Childrens' First Medical Group

Mental Health Clinical Guidelines

Anxiety Disorders in Children & Adolescents

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General Clinical Guidance

- Pediatric primary care providers are on the front line for preventing, screening, assessing, treating, and monitoring pediatric mental health concerns.
- The primary care clinician should evaluate any child who presents with symptoms of anxiety, or symptoms that could be related to underlying anxiety.
- The American Academy of Pediatrics has recommended that the first step for addressing anxiety and other common pediatric mental health concerns is to develop standard office procedures. This guideline will provide the following:
    - Screening tools
    - Treatment protocols
    - Resource and referral guide
    - Criteria for consultation

Overview

- Children often experience periods of having worries or fears that may be normal reactions to their situation or environment. However when these symptoms impact their functioning at home, school, and/or peer interactions, they may have an anxiety disorder which affect anywhere from 6-20% of children and teens.
- They may present with specific anxiety-related concerns, unexplained somatic symptoms, difficulties with peers, behavioral problems, and/or poor school performance. Shyness, behavioral inhibition, and parental anxiety disorders can increase the risk for developing anxiety disorders. Without treatment, symptoms often persist and worsen over time with higher risk for depression, suicidality, and substance use.
- Barriers to specialty mental health services have led primary care to become the de-facto mental health clinic with opportunities to provide early prevention and treatment.
- These guidelines will cover the screening, assessment, treatment, and referral criteria. These guidelines will not cover how to make specific referrals for specialty care or therapy.

Pediatric Anxiety

All children experience anxiety. But when the level of arousal or anxiety becomes too high to cope, it can cause significant impairment in a child or teenager's ability to function. Core symptoms of anxiety disorders include fears or phobias, worries, and somatic concerns. Irritability, need to be "in control," and avoidance of situations that cause fear or worry can be common associated symptoms.

Normal and developmentally appropriate fears must be distinguished from abnormal fears or worries depending upon their severity and degree of impairment:

- Infants are commonly fearful of loud noises, surprises, and strangers.
- Toddlers may be afraid of imaginary creatures or monsters, darkness, and separation from parents or siblings.
- School-age children often worry about injury and natural events/disasters such as storms, lightning, earthquakes, and volcanoes. They may tend to more negatively interpret ambiguous or vague situations, and underestimate their own competency to handle themselves in those situations.
- Adolescents tend to have fears more similar to adults often related to school, social capabilities, and issues of physical and mental health. Panic disorder tends to increase with age.

Anxiety and depression also frequently co-occur, and can exacerbate one another; thus it is often advised to assess for both. Preschool and school-aged children suffering from an anxiety disorder will often present with physical or somatic symptoms (*e.g.*, headache, stomachache, nausea) because they have difficulty recognizing and describing their emotions. Adolescents are better at identifying their feelings but may still present with oppositionality or disruptive behavior when feeling anxious. Although anxiety disorders often lessen over time, one disorder may simply substitute or replace another.

Subjective

- Obtain history of presenting illness:
    - Assess for anxiety symptoms such as excessive worries, fears, phobias, somatic concerns, avoidance of specific situations or environments.
    - Common symptoms in pediatric anxiety disorders:
        - Fear of separation from a loved one (Separation Anxiety Disorder) and fear of embarrassment/discomfort in social situations (Social Anxiety Disorder)
        - Specific phobias (*e.g.,* of spiders, heights, needles)
        - Excessive worrying, such as homework or friendships (Generalized Anxiety Disorder)
        - Physical complaints, like stomachache or headache
    - Identify triggers, settings, what alleviates/worsens the anxiety, when the anxiety started. Evaluate for areas of impairment and level of impairment.
    - Assess for other common psychiatric symptoms such as difficulty concentrating or focusing, sleep problems, restricted eating, low motivation or hyperactivity, panic attacks, and behavioral outbursts.
    - Explore other physical or somatic symptoms.
- Ask about prior evaluations and treatments.
- Ask about current medications and/or alternative therapies.
- Obtain social history using the HEEADSSS mnemonic (Home environment, Education and employment, Eating, peer-related Activities, Drugs, Sexuality, Suicide/self-harming/depression, and Safety from injury and violence).

