Objectives

- identify signs and symptoms of major depression in children
- update knowledge of evidence-based therapies for childhood depression
- use, or refer for, the most effective types of psychotherapy or medical intervention based on diagnosis and individual situation
Childhood major depression

- prevalence (general population, US)
  - preschoolers: <2%
  - children: 2.8% (M:F = 1:1)
  - adolescents: 8.3% (M:F = 1:2)
    - from adolescence through menopause, females have about 2x the rate of depression as males
- cumulative prevalence by age 18: 20%, similar to adults
DSM-5 childhood depression

• depressed mood and/or irritability, or decreased ability to enjoy (anhedonia) **for at least 2 weeks**

  *and* three of:

  • ↓ motivation, or concentration, or energy
  • ↑↓ sleep, or appetite (5% weight gain/loss), or activity
  • ↑ feelings of worthlessness or guilt
  • recurrent thoughts of death, suicidal ideation, or suicide attempts

• not only due to other conditions such as abuse, substance use, other psychiatric/medical conditions
Often seen in childhood MDD

- vague, non-specific physical complaints
- ↑ school absences, ↓ grades
- being bored
- increased anger, hostility
- reckless behavior
- younger kids have more somatic (physical) complaints, adolescents have more anergy and sleep disturbance
Challenges in diagnosis

- symptom expression varies with stage of development
- depressed kids have more ‘flexible’ affect than adults: during a depressive episode, they may appear fine for a short period (a specific activity or situation) but lapse back into depression
Co-occurring problems

40% to 70% of depressed children have other disorders

• anxiety disorders
• ADHD
• disruptive disorders
• substance use disorders
• eating disorders
• ASD
Natural history of untreated MDD

- average duration = 7-9 months
- by 2 years, 90% remission
  - but -
- 50% will relapse (recur within a year)
- 70% will recur within 5 years
- 20-30% of children with depression will go on to be diagnosed with bipolar disorder
Associated with higher MDD risk

- irritability, negative affect (Eeyore the donkey)
- ADHD, ODD, conduct disorder
- sleep problems
- emotion dysregulation
- medical problems
Environmental risks for MDD

- **depressed caregiver**: increases a child’s risk for depression all the way to age 35
- **negative life events**
  - bereavement, relationship loss (divorce)
  - parent-child discord
  - abuse, neglect
  - victimization by peers
- **same sex attraction**
76 depressed mothers, 135 children (age 7-17)

maternal MDD remission was associated with decrease in child’s depressive symptoms

maternal MDD relapse was associated with increase in child’s depressive symptoms

Protective factors

- positive parent-child relationship
- parental supervision and monitoring
- pro-social peer group
- higher IQ
- connection: school, sports, spirituality, social hobbies
Diagnosing MDD

• history
  • include history of trauma, head injury, seizures, major losses/stressors
  • family history

• thorough ROS, medical workup as indicated

• interview/MSE: ask about suicidality

• rating scale (e.g., CDRS-R) can help assess treatment response
CHILDREN’S DEPRESSION RATING SCALE-REVISED (CDRS-R)

1. Impaired School/Work (rate 1 to 6)
   1 = Performance is consistent with ability
   6 = No motivation to perform

2. Difficulty Having Fun (rate 1 to 7)
   1 = Interest and activities realistically appropriate for age, personality, and social environment. No appreciable change from usual behavior during at least the past 2 weeks. Any feelings of boredom are seen as transient.
   7 = Has no initiative to become involved in any activities. Describes himself/herself as primarily passive. Watches others play or watches TV but shows little interest. Shows no enthusiasm or real interest.

3. Social Withdrawal (rate 1 to 7)
   1 = Enjoys friendships with peers at school and at home
   7 = Does not currently relate to other children. States that he/she has "no friends" or actively rejects new or former friends

4. Sleep Disturbance (rate 1 to 5)
   1 = No difficulty or occasional difficulty that is situationally explainable
   5 = Has difficulty with sleep nearly every night

5. Appetite Disturbance (rate 1 to 5)
   1 = No problems or changes in eating pattern
   5 = Avoids eating and/or is not hungry most of the time OR describes a noteworthy increase in appetite and/or excessive food intake

