Be a Warrior, Not a Worrier: Anxiety Disorders in the Pediatric Setting

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Off-label uses of medications may be discussed
Learning Objectives

• To appreciate common features of anxiety disorders.

• To understand the DSM-5 diagnosis of anxiety disorders.

• To discuss treatment options for anxiety disorders.
Worry?

“Our anxiety does not come from thinking about the future, but from wanting to control it.”

Khalil Gibran
(1883-1931)
Warrior?
What are Anxiety Disorders?

- Extreme, often disabling, **anxiety** is the primary symptom
- **May be accompanied by** physical symptoms
- Causes significant **distress**
- Interferes with **functioning**
- Marked by **time** consumption
Pathological Anxiety vs. Normal Fears

Normal fear or anxiety may be appropriate at different developmental levels:

- **Infancy**: loud noises, being startled, and strangers
- **Toddlers**: fearful of dark and separation from attachment figures
- **School-aged children**: injury and natural disasters
- **Adolescents**: competency-based concerns
- **Adults**: relationships, money, providing for family, etc.

**Anxiety Disorders**

- Frequency and intensity of such symptoms are excessive in relation to the developmental norm
Fight or Flight
Symptoms of Anxiety

Cognitive component:

- Worry thoughts
- Develop in response to cognitive distortions
- Focused on the risk of being harmed
### Cognitive Component of Anxiety

<table>
<thead>
<tr>
<th>Anxiety Disorder</th>
<th>Sample Worries</th>
<th>Anticipated Harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separation Anxiety Disorder</td>
<td>Being separated from caretaker</td>
<td>Harm to self or caretaker</td>
</tr>
<tr>
<td>Panic Disorder</td>
<td>Being unable to escape the current situation</td>
<td>Dying, losing control or going crazy</td>
</tr>
<tr>
<td>Social Phobia</td>
<td>Negative social judgment</td>
<td>Being embarrassed, negatively evaluated or rejected</td>
</tr>
<tr>
<td>Posttraumatic Stress Disorder</td>
<td>Past traumatic event</td>
<td>Re-experiencing the traumatic event</td>
</tr>
<tr>
<td>Obsessive Compulsive Disorder</td>
<td>Contamination Doubt</td>
<td>Contracting a disease, Catastrophic outcome</td>
</tr>
<tr>
<td>Generalized Anxiety Disorder</td>
<td>Routine life issues such as work, academics or social situations</td>
<td>Wide range of negative outcomes (e.g., failure, rejection)</td>
</tr>
</tbody>
</table>
So... What to do?

“I suffer from test-taking anxiety, brought on by lack of studying.”
Symptoms of Anxiety

Physiological component:

• Associated autonomic or somatic sensations
• Physiological arousal is excessive in duration or intensity for the situation
• Sleep problems are prevalent among anxious youth and adults including:
  • Insomnia
  • Nightmares
  • Reluctance to sleep alone
Which of the following can be a physical symptom of anxiety?

A. Stomachache
B. Headache
C. Palpitations
D. Sweating
E. Shortness of breath
F. All of the above
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### Physiological Component of Anxiety

<table>
<thead>
<tr>
<th>System</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac</td>
<td>heart rate, chest pain, palpitations, SOB, heart pounding</td>
</tr>
<tr>
<td>GI</td>
<td>Difficulty swallowing, nausea, diarrhea, GI discomfort, frequent urination</td>
</tr>
<tr>
<td>Respiratory</td>
<td>SOB, smothering sensation, choking sensation, dry mouth</td>
</tr>
<tr>
<td>Neurological</td>
<td>Numbness, tingling, trembling, shaking</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>System</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Temperature Regulation</td>
<td>Sweating, hot flashes, chills, cold/clammy hands</td>
</tr>
<tr>
<td>Vestibular System</td>
<td>Dizziness, faintness, lightheadedness, feeling unsteady</td>
</tr>
<tr>
<td>Sleep Problems</td>
<td>Insomnia, nightmares, reluctance to sleep alone, talks/walks in sleep, excessive tiredness</td>
</tr>
<tr>
<td>Others</td>
<td>Exaggerated startle response, muscle tension</td>
</tr>
</tbody>
</table>
Symptoms of Anxiety

