**Prescribing SSRIs in Primary Care Pediatrics**

**Indications:**

* *Ideally give SSRIS in conjunction with appropriate psychotherapy, and the younger the patient (i.e. for kids in elementary school), the more reason to push for therapy first, but don’t withhold SSRIs if not in therapy*
* Depression
* Anxiety (separation anxiety disorder, selective mutism, social phobia, specific phobia, panic disorder, generalized anxiety disorder)
* Obsessive compulsive disorder (OCD)
	+ A specific form of CBT, Exposure with Response Prevention (E/RP) therapy, is the gold standard therapy
* Post-traumatic stress disorder (PTSD)
	+ Trauma-focused CBT (TF-CBT) is the most effective form of therapy, meds often less effective
* Somatoform disorders – irritable bowel sxs, chronic headaches, etc.
	+ If you dig you’ll probably find depression, anxiety, or both in these kids

**There are risks of untreated anxiety and depression:**

* Left untreated, these disorders can be persistent, painful/distressing, and impairing to kids and families emotionally, academically, socially, financially, etc.
* Left untreated, these disorders increase the risk of developing other comorbid disorders (including other anxiety disorders, depression, substance abuse, and externalizing disorders) and of suicide
* There is a significant shortage of child psychiatrists to prescribe these medications

**Before you prescribe:**

* Make the diagnosis – based on thorough history (from patient and caregivers) and mental status evaluation; use screening tools to help diagnose and track over time (PHQ-9 for depression, SCARED for anxiety)
* Screen for patient or family symptoms/history of mania/hypomania
	+ SSRIs can induce manic sxs in predisposed individuals; though if this happens despite your best efforts, it is okay, you did your best and there’s treatment for that, too. Discuss this risk with parents.
* Be aware of the medical conditions the patient has and the medications he/she is taking
	+ Lexicomp has good Interaction Checker
	+ Medical contraindications: prolonged QTc, certain chemotherapy agents (check P450 interactions; procarbazine acts like an MAOI), high risk bleeding disorders (risk of platelet dysfunction with SSRIs)
* Anxiety disorders and OCD typically require higher dosing than depression 🡪 provide guidance
* For all SSRIs, you usually see side effects BEFORE you see benefits, so requires anticipatory guidance
	+ the two main SSRIs used in pediatrics (fluoxetine and sertraline) can cause increased energy/agitation upon initiation and dose increases, so talk about this, start low and go slow (but don’t stop too soon)
* Discuss with families that treatment duration for first depressive episode is at least 6-9 months (many recommend 12 months) after remission of symptoms; can follow this as general rule for anxiety, too, then trial off during a low-stress time.

**First line medications:**

* Fluoxetine (Prozac) – best studied and first FDA approved SSRI in pediatric patients, only FDA approved med for depression (also approved for OCD) in children (also approved for adolescents), long half-life so missed doses here and there aren’t a problem, comes in liquid & pills
	+ **Dosing**: Start with 5mg QAM in prepubertal kids, 10mg QAM in adolescents; give starting dose for 1-2 weeks to observe for tolerability, then if doing fine, increase to 10mg or 20mg, respectively. Give 6-8 weeks at given therapeutic dose – if some benefit but not entirely better or no benefit but tolerating, increase again stepwise by 5mg at a time for kids and 10mg at a time for adolescents every 6-8 weeks until max of 60mg or side effects.
* Sertraline (Zoloft) – also very frequently used and effective in pediatric patients for depression and anxiety disorders but only FDA approved in kids for OCD, comes in liquid & pills
	+ **Dosing:** Start with 12.5mg QAM in prepubertal kids, 25mg QAM in adolescents; give starting dose for 1-2 weeks to observe for tolerability, then if doing fine, increase to 25 or 50mg, respectively. Give 6-8 weeks at given therapeutic dose – if some benefit but not entirely better or no benefit but tolerating, increase again stepwise by 12.5mg at a time for kids and 25mg at a time for adolescents every 6-8 weeks until max of 200mg or side effects. (once you’re above 50mg can increase by 25mg increments for kids)