- Obtain adverse childhood experiences history, abuse and trauma history (including re-experiencing symptoms, hypervigilance, and avoidance symptoms related to the traumatic event).
- Note that some cultures may be more reserved, tend to somaticize more, or use other terms such as "nervios" or "a fit" to describe anxiety. Use an interpreter if there may be a language barrier.
- Obtain family history of mental illness, with special emphasis on anxiety disorders, obsessive-compulsive disorder, depression, bipolar disorder, history of violence/aggression, substance abuse, suicide attempts or completed suicides.
    - 50% of children with anxiety disorders have an anxious parent. If parents have benefitted from a specific SSRI, this may help to predict response to that particular SSRI in the child.

Objective

- Physical examination
    - Examine for signs of nail biting, patches of hair loss, tics
    - Assess for other possible comorbid medical conditions (may include anemia, allergy, asthma, thyroid disease, sleep disorder, Crohn's disease, lupus, celiac disease, Addison's disease, pheochromocytoma, and cancers.)
        - CBC with Differential, Serology-Electrolytes, Ca Mg, ESR, Bun/Cr, Glucose, LFTs, Serum B12, Folate, and Thyroid Function Tests (TSH and FT4) may be appropriate baseline labs.
        - Pregnancy Test
- Questionnaires for anxiety: SCARED, GAD-7
    - **Screen for Child Anxiety-Related Emotional Disorders** (**SCARED**) - patient and child self-report instrument for 8-18 year olds. Itemized checklist that assesses for Anxiety Disorder, Panic Disorder or Significant Somatic Symptoms, GAD, Separation Anxiety, Social Anxiety, and School Avoidance.
        - Child Version: http://psychiatry.pitt.edu/sites/default/files/Documents/assessments/SCARED%20Child.pdf
        - Parent Version: http://www.psychiatry.pitt.edu/sites/default/files/Documents/assessments/SCARED%20Parent.pdf
    - **GAD-7 Item Scale** (18 years+): Validated diagnostic tool designed for use in the primary care setting. The first two questions make up the GAD-2, which can be use a shorter diagnostic instrument. Originally designed to detect GAD, but fairly accurate for panic, social anxiety, and post-traumatic stress disorders.
        - Found at: https://www.dhs.wisconsin.gov/mh/conferences/generalized-anxiety-scale-2-11-16.pdf
- Screen for co-occurring mental health conditions such as depression, attention deficit hyperactivity disorder, learning disorders, substance use, eating disorders, bipolar and psychosis.
- Suicide screen
- Screen for substances (if appropriate)
    - Toxicology Screen if appropriate.
    - Marijuana can increase risk of anxiety
    - Consider using the CRAFFT screening tool, which takes less than five minutes to score. See Appendix.

Assessment

- It is important to interview the youth separately and to gather history for the parent/caregiver and collateral (therapist, school, other health providers).
- Confirm the patient meets the criteria for an anxiety disorder in DSM-5.

DSM-5 criteria for *Generalized Anxiety Disorder*:

A. Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least six months, about a number of events or activities (such as work or school performance).

B. The individual finds it difficult to control the worry.

C. The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms having been present for more days than not for the past six months):

[Note: Only one item is required in children:]

1. Restlessness or feeling keyed up or on edge
2. Being easily fatigued
3. Difficulty concentrating or mind going blank
4. Irritability
5. Muscle tension
6. Sleep disturbance (difficulty falling or staying asleep, or restless, unsatisfying sleep)

D. The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

E. The disturbance is not attributable to the physiological effects of a substance (eg, a drug of abuse, a medication) or another medical condition (eg, hyperthyroidism).

F. The disturbance is not better explained by another mental disorder (eg, anxiety or worry about having panic attacks in panic disorder, negative evaluation in social anxiety disorder (social phobia), contamination or other obsessions in obsessive-compulsive disorder, separation from attachment figures in separation anxiety disorder, reminders of traumatic events in posttraumatic stress disorder, gaining weight in anorexia nervosa, physical complaints in somatic symptom disorder, perceived appearance flaws in body dysmorphic disorder, having a serious illness in illness anxiety disorder, or the content of delusional beliefs in schizophrenia or delusional disorder).

Other common anxiety disorders to consider (and that may co-occur) are:

Social Anxiety Disorder – marked fear or anxiety about social situations in which the child is exposed to possible scrutiny by others including peer settings. Examples include social interactions (meeting unfamiliar people, having a conversation), being observed eating or drinking, and performance anxiety.

