temperament
 - Life experiences
 - Development of "thinking traps"
 - Escape and avoid = More anxiety



Psychoeducation for Parents

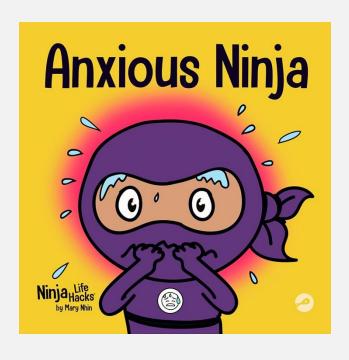
100% Accountability

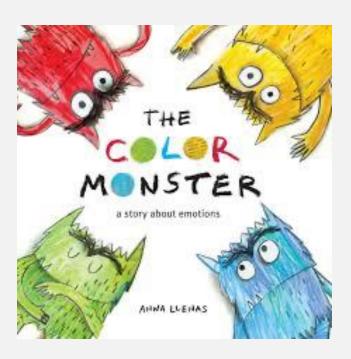
100% Accommodation





BOOKS FOR PRESCHOOLERS

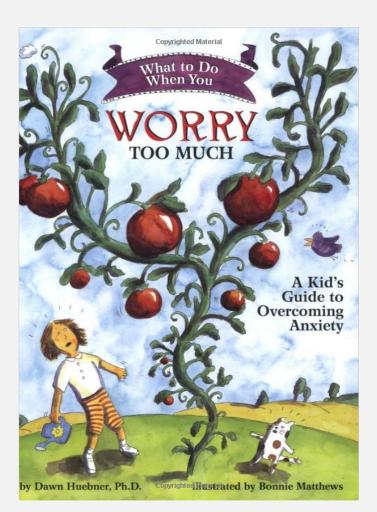


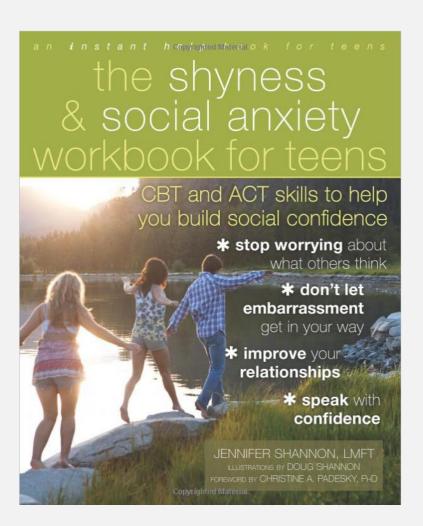


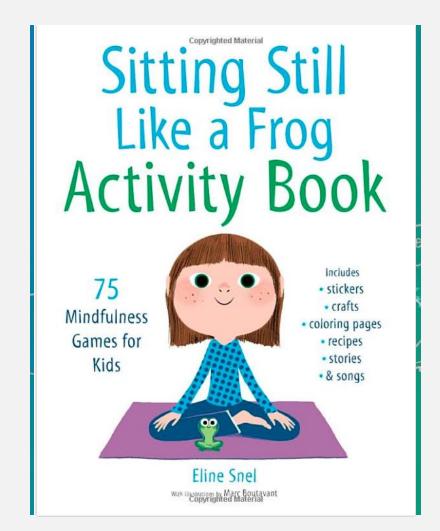




Books for Kids and Teens

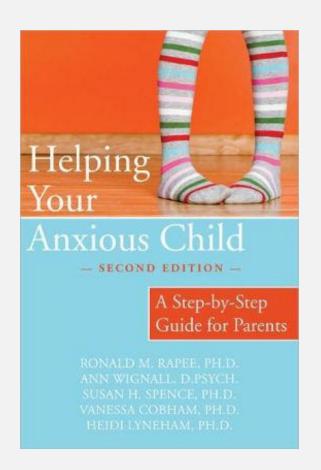


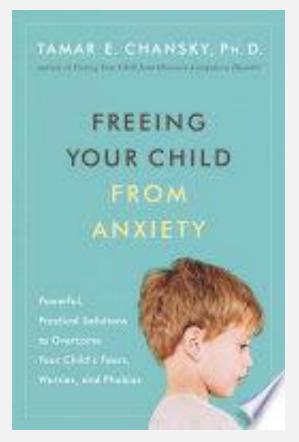


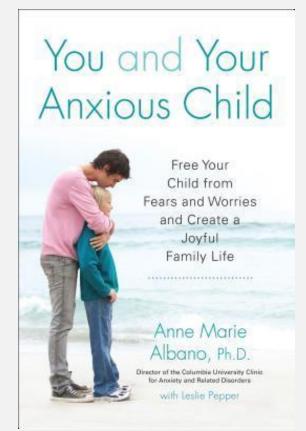


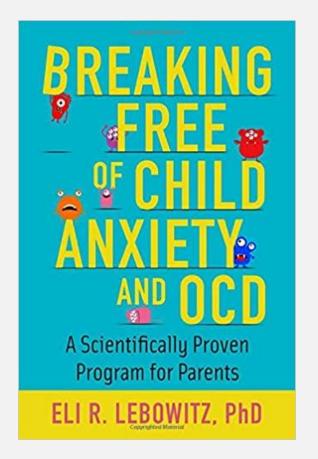


Books for Parents and PCPs











Treatment of Anxiety Disorders: Depends on Severity

Consider the 3 'Ps': Pervasive, Persistent, imPairing

	SCARED	Distress	Avoidance
Mild	<30	Some	Minimal
Moderate	30-40	Good deal	Some
Severe	41+	A lot	A lot



Mild Anxiety



Mild Anxiety Treatment

- Educate, support, monitor
- Bibliotherapy
