



“Comorbidities of ADHD”

AKA: Treating anxiety & depression in children

Katharina Manassis, MD, FRCPC

(www.katharinamanassis.com)



Objectives


1. To provide a step by step approach to assessing and treating anxiety and depression in children and teens (including ADHD comorbidity)
2. To reduce trepidation around prescribing SSRIs, yours and the families'
3. To allow for discussion of your cases!

Important disclaimer: Use of Selective Serotonin Reuptake Inhibitors (SSRIs) in persons < age 18 is considered Off-Label in Canada



Key Questions/Steps

- ▶ 1. Are you dealing with a primary disorder, or anxiety/depression secondary to a) another physical or mental disorder or b) family, school, or social factors?
- ▶ 2. What is the child's level of impairment?
- ▶ 3. What non-pharmaceutical resources or interventions might help?
- ▶ 4. What factors determine the choice of medication?
- ▶ 5. What is important to do/discuss when prescribing SSRIs?



1. Conditions that may mimic/co-occur with anxiety & depression


- ▶ Anxiety (physical): asthma esp. with overuse of Ventolin, caffeine, hyperthyroidism, poorly controlled diabetes, arrhythmia (rare)
- ▶ Depression (physical): infectious mononucleosis, hypothyroidism, medication-induced, post-concussion
- ▶ Anxiety (mental): ADHD, ASD, PTSD, LD, Depression, DMDD (explosiveness)
- ▶ Depression (mental): Anxiety-related avoidance, ADHD, LD, ASD, PTSD, severe PMDD, any chronic illness
- ▶ General Emotion Dysregulation: Developmental trauma (usually occurring at a time when the child was too young to remember)



Children are Different



- ▶ Symptoms have to be assessed in the context of child environment and child development (e.g., cognitive abilities of 5 year olds vs. 15 year olds; the destabilizing effect of puberty esp. in females; the increasing importance of peer and school success)
- ▶ Untreated anxiety, ADHD, etc. in childhood predisposes to teen depression, and once you are depressed your prognosis is worse
- ▶ Anxiety disorders are highly comorbid before puberty, then start to become more discreet after puberty; types same as adults (recognizing continuity)
- ▶ Reassurance-seeking = worry in younger children, somatic symptoms of anxiety are common (bellyaches), & tantrums are sometimes attempts to avoid anxious stimuli, as they have limited feelings vocabulary
- ▶ It doesn't matter how many disorders you have; it matters how impaired you are! --anything that disrupts school is automatically high impairment

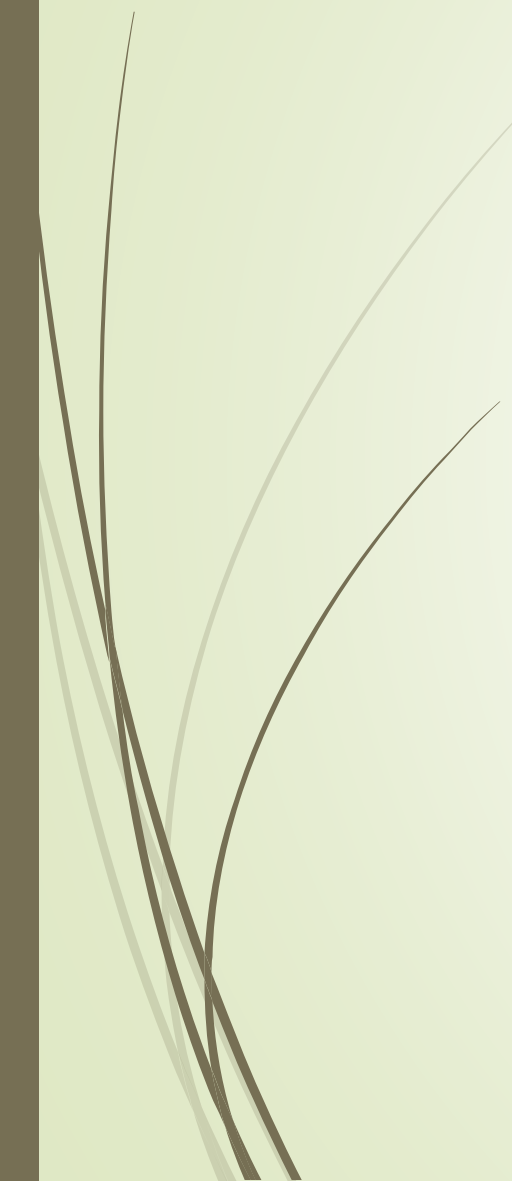


Psychosocial Factors *(also see Case Formulation with Children & Adolescents)*

- ▶ Address these first, as this may reduce the need for more intensive treatments
- ▶ Temperament/family history are common in primary disorders
- ▶ School-based symptoms and/or developmental issues may suggest testing for learning disability
- ▶ Bullying, including cyber-bullying, is a common social stress
- ▶ Good health habits are important, especially limiting video games and increasing aerobic exercise (4x per week for endorphin effect)