Panic Disorder – recurrent unexpected panic attacks, defined as an abrupt surge of intense fear or discomfort that reaches a peak within minutes, with accompanying bodily symptoms (*e.g.*, palpitations, sweating, shaking, chest pain, dizziness), fear of dying or losing control.

Specific Phobias – Marked fear or anxiety about a specific object or situation (*e.g.* flying, heights, animals, receiving an injection, seeing blood) that is persistent, actively avoided or endured with intense fear or anxiety out of proportion to the actual danger, and causes significant distress or impairment.

Separation Anxiety Disorder – Developmentally inappropriate and excessive fear or anxiety about separation from a parent or caregiver. The child may have persistent and excessive worries about losing major attachment figures, complain of physical symptoms when anticipating separation, and may refuse to leave the home or go to school due to these fears.

Selective mutism – Consistent failure to speak in specific social situations such as school, despite speaking in other situations, for at least a month. Interferes with educational achievement or social communication, and is unexplained by language difficulties or communication disorders.

These diagnoses are no longer in the DSM-5 anxiety disorders category, but may present similarly:
Post-traumatic Stress Disorder – avoidance, intrusions, hypervigilance, and other emotion and regulatory problems after a traumatic event or events. Reclassified to trauma and stress-related disorders in the DSM-5.

Obsessive-Compulsive Disorder – preoccupation with intrusive, unwanted thoughts, images or urges that cause distress and are often accompanied by compulsive behaviors or rituals to reduce this distress. Reclassified to obsessive-compulsive and related disorders in the DSM-5.

Other differential diagnoses and co-occurring disorders include:
Depressive disorders
Substance use disorders
Attention deficit hyperactivity disorder
Learning Disorders
Pediatric acute-onset Neuropsychiatry Syndrome: sudden onset of bsessions/compulsions or food restriction and/or symptoms of depression, irritability, anxiety, and difficulty with schoolwork. The cause of PANS is unknown in most cases but is thought to be triggered by infections, metabolic disturbances, and other inflammatory reactions. *Pediatric autoimmune neuropsychiatric disorder associated with group A streptococci (PANDAS)* is the most well-known and well-established cause of PANS. Consider testing with throat culture for GAS, ASO antibody titer, and anti-DNase B titer .

<u>Plan – Treatment for Anxiety Disorders:</u>
Though establishing a specific diagnosis is helpful for the patient and family to understand what is going on for the child, the treatment approach is basically the same: CBT and, sometimes, a medication.

Mild anxiety
- First line treatment:
    - Validate symptoms and the distress that it is causing ("I hear that you must be worried, that must be hard"). Avoid telling them that they don't need to worry as this may be

experienced as invalidating. Someone with clinically significant anxiety usually needs to experience for themselves that the feared situation is not as scary as they thought before they believe there is nothing to worry about.

- Educate the child and family on what anxiety is, how to talk about it, and strategies to overcome it such as facing your fears rather than using avoidance. This includes resisting the possible request to write for home hospital or disability before the child has had ample, scaffolded opportunity to face their fears, rather than avoid them. : http://www.anxietybc.com/anxiety-PDF-documents
- Identify wellness goals to promote healthy sleep, eating, activities, supports, and problem-solving. Create a treatment plan to monitor symptoms and goals.
- Follow up every 2-4 weeks to provide support.
- Continue to monitor for impairments in functioning, suicidal ideation, self-harm behaviors and substance use.
- If symptoms persist or worsen after 4 to 6 weeks of support, or based on patient request, refer for therapy.
    - **Cognitive Behavioral Therapy (CBT):** Exposure-based CBT has the most empirical support for the treatment of anxiety disorders in youth. CBT is a brief treatment model based for 3-18 visits that focuses on identifying thoughts, feelings, and behaviors. Clients are taught how to identify irrational thoughts, change maladaptive behaviors, and learn adaptive skills to cope with their stress in healthier ways.
    - **Parent-Child and Family Interventions:** Interventions to improve parent-child relationships, strengthen family problem-solving, reduce parental anxiety, and foster parenting skills are often incorporated into a range of psychotherapeutic interventions with anxious children. Several trials involving parents in the CBT process showed significant additional benefit on outcome measures. However, further empirical studies are needed.
    - **Psychodynamic Psychotherapy:** Uses a case formulation informed by one or more of several psychodynamic theoretical perspectives (ego psychology, object relationships, attachment, self-psychology, etc.) and incorporates the patient's developmental accomplishments and difficulties. Multiple case studies indicate benefits of psychodynamic psychotherapy with a few empirical studies, however there are limited clinical trials with controlled studies.

