

Objectives

- Learning Objectives:
 - Review anxiety disorders and depression in pediatric patients
 - Develop an initial treatment plan for pediatric patients with anxiety or depression
 - Demonstrate effective communication techniques for interacting with families dealing with pediatric mental health concerns
 - Identify resources for healthcare providers and families managing pediatric mental health concerns

Disclosures

- I receive no funding from pharmaceutical companies
- I have received a grant via SickKids for research into yoga as a therapeutic modality for children with anxiety (INCYT)
- I receive funding from NOSM for clinical education

Agenda

- Introduction/Epidemiology
- Anxiety
 - Signs and symptoms
 - Management
- Depression
 - Signs and symptoms
 - Management
- Resources





Epidemiology

Disorder	Prevalence (1-year)
MDD or Dysthymia	8.2%
BD (any type)	2.1%
Any Mood Disorder	10%

Epi, cont'd

Disorder	Prevalence (1-year)
Panic Disorder	1.9%
Generalized Anxiety Disorder	1.1%
Agoraphobia	1.8%
Social Anxiety Disorder	8.2%
Specific Phobia	15.8%
Any Anxiety anxiety	24.9%

Epi, cont'd

Disorder	Prevalence (1-year)
ADHD	6.5%
Conduct (CD)	5.4%
Oppositional Defiant (ODD)	8.3%
Any Disruptive Behavioural disorder	16.3%



Pearls

- Anxiety is far more common than any other type of mental illness in children and teens.
- Anxiety disorders often precede other disorders (CD/ODD, depression, substance use)
- Common comorbidities include (in order of prevalence): other anxiety disorders, depression, ADHD, CD/ODD, learning disorders, substance use disorders
- Data shows us it is more common to have Anxiety + a comorbidity (40.3% of children/youth) than to have ONLY ONE anxiety disorder (21.9%).
- CBT, CBT, CBT and maybe SSRI's.
- NOTE: in DSM 5, OCD was moved out of the anxiety disorders chapter.

Natural progression

- More common in younger children:
 - Separation Anxiety: onset ~4yoa
 - Selective Mutism & Specific phobia: between 5-8yoa
- More common in older children & adolescents:
 - Social anxiety: between 10-12yoa
 - Generalized anxiety disorder: ~16yoa
 - Panic disorder (+/- agoraphobia): ~18yoa



Case: Lee, 11yoM

- RFR: removed from school "not allowed back until he graduates from residential care".
 Death threats to teacher and SSP, requiring classroom to be cleared and police called in due to behaviours in class. The school described him as having "anger issues" and told parents he was expected to receive treatment for these.
- On assessment: articulate and well spoken, describing deep fear in class when he is centered out or called upon. Very bothered by loud noisy rooms, with loud noises/chaos triggering fear. Able to directly connect his fear to his anger outbursts.
 States that his anger and fear means he is never happy and he doesn't want to go on living like this (passive suicidal ideation).
- Also on assessment: death threats to me, punched father in face, made a LEGO gun and threw it at me.

Screening

- There are MANY office-based screeners: cover differing age spans, cover differing diagnoses, some have \$\$\$ associated or require special training.
- Decent screeners:
 - Screen for Child Anxiety Related Emotional Disorders (SCARED) (validated 8-18)
 - APA Severity Measure for Generalized Anxiety Disorder—Child Age 11–17
 - GAD-7 (validated 12+)
 - HAM-A (Hamilton Anxiety Scale, validated 12+)
 - Spence Childhood Anxiety Scale (validated 8-15)

TAK	ENT Version—Page 1 of 2 (to be filled out by the PARENT)	
	uneeta Khetarpal, M.D., Mariane Cully, M.Ed., David Brent, M.D., and Sandra McKenzie, Pl , University of Pintsburgh <i>(October, 1995), E-mail</i> : birmaherb@upmc.edu	.D.,
	etta, L., Bridge, J., Monga, S., & Baugher, M. (1999). Psychometric properties of the Screen SCARED): a replication study. <i>Journal of the American Academy of Child and Adolescent Ps</i>	
Name:	Date:	

True or Very True Sometime True When my child feels frightened, it is hard for him/her to breathe 0 0 My child gets headaches when he/she am at school 0 My child doesn't like to be with people he/she does't know well . My child worries about other people liking him/her When my child gets frightened, he/she fells like passing our 0 0). My child feels nervous with people he/she doesn't know well. 0 11. My child gets stomachaches at school When my child gets frightened, he/she feels like he/she is going crazy. 5. When my child gets frightened, he/she feels like things are not real 0 7. My child worries about going to school When my child gets frightened, his/her heart beats fast 0 20. My child has nightmares about something bad happening to him/her.

