Treating Childhood Depression

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Outline

- Epidemiology
- Etiology
- Recognition
- Psychotherapeutic treatment
- Pharmacologic treatment
- Indications for referral
Epidemiology

- Major depression disorder (MDD) has a 15-20% lifetime prevalence in adults and frequently begins in early adulthood, or adolescence (median age = early twenties)

- Youth prevalence:
  - Pre-adolescent = 2% for MDD
  - Adolescent = 6% for MDD
  - Higher rates of less severe depression (about 7% for pre-adolescent)
What about prevalence of childhood depression in Indian Country?

- Largest epidemiologic mental health study (National Center for AI/AN MH Research) specifically in Indian country only measured down to age 15

- One nationwide, general childhood health study demonstrated the prevalence of depressive symptoms in AI/AN youth (11-15) at about 1.5 times the rate of general population

- This is consistent with the increased rate of suicide in the AI/AN youth population
Monoamine hypothesis

- Serotonin and norepinephrine predominant in the amygdala and other limbic system structures. Responsible for mood regulation, appetite, sleep and arousal.

- Dopamine predominant in the prefrontal cortex, mediates attention and executive functions.

- Though forms the basis for some of the medication efficacy, the model is oversimplified.
Etiology - Genetics

- Having one depressed parent about doubles the risk for childhood depression

- Twin studies have shown about double the rate in identical vs. fraternal twins

- Adoption studies have shown consistently higher rates of mood disorders when biological parent has mood disorder
Etiology- Intrauterine environment

- Many lines of evidence showing high level of maternal stress, causing high levels of cortisol, inhibits normal growth of limbic system (among other parts of brain)

- These infants then have difficulty with mood regulation, self soothing and recognition of social cues
Limbic system still very sensitive to environmental and neuro-hormonal factors through infancy.

Neglect and maltreatment causing high cortisol and inhibition (again) of limbic system development.
Infant-mother bond

- Romanian orphanages
- Harlow’s Monkeys
ACE increases the risk of adolescent depression by 300%

- Risk and severity and dose-dependent
DSM-IV-TR: For two or more weeks, a persistently sad, or depressed mood; or a loss of interest in usually pleasurable activities, and 4 or more of the following:

- Trouble sleeping (too much, or too little)
- Trouble with appetite (too much or too little)
- Fatigue
- Agitation, or physical slowing
- Poor memory and/or concentration
- Excessive guilt
- Suicidal ideation
Variants

- Dysthymia, DDNOS
- Bipolar D/O
- Due to substances or medical disorder
Depression in adolescents over 14 years old is similar to adult depression (part of reason that PHQ-2 and 9 validated is this population)

Depression under 12 years frequently presents differently

The younger the child, the more different the presentation
Pre-pubertal depression

- Mood more frequently irritable
- Behavior problems/acting out are frequent
- Academic problems frequent
- Perception of not being loved by parents, or not being liked by peers
Pre-pubertal symptoms

- Headaches and abdominal complaints
- Rapid weight loss, or weight gain can occur
- Less animated (exuberance of childhood gone)
- Quality of play different
Essential parts of evaluation of every childhood depression evaluation

- Substance use
- Abuse
- Bullying
- Safety
Medication studies show high placebo response rates

Validation and small environmental changes can sometimes be curative
Ideally, every depressed youth should receive some form of psychotherapy

Cognitive-behavioral and interpersonal therapy are both research validated for adolescent depression
Play therapy is generally effective for youth under eight years old, can be used in older youth.

Family therapy particularly helpful when family conflict and blaming of child present.

Group therapy/social skills training good for youth with trouble socializing.
Medication

- Medication generally shouldn’t be used as sole treatment, except for some older adolescents
- Efficacy studies not as robust as for adults, partly due to large placebo response (smaller effect size)
- Combination therapy shown to be more effective than medication or psychotherapy alone in adolescents, especially with more severe depression
Medication (cont’d)

- Only fluoxetine FDA-approved for pre-pubertal depression, escitalopram FDA-approved over 12 years, sertraline approved for OCD in pediatric
- TCA’s FDA-approved for other disorders in pediatric pop
- Though studies have shown effectiveness in social anxiety disorder, paroxetine should not be used for in pediatric/adolescent depression
Suicide risk and anti-depressants

- FDA “black box” warning placed on all anti-depressants in 2004, warning of increased risk of suicidal thoughts and behaviors.

- Based on analysis of pooled efficacy and safety data from pharmaceutical companies.

- Pooled data covered 4,100 pediatric patients, and showed double the risk of suicidal thoughts and behaviors in the weeks following initiation of medication therapy (4% vs 2%).
Epidemiologic studies have demonstrated increase in suicide rates since black box warning

No actual completed suicides in original data

Subsequent studies have shown decrease in suicide rates, starting about 12 weeks post-initiation

Other large studies and meta-analyses confirmed increased risk, but demonstrated smaller, time-limited risk
Bottom line on safety

- Small, increased risk in suicidal thoughts and behaviors with medication treatment consistent with decades-known phenomenon
- Overall, decreased risk of suicide with medication treatment after initiation period
- Black box warning should not prevent use of medication, but should underscore the need for careful monitoring
Recent, large study has demonstrated protective effect of psychotherapy regarding suicidal thoughts and behavior.

FDA now recommends monitoring be individualized, but previous recommendation of weekly for 4 weeks, then biweekly for 4 weeks, then monthly, which is still a good guide.
Evolution in thinking about type of prescriber for pediatric medication

- Development of SSRI’s have made treatment of depression much simpler and safer
- Until the late 1990s, American Academy of Child and Adolescent Psychiatry took the position that pharmacotherapy for depression should be done by a psychiatrist
- Now, the position is that pediatricians and family practitioners are the first-line for pharmacotherapy for childhood depression
When to consider referral to a psychiatrist

- If patient has recently been psychiatrically hospitalized
- High concern about safety
- Partial, or no response to intervention after 8 weeks
- Failure of initial medication trial
- Other complicated issues (abuse in family, severe substance abuse in patient or family, serious medical condition, or disability in youth, etc)
- Serious mental disturbance in very young child
Summary

- Childhood depression very treatable
- Talk therapy indicated in almost all cases of childhood depression
- Treatment available in most of our tribal and urban Indian health programs, consisting of talk therapy and pharmacotherapy, can be very effective
- Coordination between behavioral health and prescribing provider enhances safety and efficacy