- Cognitive Behavioral Therapy (CBT) skills in the office



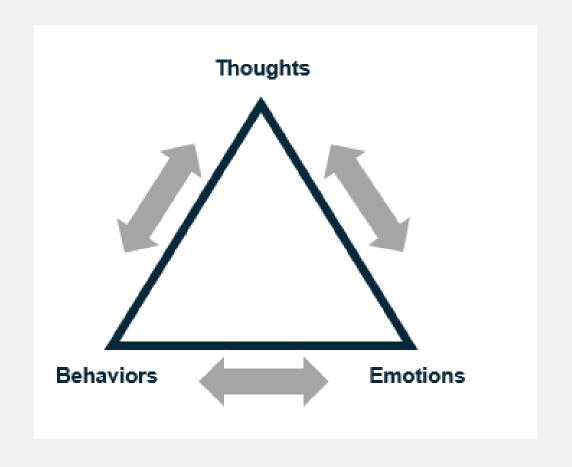
CBT Goals

- Extinguish avoidance behavior
- Increase healthy problem-solving
- Facilitate insight and self-efficacy
- Solidify gains and promote generalization



CBT Concepts

- Teach self-soothing and somatic management
- Identify and change maladaptive thinking
- Increase proactive approach behavior (graduated exposure)





Somatic Management

Goals:

- Develop tolerance of normal, expected levels of anxiety
- Learn & utilize strategies to calm self during stressful/ fear provoking situations or tasks

Methods:

- Breathing retraining
- Progressive Muscle Relaxation



Breathing Retraining

- Calms the nervous system
- Stimulate the vagus nerve
- Lowers heart rate and blood pressure
- Reduces stress hormones



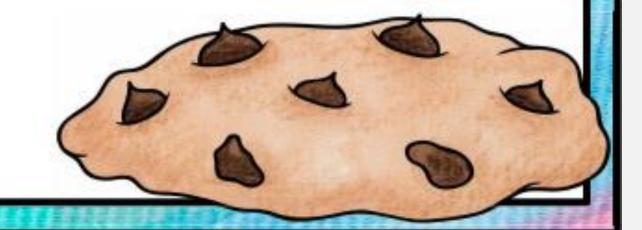
Belly Breath

Sit in your chair with your body tall, shoulders back, eyes closed. Lay your hands in your lap. Nice and relaxed.