Childhood anxiety

Separation anxiety disorder	 Developmentally inappropriate and excessive fear or anxiety concerning separation from those to whom the individual is attached. What you'll see: Parents in deep distress as they can't go to work, can't get work done, excessive "check-ins", no one at home is sleeping.
Selective mutism	 Consistent failure to speak in specific social situations in which there is an expectation for speaking (e.g., at school) despite speaking in other situations What you'll see: Parents speaking for the child everywhere, teachers sending notes home about lack of participation but child participates normally at home and marks are good.

Symptoms in Children

Disorder	Key features
Specific phobia	 The fear or anxiety may be expressed by crying, tantrums, freezing, or clinging Other specifiers: loud sounds or costumed characters
Social Anxiety Disorder	 The anxiety must occur in peer settings, not just during interactions with adults The fear or anxiety may be expressed by crying, tantrums, freezing, clinging, shrinking, or failure to speak in social situations
PTSD	 Intrusion symptoms: repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed; there may be frightening dreams without recognizable content; trauma-specific re-enactment may occur in play Specific subtype for children ≤6 years of age
GAD	Needs only one physical symptom of anxiety daily for 6 months time
OCD, panic disorder	No pediatric specific criteria

REMEMBER FUNCTION

- For ANY DSM diagnosis, the patient must have functional impairment. So the FEAR must get in the way of LIFE.
- For children and teens, function will vary depending on age.
 - 0-5: Can they eat and gain weight appropriately? Can they sleep? Can they learn? Can they play with other children? Can they interact with other adults?
 - 6-12: Can they go to school? Can they learn? Can they make and keep friends?
 Can they do independent activities outside of the family home?
 - 13-18: Can they go to school independently? Can they learn independently? Can they make and keep friends? Are their strongest relationships outside of the family? Can they do activities outside of the family home?

Contextual Fear...

- Children with TRAUMA may have fear that impairs function that is still CONTEXTUAL.
 - Example: 13yoF, on a Form 1, referred for SI and HI. Referring physician states child is bullied daily (ongoing) and has been sexually assaulted by a bully. The child told her parents and teachers and no interventions were made.
 - What role does an inpatient admission for acute suicidality play for this patient?
 - What about CBT or medication?
 - REALITY: it isn't PTSD or anxiety. This is a contextually appropriate reaction to ongoing lifethreatening experiences. The child's life has been left at risk by the bully and authorities.
 Expressing suicidality and homicidality gets the patient noticed and gets the child help.

Treatment Principles

- Parent and patient psychoeducation
- School consultation and accommodations
- FIRST LINE: Cognitive behavior therapy (CBT)
- SECOND LINE: Combination of CBT and SSRI's

CBT

Treatment targets for each anxiety disorder:

- SEP: cognitive restructuring, behavioral exposures
- Specific phobia: systemic desensitization, exposure hierarchy
- GAD: diaphragmatic breathing, progressive muscle relaxation, cognitive restructuring
- SOC: social skills training, exposure
- PD: interoceptive exposure

Self-help CBT Resources

- Books (see handout)
- Websites:
 - https://www.copingcatparents.com/
 - Campcopealot.com
 - Tamingsneakyfears.com
 - www.anxietycanada.com
- Apps:
 - Headspace
 - MindShift
 - Calm
 - Relax Melodies
- YouTube: Cosmic Kids Yoga, Yoga with Adrienne, John Kabat-Zinn

Medication management

- Overall: our first line consideration for ALL of anxiety is therapy FIRST.
 - Second consideration would be combination SSRI & CBT.
 - There is no Level 1 evidence for medication management for Panic Disorder, GAD, PTSD,
 Separation Anxiety.
- Level 1 Evidence:
 - OCD: Fluoxetine and Clomipramine monotherapy.
 - Social Anxiety Disorder: Fluoxetine
- Level 2 Evidence:
 - Social Anxiety Disorder: Fluvoxamine, paroxetine, venlafaxine
 - GAD: Fluoxetine, fluvoxamine, sertraline
- Negative Evidence: evidence of harm in PTSD with sertraline. Evidence of harm from use of benzodiazepines in SAD, Separation Anxiety, PTSD, GAD.