Behavioral component:

• The action taken to prevent exposure to the feared stimuli or to reduce anxiety associated with it
• One of the most common is avoidance...
  • Of stimuli (e.g. bridges)
  • Or situation (e.g. public speaking)
• This often leads to impaired functioning
• In OCD, common behavior is engaging in rituals to decrease anxiety
Epidemiology

- One of the most prevalent categories of childhood and adolescent psychopathology

- Pediatric sample of 700 families:
  - 20% of children were above the clinical cutoff for brief anxiety screen measure
  - 28% of children with an anxiety disorder had an additional comorbid diagnosis:

- Most common co-occurring disorders are other anxiety disorders and depressive disorders, but you may also see ADHD, disruptive disorders and substance use disorders.
### Prevalence Rates

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific phobia</td>
<td>10%</td>
</tr>
<tr>
<td>Social phobia</td>
<td>6.8%</td>
</tr>
<tr>
<td>Generalized Anxiety Disorder (GAD)</td>
<td>3.2%</td>
</tr>
<tr>
<td>Obsessive Compulsive Disorder (OCD)</td>
<td>1-4%</td>
</tr>
<tr>
<td>Separation Anxiety Disorder (SAD)</td>
<td>4-5%</td>
</tr>
<tr>
<td>Posttraumatic Stress Disorder (PTSD)</td>
<td>1-14%</td>
</tr>
<tr>
<td>Panic Disorder (PD)</td>
<td>1-5%</td>
</tr>
</tbody>
</table>

Overall, Anxiety Disorders are one of the most prevalent categories of mental health issues across the lifespan.
Etiology

Anxiety likely arises from a complex interaction of specific characteristics related to a person and their environment:

• Biological factors

• Psychological factors

• Genetic factors
DSM-5 Anxiety Disorders

Now 3 separate chapters:

- **Anxiety Disorders**
- Obsessive Compulsive & Related Disorders
- Trauma & Stressor Related Disorders
DSM-5 Anxiety Disorders

- Separation Anxiety Disorder
- Selective Mutism
- Specific Phobia
- Social Anxiety Disorder
- Panic Disorder
- Agoraphobia
- Generalized Anxiety Disorder
Separation Anxiety Disorder

• Separation anxiety is normal beginning at about 7 months and decreasing after 30 months.

• Developmentally inappropriate

• Excessive anxiety about being apart from home or from those individuals to whom a child is most attached
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<th>Separation Anxiety Disorder</th>
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<tr>
<td>Recurrent excessive distress when separation occurs or is anticipated</td>
</tr>
<tr>
<td>Persistent and excessive worry about losing or harm befalling major attachment figures</td>
</tr>
<tr>
<td>Worry that an event will lead to separation from a major attachment figure</td>
</tr>
<tr>
<td>Reluctance or refusal to go to school or elsewhere</td>
</tr>
<tr>
<td>Afraid to be alone</td>
</tr>
<tr>
<td>Refusal to go to sleep alone</td>
</tr>
<tr>
<td>Repeated nightmares involving the theme of separation.</td>
</tr>
<tr>
<td>Repeated complaints of physical symptoms when separated</td>
</tr>
</tbody>
</table>
Separation Anxiety Disorder

- Slightly more common in **females**, about 4%
- More common in **younger** children
- Risk factors:
  - Genetics/Temperament (highly reactive infants)
  - Insecure attachment pattern between mother and child
  - Parental anxiety
  - Parenting style that is controlling and encourages their child’s avoidance
  - Negative life experiences
- Children often have comorbidities:
  - Anxiety, depressive and disruptive disorders
Selective Mutism