**If intolerance to or other reason against trial of above meds:**

* Escitalopram (Lexapro) – frequently used and effective in pediatric patients for depression and anxiety disorders if sertraline or fluoxetine are too activating or bad GI side effects or if issues w/ drug-drug interactions, is FDA approved for depression treatment in adolescents (not children). Comes in liquid & pills.
	+ **Dosing:** Start with 2.5mg daily in prepubertal kids, 5mg daily in adolescents; give starting dose for 1-2 weeks to observe for tolerability, then if doing fine, increase to 5mg or 10mg. respectively. Give 6-8 weeks at given therapeutic dose – if some benefit but not entirely better or no benefit but tolerating, increase again stepwise by 5mg at a time for kids and 5mg at a time for adolescents every 6-8 weeks until max of 20mg or side effects.

Fluoxetine, sertraline and escitalopram:

**Side effects** if at all: nausea, loose stools, increased energy/agitation, sedation, sleep disturbance, headache, tremor. Fluoxetine generally more **activating** (and associated with bad dreams).Sertraline generally more likely to be **sedating,** but remember all SSRIs can be activating or sedating. GI side effects usually resolve within 3-5 days but can occur at each dose increase. Teenage patients may experience sexual side effects, which do not resolve.

**How to pick:** If first degree relative benefits from one SSRI, try that. If first degree relative had bad side effects to an SSRI, avoid that one. Fluoxetine good for teenagers due to long half-life. Sertraline good for high anxiety but can take a long time to get up to adequate dosage. Escitalopram generally has less GI S/E. Note- Often can’t get to high enough dosing to adequately treat anxiety with **citalopram** but is very similar to escitalopram. ***Do NOT prescribe Paroxetine (Paxil) – there are lots of reasons, but suffice it to say, just don’t.***

**Timing:** Recommend taking in AM in case of increased energy, but if no evidence of that can switch to nighttime dosing

**Ideal Follow up:** After initiation & dose changes, offer to check in by phone at week 1, see patient in the office at week 2, then see every 2-4 weeks until on stable dose, then every 1-3 months thereafter depending on patient.

**To stop med:** the higher the dose, the more you need to taper; decrease by 50% every 1-2 weeks, step back up if experience discontinuation symptoms. No need to taper low-dose fluoxetine because of long half life.

**Black Box Warning:** What prescribers, patients, and families need to know (from APA and AACAP publications)

* A “black box warning” is a cautionary label placed by the FDA on some medications to alert prescribers and patients that special care should be taken using a medication.
* In 2004, the FDA decided to attach a “black box warning” to all antidepressants used to treat depression and other disorders such as anxiety and OCD in children and adolescents. In 2007, extended to young adults 18-24 years
* stated **“associated with an increased risk of suicidal thinking and/or behavior in a small proportion of children and adolescents, especially during the early phases of treatment.”**
* This label was the result of the FDA review of 23 clinical trials involving more than 4,300 children and adolescents with depression who received any of nine different antidepressants.
* But, there were NO suicides in the cases they studied. All of the studies the FDA reviewed measured suicidal thinking and behavior by using "Adverse Event Reports."
* Majority of events = increases in suicidal thoughts. Only a few were actual suicide attempts.
* NONE were suicide completions.
* Autopsies of teenagers who have committed suicide show that very few of them had traces of an antidepressant, making the link between antidepressant use and suicide even weaker.
* Between 1992 and 2001, there was a large increase in the number of adolescents being prescribed SSRI antidepressants. But, during that time the rate of suicide among American youth ages 10-19 years actually dropped by more than 25 percent. This was the first time in nearly 50 years that the suicide rate declined in young people.
* After the FDA issued the black box warning in 2004, there has been a decline in antidepressant use, but an increase in completed suicides in adolescents in both the US and the Netherlands.