Landmark Studies

- CAMS: 488 youth (7-17y), NIHB funded, SOC/GAD/Sep (DSM-IV)
 - CBT vs sertraline vs Combo vs Placebo
 - Combo>(CBT=sertraline)>Placebo
- POTS: 112 youth (7-17), NIHB funded, OCD (DSM-IV)
 - CBT vs sertraline vs Combo vs Placebo
 - Combo>(CBT=sertraline)>Placebo (both in response rates and remission rates)

Case update: Lee

- Fluoxetine started and titrated, now at 30mg per day without adverse effects.
- He started in the day treatment program at CCTB. He learned emotion regulation strategies and relaxation strategies. He can now readily apply them. No outbursts, no expressed homicidality or suicidality in ~ 12 months.
- Academically, he has caught up on all curriculum areas. He will be returning to school (regular curriculum classroom) this fall for the first time in 4 years.



Pearls

- The primary mood change in Major depressive disorder (MDD) in C&A can be irritability in addition to depressed mood or anhedonia
 - Children will express that life is boring, just not fun anymore. Parents will say they're cranky all the time, they're never happy, "prickly", "hedgehog".
- As children age, prevalence rates increase to adult levels: adulthood is depressing?
 - M:F 1:1 in children, 1:2 after puberty

Bipolar versus Unipolar?

- Always keep Bipolar Disorder in the differential especially for first/second-episode depressive episode
- Risk factors for future diagnosis of BD:
 - Treatment resistant depression
 - Hypersomnia, hyperphagia
 - Family history of BD
 - Hypomania from SSRI



But what about DMDD?

- Daily crankiness/irritability combined with anger outbursts, diagnosed AFTER age 6 but started BEFORE 10.
 - Diagnosis: between 6-18 years only.
- Must be daily for 12 months.
- Outbursts 3 times per week minimum, NOT in keeping with developmental expectations.
- How is this different from mania?
 - Episodic vs pervasive: "discrete episodes" vs "Oh no this is how they are all the time".
 - SLEEP



Case: Scott, 15yoM

- RFR: Query Bipolar. Irritable and angry for weeks at a time, some anger outbursts at school.
- On interview: "quiet rage", clearly irritable, also tearful and deeply distressed by his symptoms. Some sleep disturbance issues: could go days without need for sleep, then weeks sleeping 14-20 hours a day. Two family members with confirmed Bipolar Disorder. Huge issues at school due to irritability and zero frustration tolerance.

Screening for depression

- As with anxiety screening, validation remains a question: review of screening tools in 2016 found that validation studies were too small and used inconsistent cut-off scores.
 - Children's Depression Inventory (CDI)
 - ∘ PHQ-9

Treatment Principles



- Parent and child psychoeducation
- School accommodations
- Psychopharmacology SSRIs
- Psychotherapy CBT, IPT, DBT

Therapy

- CBT: Level 1 evidence for C&A.
 - Combination of cognitive restructuring/reframing (confront negative/depressogenic thoughts) while also altering routine/behaviours.
 - MoodGym
- Behavioural Activation: Level 1 evidence for adults.
 - Focuses on just altering routine/behaviours.
 - Rainbow Scheduling
- IPT: Level 1 evidence for C&A.
 - Focus on identifying and moving away from depressogenic relationships/people while simultaneously enhancing/moving towards mood-lifting relationships/people.
- DBT: Balanced focus between learning to identify and tolerate negative emotions, while improving emotional communication.
 - Family Connections

Self-Help Therapy Resources

Books:

- Mind over Mood
- Don't Let Your Emotions Run Your Life for Teens
- What To Do When series
- How to Hug a Porcupine

Websites:

- MoodGym
- Sashbear.org: Family Connections: Caregiver DBT
- CCI: https://www.cci.health.wa.gov.au/Resources/For-Clinicians

Medication management

- Approach: as per CANMAT guidelines, if patient's episode is severe (9+ symptoms OR suicide attempt OR psychotic features), we treat with medication and therapy.
- Consider a stepped approach: FIRST LINE is therapy.
 - MILD: Psychoeducation, supportive therapy/counselling, Rainbow Scheduling, self-help resources.
 - MODERATE: All of MILD, plus CBT/IPT. Discussion of adding SSRI's if therapeutic interventions fail.
 - SEVERE: Start SSRI, while doing all of above.
- SSRI's: NONE approved by HC for C&A's.
 - Second line: Level 1 evidence for fluoxetine. Level 2 evidence for sertraline, escitalopram, citalopram
 - Third line: Level 2 evidence for venlafaxine and TCA's.