The context at home

- Decrease family conflict
 - Increase parental consistency
 - Help parents see the child's strengths
 - Help parents manage their own mental health
 - Decrease exposure to frightening shows or games
 - Encourage good family health habits
 - Make sure expectations are developmentally appropriate and focused on small gains from baseline
- 



The Role of Attachment

- ▶ Disorganized attachment resulting from parental mental health problems (esp. unresolved trauma/loss; depression), child abuse, or both is most likely to result in psychopathology (child has an unpredictable attachment figure, so no consistent attachment style that relieves distress); often a mix of internalizing and externalizing problems
- ▶ Other attachment styles can affect the manner of presentation, but usually in the context of some biological vulnerability

e.g., Ambivalent/resistant attachment and separation anxiety (child amplifies emotion to get needs met); Avoidant attachment and social anxiety (child constrains emotion to get needs met, but is anxious underneath so avoids)

- ▶ Secure attachment is protective, to a degree



What about questionnaires?

- ▶ Handy screeners: SCARED, CDI
- ▶ Sometimes useful in monitoring change over time
- ▶ NOT diagnostic—use DSM5 criteria if your screener is positive & look at context & development
- ▶ NOT consistent between children, parents, teachers esp. for internalizing symptoms, so need to track each informant separately
- ▶ With help, children 7 & up can complete; not very valid at younger ages (limited emotion vocabulary; difficulty quantifying; can sometimes use visual analogue scales or caricatures)
- ▶ Some items need follow-up questions (e.g. the suicide question on CDI)
- ▶ 4Q: avoidance, worry, physical symptoms, repetitive behaviors



2. Assessing Impairment

- ▶ Frequency of symptoms
- ▶ In how many environments do symptoms occur (n.b., school absenteeism is automatically considered severe!)
- ▶ Effect of symptoms on daily activities
- ▶ Effect of symptoms on others
- ▶ Unhealthy lifestyle related to symptoms
- ▶ What deviations from normal development are present
- ▶ Note: severity described is not always helpful, especially in anxiety (e.g., panic is severe anxiety, but it's time limited and need not be impairing if infrequent and associated with little avoidance)



Anxiety: Appropriate Intervention

Impairment

- Mild
- Moderate
- Severe
- In the context of ADHD

Intervention

- Self-help esp. parent-focused, healthy lifestyle, brief strategies (www.katharinamanassis.com)
- CBT + SSRI (CAMS trial says combine, families may argue)
- CBT + SSRI
- Start with a stimulant, as the positive feedback from attending better often relieves anxiety, and CBT is really tough for unfocused kids



Depression: Appropriate Intervention

Impairment

- Mild
- Moderate
- Severe

Intervention

- Usually only in pre-pubertal kids; address psychosocial stress and healthy lifestyle (esp. exercise)
- SSRI \pm CBT (as per TADS trial)
- SSRI \pm CBT; hospitalize if actively suicidal



In general....

- ▶ Combination treatments seem to work best if impairment is moderate to severe
- ▶ CBT reduces relapse risk when medication stopped, and may be sufficient in some mildly affected or young children
- ▶ CBT has lengthy waitlists if publically funded, so those who can afford it should be referred to psychologists
- ▶ While waiting for CBT, self-help resources, simple strategies (e.g., 10-minute CBT on website), healthy lifestyle (good sleep, more exercise, less video games), and parenting advice are often helpful
- ▶ Support functioning, especially school attendance, whenever possible

3. Favorite Resources

- ▶ www.anxietybc.com
- ▶ www.workbookpublishing.com (Camp Cope-a-Lot; Taking ACTION, Coping Cat/CAT Project)
- ▶ What to Do When You Worry Too Much (D. Huebner); for 6-8 years to read with parent
- ▶ *Keys to Parenting Your Anxious Child, 3rd Edition* (Manassis, 2016; Barron's Educational)
- ▶ Talking Back to OCD (March & Benton, 2007, Guilford Press)
- ▶ If Your Adolescent Has an Anxiety Disorder (Foa & Wasmer-Andrews, 2006, Oxford U. Press)
- ▶ Helping Your Child With Selective Mutism (Mcholm et al., 2006, New Harbinger)
- ▶ All self-help, whether child- or parent-focused, is only helpful if applied
- ▶ It's better to read 1 chapter with follow-up re: implementation than several books of strategies that are never applied