- Consistent failure to speak in specific social situations (typically school)
- Speaks in other situations
- Interferes with achievement or communication
- Lasts at least 1 month
Specific Phobia

- Marked fear of a specific object or situation
- Exposure to the stimulus provokes an immediate anxiety response
  - May be a panic attack
- Must cause distress or impairment
- Lasts 6 months or more
- Reaction:
  - Avoidance
  - Endure with dread
Specific Phobia Subtypes

- **Animal type**
  - e.g. dogs, snakes, insects
  - Onset usually in childhood

- **Natural environment type**
  - e.g. storms, heights, water
  - Onset usually in childhood

- **Blood-injection-injury type**
  - Highly familial and often with vasovagal response

- **Situational type**
  - e.g. bridges, elevators, tunnels.
  - Similar to panic disorder with agoraphobia

- **Other type**
  - e.g. falling down, choking, loud noise, costumed characters
Social Anxiety Disorder

Marked fear in one or more social situations > 6 months

Common Signs:

- Experience greater sensitivity to rejection
- Report fewer friendships and close relationships
- Perceive less acceptance from peers
- Present as shy and socially withdrawn
- Have limited eye contact
- Have difficulty with articulation
- Exhibit noticeable anxious-somatic symptoms:
  - Blushing
  - Sweating
  - Shaking
Social Anxiety Disorder is a Vicious Cycle

Anticipatory Anxiety → Negative Thoughts

Embarrassment

Anxiety in the Situation

Actual or Perceived Poor Performance
Panic Disorder

Occurrence of panic attacks and worry about another panic attack

Panic attacks:
• Fear of being in danger for no apparent reason
• Peaks within minutes
• Physiological symptoms (4 or more)
  • Chest pain or palpitations
  • Sweating, trembling or shaking
  • Shortness of breath or choking sensation
  • Nausea
  • Dizziness
  • Feelings of unreality or depersonalization
  • Fear of going crazy of dying
• Panic Attack can also be a specifier for other conditions
Panic Disorder Varies by Age

• Less common in childhood than in adolescence

• Clinical picture varies across developmental span:
  • Younger children’s panic attacks frequently related to particular triggering events
  • Adolescent’s panic attacks more often unexpected

• Kids usually present with one or more physiological symptoms

• Disabling because of efforts to avoid triggers
The most common form of phobia is:

A. Photophobia
B. Thanatophobia (death)
C. Acrophobia (heights)
D. Agoraphobia
E. Nyctophobia (night)
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A. Photophobia
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Agoraphobia

• Now a separate diagnosis in DSM-5

• Marked fear of at least 2 situations:
  • Public transportation
  • Open spaces
  • Enclosed spaces
  • Being in a crowd
  • Being out of the home alone

• Fears that escape might not be possible or help not available

• Lasts 6 months
Generalized Anxiety Disorder

- Diffuse excessive worry over a wide variety of routine daily activities such as:
  - School/work performance
  - Social concerns
  - Family interaction

- Characterized by **6 months** or more of chronic worry or tension that are unfounded or much more severe than the anxiety that most people experience
Generalized Anxiety Disorder

Patients with GAD:

• Selectively attend to negative and threat related information
• Have higher levels of generalized tension
• May have a chronic inability to relax
• Are often described as “worriers”
• Have few coping skills to effectively handle concerns
• Make excessive attempts to seek approval from others
• Show avoidant behavior in situations that provoke anxiety
GAD Somatic Symptoms

- Often accompanied by physiological or somatic symptoms
- Common somatic symptoms include:
  - Trembling
  - Twitching
  - Muscle tension
  - Headaches
  - Irritability
  - Hot flashes
  - Nausea
  - Frequent urination
  - Fatigue
GAD Varies by Age

- Younger children
  - Report anxiety pertaining to specific situations
- Older children
  - Report “generalized” worries
So... What to do?