6. Excessive Fatigue (rate 1 to 7)
   1 = No unusual complaints of “feeling tired” during the day
   7 = Complains of feeling tired most of the day. May voluntarily take long naps without feeling refreshed. Degree of fatigue interferes with play activities

7. Physical Complaints (rate 1 to 7)
   1 = Occasional complaints that do not appear to be excessive
   7 = Preoccupied with aches and pains. These regularly interfere with play activities

8. Irritability (rate 1 to 6)
   1 = Rarely irritable
   6 = Constant experience of irritability. Nothing changes this mood

9. Excessive Guilt (rate 1 to 6)
   1 = Does not express any undue feeling of guilt. Reported guilt appears appropriate to precipitating event
   6 = Severe delusions of guilt

10. Low Self-Esteem (rate 1 to 7)
    1 = Describes himself/herself in primarily positive terms
    7 = Refers to himself/herself in derogatory terms. Reports that other children frequently refer to him/her by using derogatory nicknames. Puts himself/herself down

11. Depressed Feelings (rate 1 to 7)
    1 = Occasional feelings of unhappiness that quickly disappear
    7 = Feels unhappy all of the time; characterized by a sense of psychic pain (eg, “I can’t stand it”)

12. Morbid Ideation (rate 1 to 7)
    1 = No morbid thinking reported
    7 = Preoccupied on a daily basis with death themes or morbid thought that are elaborate, extensive, or bizarre

13. Suicidal Ideation (rate 1 to 7)
    1 = Understands the word suicide, but does not apply the term to himself/herself
    7 = Has made a suicide attempt within the last month or is actively suicidal

14. Excessive Weeping (rate 1 to 6)
    1 = Report appears normal for age
    6 = Cries nearly every day

15. Depressed Facial Affect (rate 1 to 7)
    1 = Facial expression and voice animated during the interview. No sign of depressed affect
    7 = Severe restriction of affect. Looks distinctly sad and withdrawn. Minimal verbal interaction throughout the interview. Cries or may appear tearful

16. Listless Speech (rate 1 to 5)
    1 = Quality of speech seems situationally sensitive without any noteworthy deviations
    5 = Extreme sense of psychic distress exhibited in voice or by a profound sense of hollowness or emptiness. Has difficulty conducting the interview

17. Hypoactivity (rate 1 to 6)
    1 = Bodily movements are animated. (Note that hyperactive, agitated child is not distinguished here from what would be seen as normal nondisturbing behavior; hypoactivity should be noted)
    6 = Severe sense of motor retardation with catatonic-like qualities

Total of all subscores = Raw summary score
• 13-center study, n= 439
• age 12-17
• moderate to severe depression
• RCT, double-blind for meds vs. placebo and single-blind for therapy

March J et al. *Treatment for Adolescents With Depression Study (TADS).* JAMA V 292, No.7 Aug 18, 2004
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TADS: take-home thoughts

- Fluoxetine alone is effective
- Combination therapy is better
- Harm- and suicide-related events
  - OR= 1.27 for CBT, 1.6 for combination, 2.43 for fluoxetine alone
  - CBT reduced suicidality for patients on fluoxetine

March J et al. Treatment for Adolescents With Depression Study (TADS). JAMA V 292, No.7 Aug 18, 2004
Treatment of MDD in children

• **psychoeducation**: from first visit
  • about the illness, about therapy, about how meds work
  • in one study, 30% of children improved with this intervention alone

• **psychotherapy** (mild to moderate depression)

• **medication + psychotherapy** (moderate to severe depression)
Psychotherapies in MDD

- cognitive behavioral therapy (CBT) and interpersonal therapy (IPT) are the most studied modalities in pediatric depression
  - more studies with adolescents than young kids
- response rate 60%-70% (controls 30%-50%)
CBT in childhood depression

- guiding self-statements: “stop, think, act”
- positive self-statements: “I can do it, I’ve done this before”
- self-instructions: “what are my options?”
- relaxation training: breathing, relaxing muscles
- correction of thinking errors: “it was just an accident”
- role-playing, rehearsing
Interpersonal Therapy for Depressed Adolescents (IPT-A)

**Initial phase:**

- psychoeducation
- assignment of ‘limited sick role’
- creation of ‘closeness circle’
- conduct interpersonal inventory
- 4 problem areas inventory
  - grief/loss, role transitions, role disputes, interpersonal deficits