CBT Basics Anxiety Disorders *(also see Cognitive Behavioral Therapy with Children, 2nd Edition; 10-minute CBT)*

- ▶ Anything you can do to improve the child's confidence about facing their fears is helpful (and in GAD that means decreased reassurance-seeking);
- ▶ Usually includes anxiety signal, relaxation, self-talk, problem-solving, self-reward summarized & reinforced with concrete reminders;
- ▶ Requires ongoing practice in increasingly challenging situations (no homework=not CBT!);
- ▶ Use a manual to keep it structured (Coping animal)
- ▶ Most common reason for failure: lack of generalization outside the office (which is why homework & concrete reminders are essential!)



CBT Basics Depression

- ▶ Anything you can do to encourage behavioral activation and decrease rumination is helpful (see Steady Adolescent Workbook by Clarke et al. or ACTION by Stark & Kendall);
- ▶ Challenging negative thoughts usually doesn't work until there has been some improvement;
- ▶ Need to increase emphasis on positives too (e.g. daily highlights, The Book of Awesome, lists of favorite sensory experiences & distractions);
- ▶ Problem-solving school/peer issues usually needed

Mindfulness?: Prevent depressive relapse, component of DBT, can be good for worry/obsessions, can't replace desensitization for anxiety, 'too heady' for many little kids, teens can do it if they're willing to practice



Parental Pearls

(also see Keys to Parenting Your Anxious Child, 3rd Edition)

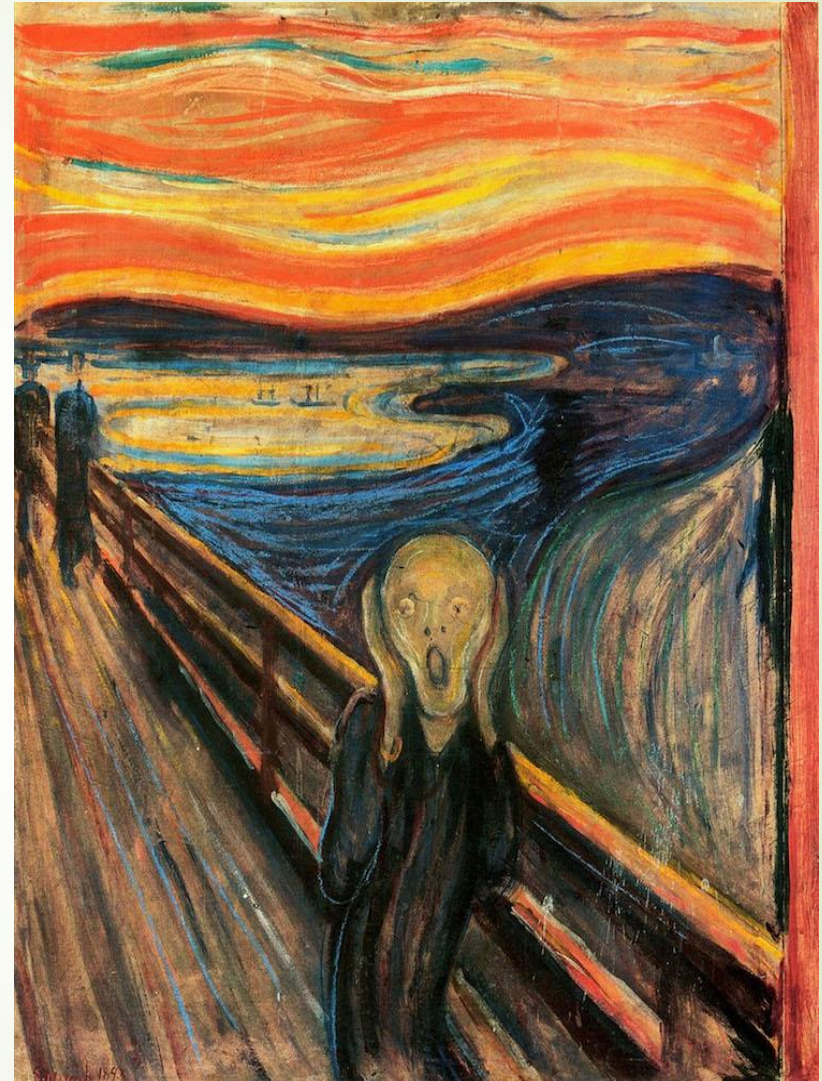
- ▶ Don't sweat the small stuff: if it's not interfering with daily activities, let it be
- ▶ Work on one or two situations at a time consistently, with empathic encouragement ("I know this seems hard, but you can do it!")
- ▶ Use charting so you don't forget & to show the child he/she is making progress; attach a small reward to it if needed
- ▶ Expect '2 steps forward 1 step back' and focus on the 'forward'
- ▶ Less talk, less negative emotion, use 'broken record' for persistent questions
- ▶ It doesn't matter if it's anxiety or behavior: if you want to encourage it, praise it; if you want to discourage it, ignore it (unless severe--and then use time out, privilege withdrawal, natural consequence, etc.)
- ▶ When in doubt, just breathe (kids can't think when highly anxious so talking just makes it worse)