Picture that I just baked some chocolate chip cookies. Take a deep breath in and smell the cookies. Hold that chocolatey smell for 3, 2, 1.

Slowly breathe out.

Let's repeat that again.





Progressive Muscle Relaxation

- Two step technique: tension and relaxation
- Pay attention to the feeling of relaxation when releasing the contracted muscle
- Practice daily, bedtime is often ideal
- Takes as little as 10 minutes per day to practice
- Younger child: parent reads the script, can use fewer body parts
- Can then utilize in other stressful situations



Relaxation Script Grades K-4 (Ollendick, 1978)

To begin the relaxation session, have the children sit comfortable in their chair and close their eyes. Soft, slow music can be playing in the background. When reading the script, speak in a soft, even tone. Pause between sentences.

Hands and Arms

Pretend you have a whole lemon in your left hand. Now squeeze all the juice out. Feel the tightness in your hand and arm as you squeeze. Now drop the lemon. Notice how your muscles feel when they are relaxed. Take another lemon and squeeze it. Try to squeeze it harder than you did the first one. That's right. Real hard. Now drop your lemon and relax. See how much better your hand and arm feel when they are relaxed. Once again, take a lemon in your left hand and squeeze all the juice out. Don't leave a single drop. Squeeze hard. Now relax and let the lemon fall from your hand. (repeat this process with the right hand and arm.)

Arms and Shoulders

Pretend you are a furry, lazy cat. You want to stretch. Stretch your arms out in front of you. Place them up high over your head, way back. Feel the pull in your shoulders. Stretch higher. Now just let your arms drop back to your side. Okay, kittens, let's stretch again. Stretch your arms out in front of you. Raise them over your head. Put them back, way back. Pull hard. Now let them drop quickly. This time let's have a great big stretch. Try to touch the ceiling. Stretch your arms way out in front of you. Raise them way up high over your head. Push them way, way back. Notice the tension and pull in your arms and shoulders. Hold tight now. Great. Let them drop very quickly and feel how good it is to be relaxed. It feels good and warm and lazy.



Muscle Relaxation: Script Conclusion

- Stay as relaxed as you can.
- Let your whole body go limp and feel all your muscles relaxed.
- As you go through the day, remember how good it feels to be relaxed.
- Sometimes you have to make yourself tighter before you can be relaxed, just as we did in these exercises.
- Practice these exercises every night to get more relaxed.
- When you are a really good relaxer, you can help yourself relax at school.
- Just remember the turtle, or the jawbreaker, or the mud puddle, and you can do these exercises and nobody will know.
- You've done a good job. You're going to be a super relaxer.



Moderate Anxiety

Exposure-based CBT or Psychopharmacology



Child-Adolescent Anxiety Multimodal Study (CAMS)

- Federally funded, multi-site RCT in 488 youth (7-17 Y/O) with a primary diagnosis of non-OCD anxiety disorder (separation anxiety disorder, generalized anxiety disorder, or social phobia)
- Randomized to 12 weeks of
 - CBT
 - Sertraline (SER)
 - Combination of CBT + SER (COMB)
 - Placebo (PBO)

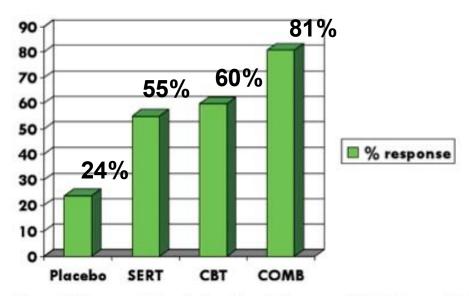
Walkup JT, Albano AM, Piacentini J, Birmaher B, Compton SN, Sherrill J, Ginsburg GS, Rynn MA, McCracken J, Waslick B, Iyengar S, March JS, Kendall PC. Cognitive-behavioral therapy, sertraline and their combination for children and adolescents with anxiety disorders: acute phase efficacy and safety. New England Journal of Medicine. Dec 25, 2008.