Landmark Studies

- TADS: RCT, 13 sites, NIHB funded, 327 youth (12-17), MDD (DSM-IV).
 - Moderate to severe depression: best treatment is combination of fluoxetine and CBT.
 - Combo>(fluoxetine alone=CBT alone)
- TORDIA: RCT, 24 weeks, NIHB funded, 334 youth (12-18), MDD (DSM-IV).
 - After min 8 weeks of any medication treatment, randomized to another SSRI or venlalfaxine or combo of SSRI/venlafaxine and CBT.
 - For treatment resistance (history of 2 failed SSRI trials, min 8 weeks each), venlafaxine was superior
- TEAMS: RCT, NIHB funded, 279 youth first episode mania (DSM-IV).
 - Risperidone superior to lithium and divalproex for first episode mania.

Case update: Scott

- Terrified of SSRI's due to risk of switch. Trialed quetiapine and had nightmares (known adverse effect), then lurasidone (numbness/emotional dulling). All of these were in combination with CBT. Opted to work on CBT alone for a while, then returned with insomnia and worsening anxious distress.
- Now: remission with quetiapine and occasional clonazepam. Employed part time, finishing high school (alternative stream).



For Parents: Depression resources

- Depression and Your Child: A Guide for Parents and Caregivers by Deborah Serani (2015)
- Coping with an Anxious or Depressed Child by Samantha Cartwright-Hatton
- Rescuing Your Teenager from Depression by Norman T. Berlinger
- The Disappearing Girl Learning the Language of Teenage Depression by Lisa Machoian
- How to Hug a Porcupine: Negotiating the Prickly Points of the Tween Years by Julie A Ross (2008)
- The Incredible Years by Carolyn Webster-Stratton (2006)
- The Whole-Brain Child: 12 Revolutionary Strategies to Nurture Your Child's Developing Mind by Daniel J. Siegel and Tina Payne Bryson (2012)
- Untangled by Lisa Damour [About adolescent female emotional development]
- How To Raise A Boy: The Power of Connection to Build Good Men by Michael C. Reichert [About adolescent male emotional development]
- Helping Teens Who Cut by Michael Hollander (2017)

For Kids/Teens: Depression resources

- My Feeling Better Workbook: Activities that Help Kids Beat the Blues by Sarah Hamil
- Have You Filled a Bucket Today by Carol McCloud (2016)
- Hot Stuff to Help Kids Cheer Up: The Depression and Self-Esteem Workbook by Jerry Wilde (2007)
- SOS Help for Emotions: Managing Anxiety Anger and Depression by Lynn Clark (2002)
- Beyond the Blues: a Workbook for Teens Who Are Depressed by Lisa Schab
- Don't Let Your Emotions Run Your Life for Teens by Sheri Van Dijk (2011)
- The Relaxation and Stress Reduction Workbook for Teens: CBT Skills to Help You Deal with Worry and Anxiety by Michael A. Tompkins, Jonathan R. Barkin, et al.(2018)
- Stopping the Pain: A Workbook for Teens Who Cut and Self Injure by Lawrence E. Shapiro (2008)
- The Teen Girl's Survival Guide: Ten Tips for Making Friends, Avoiding Drama, and Coping with Social Stress by Lucie Hemmen (2015)

For Parents: Anxiety resources

- Keys to Parenting Your Anxious Child by Katharina Manassis (2008)
- Helping Your Anxious Child: A Step-by-Step Guide for Parents by Ronald Rapee (2008)
- How to Talk So Kids Will Listen and Listen So Kids Will Talk by Adele Faber and Elaine Mazlish (2013)
- The Incredible Years by Carolyn Webster-Stratton (2006)
- The Whole-Brain Child: 12 Revolutionary Strategies to Nurture Your Child's Developing Mind by Daniel J. Siegel and Tina Payne Bryson (2012)

For Kids/Teens: Anxiety resources

- What to Do When series by Dawn Huebner
- Have You Filled a Bucket Today by Carol McCloud (2016)
- Too Shy For Show & Tell by Beth Bracken
- Train Your Angry Dragon: Teach Your Dragon To Be Patient by Steve Herman (2018)
- The Anxiety Workbook for Teens: Activities to Help You Deal with Anxiety and Worry by Lisa M. Schab (2008)
- The Shyness and Social Anxiety Workbook for Teens: CBT and ACT Skills to Help You Build Social Confidence by Jennifer Shannon, Christine Padesky, et al. (2012)
- Don't Let Your Emotions Run Your Life for Teens by Sheri Van Dijk (2011)
- The Relaxation and Stress Reduction Workbook for Teens: CBT Skills to Help You Deal with Worry and Anxiety by Michael A. Tompkins, Jonathan R. Barkin, et al. (2018)