4. SSRIs: What About the Suicide Risk???

2000-2005: reports of suicidal ideation linked to SSRIs especially age <18, and prescribing decreases (interestingly, with *increases* in suicidality in some countries linked to this change)

2006-2010: meta-analyses suggest some increased risk (about 4% vs. 2% baseline) especially in the initial weeks, sometimes linked to behavioral activation; highest risk in depressed (vs. anxious) populations (Bridge et al., 2007)

Bottom line: Monitor carefully in the first few weeks, especially re: behavioral activation





Choosing Medication

- ▶ Any SSRI can work for anxiety, so look at side effect profile and any family history of response; CAMS trial used sertraline
- ▶ In teen depression, best evidence is for fluoxetine with one positive trial for citalopram/escitalopram
- ▶ Note: tricyclics have been shown NOT to work in depressed youth, so stick to SSRIs or SNRIs (though the latter have very limited evidence)
- ▶ Comorbid anxiety and ADHD usually do better with a stimulant than an SSRI, as SSRIs can be quite activating; some end up on both but I usually start with a stimulant
- ▶ Comorbid depression and ADHD are difficult to treat; if not already on stimulant, it's worth trying (school success may reduce depression); if still depressed add SSRI; if too activating may need to try SNRI (e.g. venlafaxine/desvenlafaxine)



The SSRI 'Spectra'

Activation

Paroxetine > Fluoxetine > Citalopram > Sertraline > Fluvoxamine

Half-Life

Fluoxetine > Citalopram & Sertraline & Fluvoxamine > Paroxetine

(5 days)

(about 24 hours)

(< 24 hours; CR longer)



Why this particular medication

- ▶ Fluoxetine: Best evidence for depression and also selective mutism; comes in a minty sweet liquid for kids who can't swallow pills; long half-life means you can create intermediate doses easily by adjusting how much is taken per week; no withdrawal reaction if you miss a dose so be careful
- ▶ Fluvoxamine: Least activating of the SSRIs, good evidence for anxiety
- ▶ Sertraline: Best evidence for OCD & good evidence for anxiety, not very activating, can tell if dose gets too high (loose stools)
- ▶ Citalopram: Some evidence for depression, most weight-neutral, least effect on glycemic index, fewest interactions with other medications, arrhythmia risk at doses >40mg (which are sometimes needed in OCD)
- ▶ Escitalopram: teens like it, but difficult to finely titrate dose in kids
- ▶ Paroxetine: short half-life (bid dose & withdrawal risk) so I avoid it
- ▶ "Family history of response": no real evidence for this, but it may augment placebo effect



Dosages

- ▶ Fluoxetine, citalopram, and paroxetine all go in 5-10mg increments; fluvoxamine and sertraline go in 25mg increments; escitalopram in 5mg; can reduce the size of the increment if history of adverse reactions (e.g., alternating 10mg/20mg fluoxetine capsules to create 15mg)
- ▶ Beware of accidental liquid Prozac overdose (4mg/mL, so 10mL=40mg)
- ▶ Starting dose is lower the smaller the child, but the final dose may be in the adult range (rapid metabolism, high volume of distribution) and there is no exact formula by body weight
- ▶ Some slow metabolizers respond at low doses; more common in Asians
- ▶ Preschoolers: 6mg of liquid fluoxetine, increase in 2mg increments
- ▶ School age: 10mg of fluoxetine or 25mg of sertraline to start
- ▶ Adolescents: 20mg fluoxetine or 50mg sertraline to start

5. Talking to families

- What the medication does
- Why it is needed
- What to expect (risks & benefits)
- How we will monitor
- What are the alternatives





What the medication does

- ▶ It increases the level of a brain chemical called serotonin that is important for regulating mood and controlling anxiety
- ▶ Nature recycles serotonin quite quickly
- ▶ The medication interferes with the recycling process, so that the person's serotonin stays active in the brain longer
- ▶ As the serotonin stays active longer, the person becomes less anxious and less depressed
- ▶ This process takes time, so the medication does not work right away
- ▶ It needs to be taken daily for several weeks (2 – 6 weeks) to get the benefit, once the dosage is right
- ▶ Curious adolescents sometimes like a more detailed drawing of synapse etc.



