Major Depressive Disorder: Evidence Based Care Approach in Primary Care

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Objectives

- Discuss significance of major depressive disorder (MDD) in primary care settings
- Discuss diagnostic criteria as well as screening tools for MDD
- Discuss evidence based practice medications used in the management of MDD in the primary care setting

No conflicts to report
Significance In Primary Care

MDD
- Affects 25 million people in the U.S.
- 2nd leading cause of disability in the U.S.
- Symptoms tend to progress over time, without treatment
- With proper treatment, 2/3 recover; 1/3 have recurrence
  (NAMI, 2018)

Impact
- Primary care settings are the likely location where individuals seek out care
  (NIMH, 2017a)
- Up to 50% of common mental disorders are treated in the primary care setting
  (NIMH, 2017a)
- Most common disorders seen in primary are depression and anxiety
  (Wittchen, Mühlig, & Beesdo, 2003)

Shout out to Primary Care Providers!
Diagnostic Criteria: MDD (DSM-5)

- Must include depressed mood (sad, empty, hopeless) or loss of interest/pleasure
- Change from previous functioning- causing significant impairment
- Must include 5 or more symptoms during the same 2-week period of time:
  - Depressed mood most of day, nearly every day, significant weight loss/gain, insomnia/hypersomnia, psychomotor agitation/retardation, fatigue/loss of energy, diminished concentration, recurrent thoughts of death

Screening Tools vs DSM-5

Diagnosis is not made from answers on screening tools- These are used to assist with your assessment

- PHQ-9
  - 9 item depression scale for screening and monitoring down to age 11
  - There is also a PHQ-9 modified for teens
  - It is free, valid and reliable
- PHQ-3
  - PHQ-2 (+) item #9 (thoughts of death/SI)
MDD: Child and Adolescent

Common presentations:
- Irritability
- *Hopelessness
- Sadness
- Self-hatred
- Somatic and cognitive changes that interfere with functioning at home, in school and/or with peers
- Social withdrawal
- Grades may drop
- Alcohol and substance use are common
- Comorbid anxiety is common

*Degree of hopelessness is #1 predictor for risk of suicide

- 50% of mental health disorders begin before age 14 and 75% before age 24
- 1:1 M:F ratio in children; 1:2 in young adults
- Risks are increased if parents have depression
- Average length of untreated episode is 7-9 months with a recurrence rate of 60-70%

(Child Mind Institute, 2015)

MDD: Child and Adolescent

American Academy of Pediatrics (AAP) Treatment Guidelines
- Ages 10 - 21
- Ages 18 - 21 could follow adolescent or adult guidelines

Recommended screening for depression
- Ages 12 - 21 annually
- At risk patients should be identified and monitored by use of screening tools
- (+) screens - check DSM-5 criteria

Early interventions can help prevent chronic disorders
- SBIRT
  - Screening
  - Brief intervention
  - Referral
  - Treatment

(SAMHSA, AAP 2018)
Shout out to Rural Providers!

- Telepsych
- Network
  - Can you call a specialist?
  - Consult services?
- On-line CBT programs for teens
  - resources slide

Forget about the tooth fairy… We need the time fairy!!!

- What is the most pressing need?
- Can it wait until the next appointment?
- Send screening tools to patients prior to appointments, complete them in the lobby or in their room
- Limit open-ended questions until you have more time
- Is it possible to block more time for psychiatric-related visits?
Evidence Based Guidelines: MDD
Ages 10-21

Determine severity

Mild-Moderate (can typically be managed as an outpatient)
PHQ-9 <20
- No SI/HI and does not pose imminent risk
- No psychotic features
- Little/no aggression
- Intact judgement

Moderate-Severe (referral to psychiatry or inpatient setting)
PHQ-9 15-19 (mod) >20 (Severe)
- SI behavior
- Impairment in functioning

Collaborative treatment plans

- Safety plan
- Psychotherapy vs psychotropics or combination
- Treatment setting
- Education/resources

(AAP, 2018)

Evidence Based Guidelines: MDD
Ages 10-21

Mild - primary care setting:
- Active support/monitoring for 6-8 weeks or biweekly visits
- If symptoms persist: Psychotherapy or antidepressant

Moderate - primary care setting
- Initiate evidence based medication or psychotherapy
If partial improvement after 6-8 weeks
- If you have not added medication, add medication
- If medication present evaluate/maximize dose as tolerated
- Continue to provide education, review safety plans, and ongoing monitoring
If no improvement after 6-8 weeks
- Reassess diagnosis
- Add medication if this has not already been done
- Maximize medication if not on maximum dose
- Add psychotherapy
- If the patient is on maximum dose of medication, consider switching agents

Severe- Consult psychiatric specialist (AAP, 2018)
Medication Considerations

- Safety, tolerability, and anticipated side effects
- Efficacy data
- Parental preference (has another family member taken an SSRI with success/side effects)
- Potential drug interactions
- Half-life
- Cost