Child Anxiety Multimodal Study CAMS

CAMS (Child-Adolescent Anxiety Multimodal Study):





SERT=sertraline, CBT=cognitive-behavioral therapy, COMB=combination

Walkup JT et al, N Engl J Med, 2008;359:2753-2766

CGI-I 1 and 2 (ITT, LOCF)



Child-Adolescent Anxiety Multimodal Study

Mean dose of SER/PBO at final visit:

COMB: 134 mg/day

SER: 146 mg/day

PBO: 176mg/day

Walkup JT, Albano AM, Piacentini J, Birmaher B, Compton SN, Sherrill J, Ginsburg GS, Rynn MA, McCracken J, Waslick B, Iyengar S, March JS, Kendall PC. Cognitive-behavioral therapy, sertraline and their combination for children and adolescents with anxiety disorders: acute phase efficacy and safety. New England Journal of Medicine. Dec 25, 2008.



Serotonin Reuptake Inhibitors with FDA Approvals

- Approved for OCD
 - Clomipramine ≥ 10 yrs (TCA)
 - Fluvoxamine > 8 yrs (SSRI)
 - Sertraline ≥ 6 yrs (SSRI)
 - Fluoxetine \geq 7 yrs (SSRI)
- Approved for Depression
 - Fluoxetine ≥ 8 yrs (SSRI)
 - Escitalopram ≥ 12 yrs (SSRI)
- Approved for Non-OCD Anxiety
 - Duloxetine ≥ 7 yrs GAD (SNRI)



SSRI Efficacy for Non-OCD Anxiety Disorders

- Social Anxiety D/O, Generalized Anxiety D/O, Social Phobia
 - Fluvoxamine RUPP, 2001
 - Fluoxetine Birmaher et al, 2003
 - Sertraline (CAMS) Walkup et al, 2009
- Social Phobia
 - Paroxetine Wagner et al, 2004
 - Fluoxetine Beidel et al, 2007
 - Venlafaxine March et al, 2007
- Generalized Anxiety D/O
 - Sertraline Rynn et al, 2001
 - Venlafaxine Rynn et al, 2007
 - Duloxetine Strawn et al, 2015
 - Buspirone in GAD, unpublished negative trial



SSRI TREATMENT - Moderate Anxiety

- Patient and parent preference
- Too anxious to start CBT
- CBT not available
- CBT has failed or only partially resolved symptoms



Severe Anxiety

Exposure-based CBT and

Psychopharmacology



SSRI

Brand (off-label for non-OCD anxiety)	Generic	Target Dose	Starting Dose
Zoloft	Sertraline	25-200 for kids and adolescents	Start at 12.5-25 mg
Prozac	Fluoxetine	10-60 for kids and adolescents	Start at 5-10 mg
Lexapro	Escitalopram	10-20 for adolescent	Start at 5 or 10 mg



SSRI How-To: Part I

- Start at a dose lower than the expected therapeutic dose (fluoxetine 10 mg instead of 20 mg or sertraline 12.5mg instead of 25mg)
- If there are no side effects, go up in a week.
- Warn families that the early doses are to acclimate and test the waters.
- Get to a therapeutic dose in 2-4 weeks (clinical judgement).
- Patients should respond somewhat to therapeutic dose in 2-3 weeks.
- If no response, increase dose.
- If some response, wait 4-6 weeks (for full response to take effect) to decide if dose should be increased.