Interpersonal Therapy for Depressed Adolescents (IPT-A)

**middle phase:**

- clarification, expression of emotions
- communication analysis
- decision analysis for problem solving
- communication skills
- role playing
- interpersonal “homework”
Interpersonal Therapy for Depressed Adolescents (IPT-A)

**termination phase:**

- review warning signs/symptoms of depression
- review interpersonal strategies
- generalize strategies to future situations
- discuss emotions about ending treatment
- assess need for further treatment

Medications for childhood MDD

- **fluoxetine** is approved by the FDA for use in depression

- long half-life is a benefit
  - occasional skipped doses don’t hurt
  - can give doses under 10 mg by giving it twice or three times a week

- don’t titrate too fast, as it takes 4-5 half-lives to reach steady state (2 to 3 weeks)
Medications for childhood MDD

- sertraline, citalopram, escitalopram are also used (but off-label)

- avoid paroxetine
  - reanalysis of studies done in 1998 showed it was ineffective and increased suicidal thinking
  - GlaxoSmithKline was fined $3bn in part for fraudulently promoting paroxetine

Medications for childhood MDD

- tricyclics, atomoxetine: don’t work very well
  - ...but imipramine and doxepin are still FDA-approved for depression in children >12
- bupropion?
  - not indicated for age<18
  - some positive data (open label, no meta-analyses)
  - most studies so far are on comorbid depression and ADHD or refractory depression
  - ask about seizure history
Prescribing fluoxetine

• give any time of day that is best for compliance
• titrate as tolerated/needed, remembering that long half-life means it takes weeks to reach steady state level
  • kids may metabolize it faster
  • usual moderate dose is 20 mg/d, max. 80 mg/d
• a liquid is available: for lower doses, more precise titration, kids who can’t swallow pills
Antidepressants and suicide

- Many studies have found increased suicidal thinking/behavior in the first few weeks of antidepressant treatment.
- The FDA warnings of 2003-2004 led to a sharp decrease in treatment of adolescent depression.
- Excluding suicidal thoughts and looking only at suicide attempts and completions, antidepressants reduced suicide risk significantly.*

SSRI’s: other side effects

- GI: nausea, diarrhea (less common)
- ↑ or ↓ sleep, nightmares
- sweating
- easy bruising
- sexual SE
Increased risk of BPD

- psychotic depression
- family history of bipolar d/o
- presence of subthreshold manic symptoms (e.g., insomnia, pressured speech)
- past med-induced mania
Choice of medications

- should you start a mood stabilizer or an antidepressant when a depressed child has:
  - irritability, decreased sleep, family history of BPD?

- even in children with a bipolar parent, depression is more likely to be unipolar
  - # of risk factors is important
  - use judgment, discuss with parents, document
  - start lower, go slower, check in often
How long to continue treatment?

- for a first episode of uncomplicated depression remitting with treatment: **6-12 months**
- longer if complicated, refractory, or recurrent
- consider maintenance therapy for recurrent, complicated, and/or severe depression
ADHD and anxiety with MDD

- ADHD is associated with higher risk of depression
  - gradual erosion of self esteem
  - social, academic, interpersonal failures
- when anxiety affecting function predates depression, *it must be adequately addressed* or depression will be much less likely to respond to treatment
Treat co-occurring problems

- ADHD, anxiety: unless depression is severe, treat these first
  - depressive symptoms may remit as a result
- if treating more than one problem, avoid “compromise” medications: start with the best medication for each problem
  - e.g., use stimulant + SSRI for ADHD and depression (not bupropion)
Summary

• it’s not MDD unless it lasts 2 weeks and meets full diagnostic criteria

• even with family history of bipolar disorder, depression is more likely to be unipolar
  • but follow carefully, especially if starting meds
Summary

- **therapy** is best for mild to moderate depression
- **therapy plus medication** for moderate to severe depression
  - watch for increased SI early in med treatment
  - don’t stop meds too soon
Summary

• Cognitive-Behavioral Therapy (CBT)* and Interpersonal Therapy (IPT)** have the strongest research support for the treatment of childhood depression

*children and adolescents

**adolescents

http://effectivechildtherapy.org/content/depression
http://effectivechildtherapy.fiu.edu/professionals (CE keynote and workshop videos)