Why it is needed



- ▶ We only give these medications to people whose anxiety problems, mood problems, or OCD are interfering regularly in their lives
- ▶ For children, this usually means daily or almost daily impairment in school, at home (including sleep/eating problems), or socially
- ▶ Children can also fall behind their peers in development if they are impaired in one of these areas for a long time, which can leave them vulnerable to other mental health problems later (e.g., depression)
- ▶ We always look at a balance of possible risks versus possible benefits, both for medication and also for not medicating
- ▶ In my judgment, the possible benefits of medication outweigh the possible risks at this point in your child's life
- ▶ You will probably be told at the pharmacy that this is "off label" in children

What to expect (for child)

- ▶ You will take it daily with food, either at breakfast or dinner time
- ▶ It may upset your stomach the first few days, but that goes away
- ▶ Tell your parents if you feel unusually restless, can't sleep, or have any unusual thoughts
- ▶ The medication will take a few weeks to work, so be patient
- ▶ We'll start with a little bit, and I will see you every few weeks until we get the dose right





What to expect (parents)

- ▶ I give the same explanation as for the child, but also indicate:
 1. Need to call/email if insomnia, extreme restlessness, or suicidal thoughts (emphasizing that 96% of the time it's not an issue);
 2. Use ER if any safety concerns
 3. Headaches, rashes, weight gain (usually modest) are less common but possible
 4. In teens, there may be effects on sexual function

Feel free to call or email if you observe any changes you're not sure about.

Anxious kids are often suggestible, which is why I don't always mention all the side effects to the child.



How we will monitor

- ▶ We will do a baseline of your child's most distressing/impairing symptoms (frequency, intensity, duration, ability to manage/carry on—let's quantify!)
- ▶ We will get baseline from both child and parent, and teacher too if symptoms occur at school
- ▶ Some children report more verbally; others on questionnaire (MASC, CDI, YBOCS)
- ▶ Change is often gradual (like watching grass grow) and the people around the child may notice it first; good days & bad days are the norm, with good ones becoming more frequent over time
- ▶ We “start low and go slow” with dosage to minimize the risk of side effects
- ▶ Because 6 weeks is a long time to wait, I often adjust dose every 3 weeks (might go slightly high, but at least the child doesn't suffer for months)



NO thanks!

- ▶ What are you most concerned about? (explore & discuss: e.g., deciding based on one negative reaction in a close friend/relative vs. a large trial)
- ▶ Would you like to talk to your spouse about this (or come back with your spouse)?
- ▶ Would you like some more information?
- ▶ Let's think about the long term with/without using medication
- ▶ I don't have to write a prescription today—take some time to think about it and let's follow up in a few weeks
- ▶ We could try other interventions for a month or so, and then revisit the question of medication
- ▶ Take my card—you can always call back if things change



Will my child be on this forever, and what will that do to him/her?

- ▶ We never say 'forever' because there are new treatments being developed all the time, and some children do get better at using coping strategies with CBT and/or maturation
- ▶ Evidence suggests that depressed teens need to be on at least a year, and usually anxious kids do better with this too as it allows time to build confidence; OCD treatment is often longer term but up to 50% do come off medication eventually
- ▶ We will monitor at least every 6 months and determine if a dosage increase is needed (usually for growth) or if your child is doing well enough to decrease the dose and see how he/she handles this; gradual decreases (e.g. monthly) will ensure that the child is on the minimum needed
- ▶ I rarely taper children in the summer, as September is usually stressful
- ▶ Amotivation is the only long-term side effect documented, and it responds to dosage reduction or discontinuing medication



What are the alternatives?

- ▶ The best evidence is for CBT, although the benefits are limited in depression if medication is not also used
- ▶ There is some evidence for regular aerobic activity in preventing depression and regulating mood & anxiety symptoms (endorphin effect; 4x/week)
- ▶ Regular sleep patterns are helpful (review good sleep hygiene), and some also benefit from melatonin for this
- ▶ Avoiding caffeine (to reduce anxiety) and avoiding alcohol & street drugs helps
- ▶ There is no special diet that has been proven to work in any of these conditions
- ▶ When it comes to natural supplements: caveat emptor
- ▶ Do not mix St. John's Wort with SSRIs as the interaction can be dangerous (serotonin syndrome)



What are your clinical challenges?