Moderate to severe anxiety

- Try first line treatment if indicated.
- Consider referring for therapy immediately, before the 4 to 6 weeks of active support/monitoring.
- Consider medication treatment if there is only partial response, difficulty participating in psychotherapy due to impairment, or symptoms appear severe and impairing.

Medication Treatment

When to prescribe in primary care:

- Uncomplicated mild to moderate anxiety that persists after failed response to first line treatment and therapy.
- Significant functional impairment.
- Patient and family are known to the clinic and have followed up in the past. We do not recommend prescribing to patients on their first visit due to the risk of side effects including activation and/or suicidal thoughts.
- Parental informed consent obtained if youth under 18 years old and not emancipated. Informed consent for psychotropic medication includes:
    - Diagnosis and indication(s) for treatment.
    - Discussion of alternative and/or additional treatments.
    - Risks of not treating with medication.
    - Adverse effects:
        - SSRIs are generally well tolerated with mild and transient side effects including gastrointestinal symptoms, headaches, increased motor activity, and insomnia. Less common side effects such as disinhibition should also be monitored.
        - The U.S. Food and Drug Administration black-box warning is not a restriction, with no specific mandates for monitoring SSRIs. SSRI-induced suicidality is rare and controversial, with most recent high-quality analysis suggesting there may be a very slight increased risk of suicidality (3.8% with SSRI vs 2.2% with placebo) with antidepressants, but not actual increased risk of completed suicide in children and adolescents. This warning is based on studies of adolescents with a primary diagnosis of depression, not anxiety. However, we recommend educating patients and parents about suicidality and the importance of monitoring for suicidality during the initial phase and throughout treatment.
        - Long-term side effects of medications have not been studied in youth.
    - Pharmacokinetic issues (laboratory monitoring if needed, dosing plan, drug-drug interactions).
    - Treatment adherence risks.
    - If off-label, document reasons.
    - If the youth is in the foster care system, a court authorization (JV-220) is required to prescribe psychotropic medications.

<u>Engaging and Informing Parents</u>

- Inform parent or legal guardian of confidentiality rules for the patient.
- Inform parent or legal guardian of screening assessment results, treatment recommendations, follow-up plan, and referrals.
- Obtain written permission from parent or legal guardian to allow collaboration between primary care and behavioral health specialist(s).

<u>Starting Medication Treatment</u>

- There are no FDA-approved medications for the treatment of anxiety disorders in youth other than Obsessive-Compulsive Disorder. However there have been high quality NIH-sponsored

multisite studies demonstrating the effectiveness of fluoxetine, sertraline, and fluvoxamine for the 3 most common childhood anxiety disorders: GAD, Social anxiety disorder, and Separation anxiety disorder. These selective serotonin reuptake inhibitors (SSRIs) have indications for use in youth with OCD (as well as various anxiety disorders in adults) and are recommended for the treatment of common anxiety disorders in youth.

- The Child Adolescent Anxiety Multimodal Study (CAMS) was the largest and most rigorous study of multiple anxiety disorders to date. 488 Children ages 7-17 presenting with GAD, SAD, and/or SoP were treated over 12 weeks with sertraline up to 200mg/day(double-blinded), placebo (double-blinded), CBT, or sertraline + CBT (not blinded). CBT + sertraline was superior to CBT alone and sertraline alone ($p < 0.001$), which were equally effective, and all three treatments were superior to placebo. The NNT was 1.7 for combination therapy, 3.2 for sertraline, and 2.8 for CBT. Sertraline was generally well tolerated with no statistical difference in rates of adverse events compared to placebo, and no suicide attempts in any subject.