SSRIs

- Anxiety often needs higher doses
- Start with lower doses due to hypervigilance for side effects
- Warn about side effects
- Start low BUT do not forget to go up—Most treatment failure is just a failure to raise the dose enough!
- Younger kids respond well to all treatments but also have more side effects from meds
- Continue for 12 months of remission before tapering
- Plan taper around expected stressors



SSRI Side Effects

- Common Side effects of SSRI's:
 - Dry mouth
 - GI: Constipation, Diarrhea
 - Sweating, rashes
 - Sleep disturbance
 - Sexual dysfunction
 - Irritability
 - "Disinhibition" (risk-taking behaviors, increased impulsivity)
 - Agitation or jitteriness
 - Headache
 - Appetite changes



Side Effects

- More serious side effects
 - Serotonin syndrome (fever, hyperthermia, restlessness, confusion, etc)
 - Hypomania
 - Discontinuation syndrome (dizziness, drowsiness, nausea, lethargy, headache)
 - Suicidality



Other Meds for Anxiety

- SNRI—(Duloxetine) when failed SSRIs
- Evidence is not there to use the following as first or second line treatments:
 - Antihistamines
 - Beta blockers
 - Benzodiazepines
 - Buspirone



Sleep Hygiene

- Wind down period before bed
- Consistent bedtime schedule
- Physical activity during the day
- Limit caffeine and alcohol
- Create restful environment
- Nothing but sleep on the bed
- No napping

- No screens in the room
- Manage stress before bed
- If unable to sleep:
 - Change position
 - Read for 20 minutes
 - Muscle relaxation
 - Can do short trial of melatonin



Take-aways

- Early intervention with anxiety makes a difference.
- The pediatrician has a unique opportunity to identify anxious children.
- The pediatrician's office is an ideal setting to start treatment for anxiety.
- Medication and psychological approaches are effective for anxiety management. Medication should not be a last resort.
- Tools for management of anxiety can empower children and their parents.



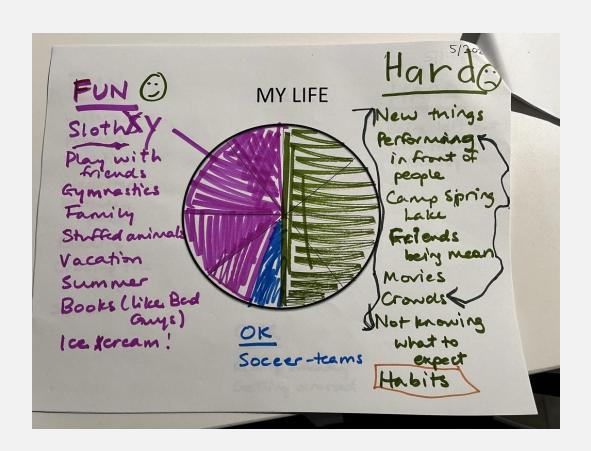


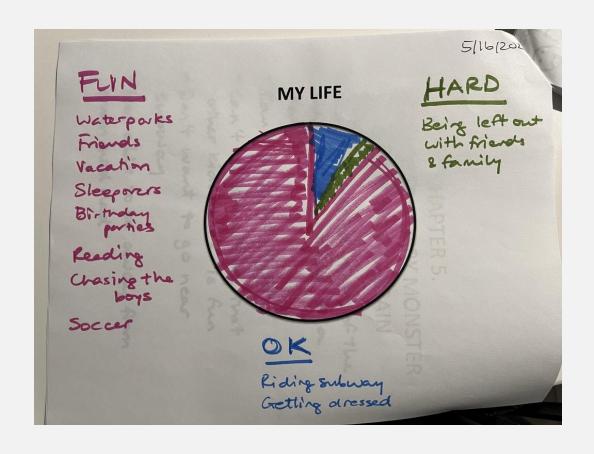
Emily

- a. Write a letter for Home Instruction
- b. Refer for therapy and collaborate with school
- c. Start a medication for anxiety
- d. Wait and monitor for now



The Pay-Off







Thank You!

Call Us

1-855-227-7272