They're anti-anxiety pills

But I'm afraid to take them!!
Treatment of Anxiety Disorders

• **Multimodal approach:**
  - Psychoeducation
  - Cognitive-behavioral interventions
  - Consider school consultation for children
  - Consider family therapy (poor support)
  - Consider pharmacotherapy
  - Consider psychodynamic psychotherapy (poor support)

• **Behavioral and cognitive-behavioral interventions have received most empirical support!**

• **Evidence base for pharmacotherapy is robust and increasing**
Treatment: Behavioral Therapy

Exposure exercises:

- Individual fear hierarchy is established
- Rate the level of distress associated with the feared situation or object (0–100)
- Patient is exposed in a stepwise fashion to identified fear-provoking stimuli and is instructed to focus on the anxiety
- Repeated exposure results in increased tolerance of stimuli and progressively reduced levels of anxiety on exposure
Systematic desensitization:

- The patient is exposed to the fear provoking stimuli
- Also taught to engage in an activity or response (e.g. relaxation) that is incompatible with anxiety

"Nervous little dogs 'face their fears' at an anxiety management seminar."
Treatment: Behavioral Therapy (cont.)

Contingency Management Methods:

• Serve to identify and modify the rewards that the patient receives that maintain anxiety
• Parents are taught to provide positive reinforcement when the child confronts fears and to remove positive reinforcement when the child engages in avoidance behaviors

Modeling techniques:

• Form of social learning treatment.
• Patient observes a participant model gradually confronting the feared situation with eventual mastery
Treatment: Cognitive-Behavioral Therapy

Goals:

• Teach the patient to identify anxiety cues
• Utilize specific coping responses
• Challenge anxiety related cognitive distortions.

Other CBT interventions include:

• Self-monitoring of anxiety
• Cognitive restructuring
• Relaxation techniques
Family therapy:

- Suggested if dysfunctional family interactions or parental anxiety are contributing factors
- Interventions include:
  - Psychoeducation
  - Contingency management plans
  - Reduction of parental anxiety
  - Cognitive restructuring techniques
  - Improvement of parent-child relationship
- Limited empirical support, except for family based CBT
Treatment: Pharmacotherapy

- **Main medications used:**
  - Antidepressants, usually **SSRIs** as older antidepressants (TCAs, MAOs) are either ineffective or associated with severe risks
  - Anxiolytic medications, usually benzodiazepines

- The combination of CBT and psychopharmacological treatment may be most efficacious treatment approach
Treatment: SSRIs

• Good efficacy to support the use of SSRIs
• Few trials evaluate the relative efficacy of different SSRIs
• They are generally well tolerated
  • Side effects may include:
    • Gastrointestinal symptoms
    • Headaches
    • Insomnia
    • Activation syndrome
    • Increased risk of suicidality
• SSRIs: Lexapro, Prozac, Celexa, Luvox, Paxil, Zoloft
• Alternative antidepressants: Remeron, Cymbalta, Effexor, Wellbutrin
  • Usually not utilized in children
• Concerns over Black Box warning...
Treatment: Benzodiazepines

- For short-term and more immediate relief, the high-potency benzodiazepines may be used (i.e., Xanax, Ativan)
- Habit forming and may have withdrawal with long term use
- Side effects:
  - Sedation
  - Dizziness
  - Cognitive blunting
  - Behavioral disinhibition
- [Beta Blockers for performance anxiety]
Conclusions

I can't keep calm and carry on because I have an anxiety disorder.
Conclusions

• **Anxiety disorders are:**
  • Common
  • Differentiated from normal fears by intensity, frequency & impairment

• **The DSM-5 now has 3 chapters on the anxiety disorders**
  • Anxiety disorders
  • OCD & related disorders
  • Trauma related disorders

• **Most effective/common treatments are CBT and SSRIs**
Questions?

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