    - **Choosing a medication**: there is no empirical evidence that a particular SSRI is more effective than another for treatment of childhood anxiety disorders. Clinically the choice is often based upon side effect profile, duration of action, or positive response to a particular SSRI in a first-degree relative with anxiety. The following table shows the most commonly prescribed SSRIs with the most evidence for efficacy and safety:

Generic name (Trade name)	US FDA Youth Indications	Initial dose	MDD	Available Unit Dose Forms	Comments
Fluoxetine (Prozac)	MDD; 8-17yrs	10-20mg daily	60mg	Daily capsules, oral liquid, Weekly capsules	Half-life of 10-14 days, consider for patients with sporadic adherence
Escitalopram (Lexapro)	MDD; 12-17yrs	5-10mg daily	20mg	Tablets, Oral liquid	Less drug-drug interactions through CYP450 inhibition
Sertraline (Zoloft)	OCD; 6-17yrs	12.5-25mg daily	200mg	Tablets, Oral liquid	May take longer to titrate up to therapeutic dose
Fluvoxamine (Luvox)	OCD; 8-17yrs	25mg twice daily	200mg (8-11yrs), 300mg (12-17yrs)	Tablets	May be less convenient due to twice daily dosing.

    - **Anxiolytics**: benzodiazepines such as lorazepam and clonazepam are commonly prescribed in children and adolescents. Due to concerns for abuse, dependence, and tolerance, they are only recommended for short-term treatment of anxiety to achieve rapid reduction of severe anxiety symptoms while waiting for an SSRI to have an effect. Benzodiazepines are generally well tolerated, with sedation being the most common adverse effect. In children they can cause generalized verbal and physical disinhibition, especially in children with intellectual and neurodevelopmental disorders. Other

concerning adverse effects are unlikely if benzodiazepines are used short-term and at appropriately low doses.

- **Adverse effects, contraindications, and drug interactions**: When starting an SSRI, it is recommended to discuss the black box warning for increased suicidal thoughts or behaviors. Reassure families that there is a great deal of controversy regarding this possible side effect, and that if it occurs would be very rare. Provide information regarding how to monitor for these symptoms at home, how to reach you if these symptoms emerge, and crisis hotlines / 911 if needed.
- **Safety monitoring**: during dose adjustment a weekly phone check-in or appointment is preferred when possible; assess for side effects, as well as suicidal thoughts and behaviors. Most common adverse effects include nausea, diarrhea and loose stools, insomnia, somnolence, fatigue, which often resolve after 3-5 days.

- **Maintenance/Follow up**
  - The 2007 AACAP Practice Parameters for Anxiety Disorders generally recommends starting at low doses, monitoring side effects closely, then increasing the dose slowly based on treatment response and tolerability. Note that anxious children and parents may be more sensitive to even transient side effects of medications.
  - Clinicians should consider increasing SSRI doses for patients if significant improvement is not achieved by the fourth week of treatment.
  - Monitor height and weight. Standardized rating scales such as the SCARED may be helpful to assess symptom change.
  - Once an optimal dose is determined, follow-ups every 1 to 3 months.
  - If one SSRI is ineffective or not tolerated, consider cross-tapering or switching to another SSRI.
  - Consider tapering off medication for children who have a significant and stable reduction in anxiety or depressive symptoms on an SSRI for 1 year. This trial off medication should be during a low-stress period, and the SSRI should be restarted if symptoms recur.
- Treat comorbid conditions such as depression, ADHD, learning disorders, and substance abuse. Some of these conditions may become more apparent as the anxiety is addressed.
- **When to refer to Child Psychiatry**: additional consultation with a child psychiatrist or referral may be considered if the diagnosis is unclear, there are concerns about a patient's clinical status, or if 2 or more medications have been tried and discontinued due to lack of tolerability

or effect. Positing specific questions and concerns can improve the quality of consultative feedback.

References:

- "Initial Approaches to Addressing Behavioral & Emotional Concerns in Primary Care: Background: Anxiety" on the AAP Website: https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Mental-Health/Documents/m2background.pdf
- AACAP Practice Parameter for the Assessment and Treatment of Children and Adolescents with Anxiety Disorders 2007
- Riddle, M.A. (2016). *Pediatric Psychopharmacology For Primary Care.* Elk Grove Village, IL: American Academy of Pediatrics.
- Shatkin, J.P. (2009). *Treating Child and Adolescent Mental Illness*. New York NY: W. W. Norton & Company.
- https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/children-and-disasters/Documents/Feelings-Need-Checkups-Toolkit_0823.pdf

Appendix / Additional Info:

RCADS (3-12 year olds): assesses child and parent self-reported symptoms and categorizes into Separation Anxiety, Generalized Anxiety, Panic, Social Phobia, Obsessions/Compulsions, Depression using the Excel scoring tool. Found at http://www.childfirst.ucla.edu/RCADS%202009.pdf