Medication Options

FIRST LINE: Selective serotonin reuptake inhibitors (SSRIs)

Fluoxetine
- FDA approved for depression in children 8 years of age and older
- Most researched SSRI
- Long half-life (4-6 days- parent drug, 9.3 days- active metabolite)
- Can be stopped without taper, if necessary

Escitalopram
- FDA approved for depression in adolescents aged 12 years and older
- Few side effects
- Half-life 27-32 hours

Also researched
- Sertraline
  - Greatest risk for GI disturbance
  - Few drug interactions
- Citalopram
  - QT prolongation
  - Least drug-drug interactions
- Venlafaxine (SNRI)
  - Monitor BP
- Do not use paroxetine

(AAP, 2018)
FDA Black Box Warning

FDA recommendation
- All pediatric patients being treated with antidepressants for any indication should be observed closely for clinical worsening, suicidality, and unusual changes in behavior, especially during the initial few months of a course of drug therapy, or at times of dose changes, either increases or decreases.

What does this mean?
- Regular and frequent monitoring for adverse events should be established with patient and family

What is frequent monitoring?
- According to expert consensus, it is ideal that patients are assessed in person within 1 week of the initiation of treatment.

Initiation Of SSRI

Start low
- Decrease side effects
- Takes 4-6 weeks to reach full therapeutic effects

Educate patient and family
- Most common side effects and expected duration of side effects
  - GI (can last 1-2 weeks)
  - Watch for increased agitation, mania, suicidal ideations (black box warning)
- Take medication every day
  - full therapeutic effect takes up to 4-6 weeks

Follow up
- One week after initiation of medication
- Every 2-4 weeks in person or by phone, if frequent in-person visits are not feasible until it is determined a therapeutic dose has been reached and is well tolerated.
Dosing

**Fluoxetine:** 10 mg - 20 mg daily  
8-18 years of age  
• Start 10 mg daily

**Citalopram:** 10 mg - 40 mg daily  
12 years of age and older  
• Start 20 mg daily  
• Increase by 10 mg

**Escitalopram:** 10 mg - 20 mg daily  
12-17 years of age  
• Start 5 mg - 10 mg daily

**Sertraline:** 25 mg - 200 mg daily  
13 years of age and older  
• Start 25 mg  
• Increase by 50 mg

Common Side Effects

- GI  
  ○ Constipation  
  ○ Diarrhea  
  ○ Appetite changes

- Sleep disturbance  
- Irritability  
  “Disinhibition” (risk-taking behaviors, increased impulsivity)

- Agitation

- Headache

- Jitteriness

- Sweating

- Dry mouth

- Rashes

- Sexual dysfunction
Monitoring

Assess:
- Ongoing depressive symptoms
- Risk of suicide
- Possible adverse effects from treatment
- Adherence to treatment
- New and/or ongoing life stressors

Length of Treatment

- Continue medication for one year after complete resolution of symptoms
- Monitor patient monthly for 6 months after full remission
- Continue to monitor for 6-24 months with regular follow-up
MDD: Adult (18 - 60 years of age)

- MDD and other serious mental illnesses are the 3rd most common cause of hospitalization in the US for those aged 18-44 years
- Adults living with serious mental illnesses die on average 25 years earlier than others
- In 2016, 37% of adults with MDD received no medical treatment for their condition


MDD: Adult (18 - 60 years of age)

- DSM-5 Criteria is the same as for child/adolescents
- Screening tools: PHQ-9 and PHQ-3

During the acute phase of depression

- Comprehensive assessment
- Establish goals of treatment
- Ensure safety of patient and others
- Determine treatment setting
- Choose treatment modality (i.e., medication, psychotherapy and/or combination)
- ECT/TMS if indicated
- Psychoeducation
MDD: Adult (18 - 60 years of age)

INITIAL TREATMENT

- Combination psychotherapy and pharmacotherapy OR each can be used as monotherapy (APA, 2018)
- Goal of initial treatment for depression is symptom remission and restoring baseline functioning
- First line medications: SSRIs/SNRIs
  - Lack of clear superiority in efficacy among antidepressants

First Line Agents: Adult MDD

SSRIs
- Citalopram
  - 20 mg - 40 mg daily
- Escitalopram
  - 10 mg - 20 mg daily
- Fluoxetine
  - 20 mg - 60 mg daily
- Sertraline
  - 50 mg - 200 mg daily
- Paroxetine (do not recommend)

SNRIs
- Desvenlafaxine
  - 50 mg daily
- Venlafaxine XR
  - 37.5 mg to 225 mg daily
- Duloxetine
  - 30 mg - 60 mg daily
- Levomilnacipran
  - 20 mg to 80 mg daily
Medication Considerations

No response/No Side Effects:
- Maximize dose
- Change medication if ongoing poor response

Partial Response:
- Increase frequency of psychotherapy
- Increase the dose to maximum tolerable dose