Screening Resources

- SCARED Screener: https://www.ohsu.edu/sites/default/files/2019-06/SCARED-form-parent-and-Child-version.pdf
- APA Online Assessment Measures: <u>https://www.psychiatry.org/psychiatrists/practice/dsm/educational-resources/assessment-measures</u>
- GAD-7: https://www.mdcalc.com/gad-7-general-anxiety-disorder-7
- HAM-A: https://dcf.psychiatry.ufl.edu/files/2011/05/HAMILTON-ANXIETY.pdf
- Spence Childhood Anxiety Scale:
 https://www.scaswebsite.com/docs/Ramme%20SCAS%20Psychomet%20evidence.pdf
- PHQ-9: http://med.stanford.edu/fastlab/research/imapp/msrs/_jcr_content/main/accordion/accordion_content3/download_256324296/file.res/PHQ9%20id%20date%2008.03.pdf

Rapid Resources

- Crisis Response: (807) 346-8282
- Kids Help Phone: 1-800-668-6868
- Mental Health Walk-ins (Talk-ins): Children's Centre Thunder Bay (807) 700-0090 or Our Kids Count (807) 345-7323
- Mental Health & Addictions Nurses: (807) 345-7339

Citations

- Katzman, M.A., Bleau, P., Blier, P. et al. Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders. BMC Psychiatry 14, S1 (2014).
- Kessler et al, Prevalence, Persistence, and Sociodemographic Correlates of DSM-IV Disorders in the National Comorbidity Survey Replication Adolescent Supplement. Arch Gen Psychiatry. 2012 Apr; 69(4): 372–380.
- Beesdo, Knappe & Pine. Anxiety and Anxiety Disorders in Children and Adolescents: Developmental Issues and Implications for DSM-V.
 Psychiatr Clin North Am. 2009 Sep; 32(3): 483–524.
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.).
- Noller, Diana T. MSPT, MMS, PA-C Distinguishing disruptive mood dysregulation disorder from pediatric bipolar disorder, Journal of the American Academy of Physician Assistants: June 2016 - Volume 29 - Issue 6 - p 25-28.
- Kovacs, M. (1981). Rating scales to assess depression in school-aged children. Acta Paedopsychiatrica: International Journal of Child & Adolescent Psychiatry, 46(5-6), 305-315.
- Roseman M, Kloda LA, Saadat N, et al. Accuracy of Depression Screening Tools to Detect Major Depression in Children and Adolescents: A Systematic Review. The Canadian Journal of Psychiatry. 2016;61(12):746-757.
- MacQueen GM, Frey BN, Ismail Z, et al. Canadian Network for Mood and Anxiety Treatments (CANMAT) 2016 Clinical Guidelines for the Management of Adults with Major Depressive Disorder: Section 6. Special Populations: Youth, Women, and the Elderly. The Canadian Journal of Psychiatry. 2016;61(9):588-603.

Citations

- Compton, S.N., Walkup, J.T., Albano, A.M. et al. Child/Adolescent Anxiety Multimodal Study (CAMS): rationale, design, and methods. Child Adolesc
 Psychiatry Ment Health 4, 1 (2010). https://doi.org/10.1186/1753-2000-4-1
- The Treatment for Adolescents With Depression Study (TADS): Long-term Effectiveness and Safety Outcomes. Arch Gen Psychiatry. 2007;64(10):1132–1143.
- Emslie GJ, Mayes T, Porta G, et al. Treatment of Resistant Depression in Adolescents (TORDIA): week 24 outcomes. *Am J Psychiatry*. 2010;167(7):782-791. doi:10.1176/appi.ajp.2010.09040552.
- Vitiello B, Riddle MA, Yenokyan G, Axelson DA, Wagner KD, Joshi P, Walkup JT, Luby J, Birmaher B, Ryan ND, Emslie G, Robb A, Tillman R. Treatment moderators and predictors of outcome in the Treatment of Early Age Mania (TEAM) study. J Am Acad Child Adolesc Psychiatry. 2012 Sep;51 (9):867-78. doi: 10.1016/j.jaac.2012.07.001. Epub 2012 Jul 31. PMID: 22917200; PMCID: PMC3427533.
- Pediatric OCD Treatment Study (POTS) Team. Cognitive-behavior therapy, sertraline, and their combination for children and adolescents with obsessive-compulsive disorder: the Pediatric OCD Treatment Study (POTS) randomized controlled trial. JAMA. 2004 Oct 27;292(16):1969-76.



Questions?