Continued partial response:
- Consider augmentation strategy taking into consideration tolerability and side effects

Augmentation Strategies

Bupropion: Norepinephrine-Dopamine Reuptake Inhibitor
- Contraindicated in seizure disorder
- Avoid in bulimia and anorexia
- Low sexual side effects
- Smoking cessation and adult ADHD
- Can increase anxiousness
- Comes in three different formulations

Trazodone: Serotonin Modulator
- Insomnia

Aripiprazole: Second Generation Antipsychotic
- Can help with mood irritability
- Assess for metabolic changes
Serotonin Syndrome

- 2 or more serotonergic meds in combination
- Occurs when central and peripheral 5HT-1A and 5HT-2A receptors are overstimulated
- Usually within 6 hours of ingestion
  - Trytophans (OTC)
  - St. John’s Wort (OTC)
  - Dextromethrophan (DM)
  - Codeine
  - Tramadol
  - Buspirone
  - Meperidine
  - TCAs
  - Recreational drugs: LSD, Ecstasy

(Volpi-Abadie, J., Kaye, A.M., & Kaye, A.D. 2013)

Serotonin Syndrome

Autonomic changes:
- Diarrhea
- Fever
- Flushing
- hypo/hypertension
- Sweating

Neuromuscular changes:
- hyperreflexia
- increased muscle tone
- restlessness
- rigidity
- tremor
- shivering

CNS:
- Agitation
- Confusion
- Delirium
- Hallucinations

(Volpi-Abadie, J., Kaye, A.M., & Kaye, A.D. 2013)
MDD: Older Adults (60+)

- Depression is one of the most common mental health disorders in older adults
  - 1 in 10
- Depression in older adults is associated with decreased levels of functioning, worse health status, reduced quality of life, and increased disability and mortality
- Depression is a leading risk factor for suicide in older adults
- 60% - 80% of older adults who receive appropriate treatment achieve a reduction in their symptoms of depression
- The incidence of major depression and suicide can be decreased by identifying older adults who are at risk for depression and providing them with effective prevention


MDD: >70 years of age

Remember…
Elderly patients often under-report their depressive symptoms and may not acknowledge being sad, down or depressed.
- Common depressive symptoms such as lack of enjoyment in normal activities, loss of interest in life, apprehension about future, poor sleep, recurrent thoughts of death, persistent unexplained poor concentration and/or impaired memory are often misattributed to old age, dementia or poor health
- They may present report somatic symptoms such as pain or various illnesses
# MDD: Older Adults: (60+)

**Medication Considerations**

First line agents: SSRIs

- **Sertraline**
  - preferred in cardiac patients
- **Fluoxetine**
  - long half life - many interactions
- **Paroxetine**
  - significant drug interactions
- **Citalopram**
  - dose should not exceed 20 mg
  - monitor for QTc prolongation

SNRI: Venlafaxine generally well tolerated (monitor BP)

TCAs not recommended per Beers Criteria

## Medications that may contribute to depression

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SSRI/SNRI and Hyponatremia

Hyponatremia: Serum Na <135 mmol/L

SSRIs are associated with Syndrome of inappropriate antidiuretic hormone (SIADH)

- Monitor patients on SSRIs and antidiuretics closely
- Most hyponatremia occurs within the first few weeks of adding SSRI
- Normonatremia occurs within 2 weeks of stopping SSRI

(Jones, ER, 2017)

SSRI/SNRI + Anticoagulants

Increased risk of bleeding through several mechanisms

- Platelet aggregation is impaired
- Platelet serotonin levels are depleted
- Reduction in platelet count
  - Monitor patients on warfarin, aspirin, NSAIDS
Prescribing Considerations in Older Adults

Dosing Considerations:
- Starting dose of antidepressant medication for older adults is often half of what is recommended for young and middle aged patients for most frail and medically complex patients.
- Sometimes even a quarter of the starting dose is recommended.

WHY?
- Changes in the body’s ability to absorb, distribute, metabolize, and eliminate medications.

Duration of Treatment:
- If responsive, provide maintenance treatment to prevent the recurrence of depression.

Resources

Guidelines for Adolescent Depression in Primary Care
GLAD-PC Toolkit
Can be found at: http://www.gladpc.org/

Here they have several tools such as:
- Depression monitoring sheet
- Assessment for High Risk Teens Suicide Attempters
- Safety Planning for adolescents

Brief Suicide Assessment

Stanley Brown Patient Safety Plan

Research Based CBT programs:
Adolescent Coping with Depression Course by GN Clark and PM Lewinsohn
https://research.kpchr.org/Research/Research-Areas/Mental-Health/Youth-Depression-Programs/Downloads

COPE (Creating Opportunities for Personal Empowerment) BM Melnyk
https://www.cope2thrive.com/
References


SAMHSA-HRSA Center for Integrated Health Solutions
http://integration.samhsa.gov/clinical-practice/SBIRT


THANK YOU!

YOU GOT THIS