



LINDNER
CENTER OF HOPE

Insights into Depression

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Conflicts of Interest and Caveats

- No conflicts of interest to report
- This presentation is for informational purposes only and is not to be interpreted as medical advice
- This presentation is a brief introduction and not meant to be exhaustive
- This presentation is not meant to provide self-diagnoses or diagnoses to family members – diagnoses should be made by a healthcare professional (general physician, psychiatrist, psychiatric PA/NPs, psychologists, counselors, and social workers)



Today's Objectives

- Outline characteristics of different forms of depression
- Describe treatment options for depression



Introduction to Depression

- Characterized by distinct subtypes
- Definitions and characteristics based on the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-5)*
- No clinically-validated biomarkers at this time unfortunately
- 280 million people worldwide living with depression in 2019 (per WHO) - one of the leading causes of disability worldwide



DSM-5



Biological Basis of Depression - Theories

Genetic, inherited component – heritability estimated to be at 37%

Overactive hypothalamic-pituitary-adrenal (HPA) axis leading to **excessive secretion of cortisol**

Thyroid and adrenal gland abnormalities

Neurotransmitter deficits – serotonin, norepinephrine, dopamine, as well as alterations of glutamate, acetylcholine and GABA levels

Neural circuit abnormalities

Immune dysfunction associated with inflammation

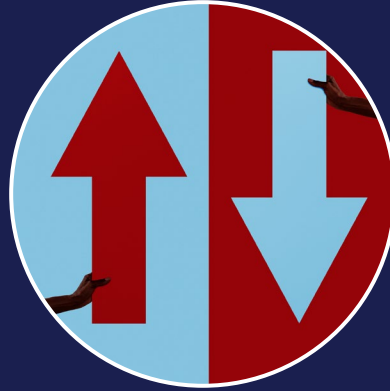


Mood Disorder Spectrum



Unipolar
Depression/Major
Depressive Disorder
(MDD)

Unipolar



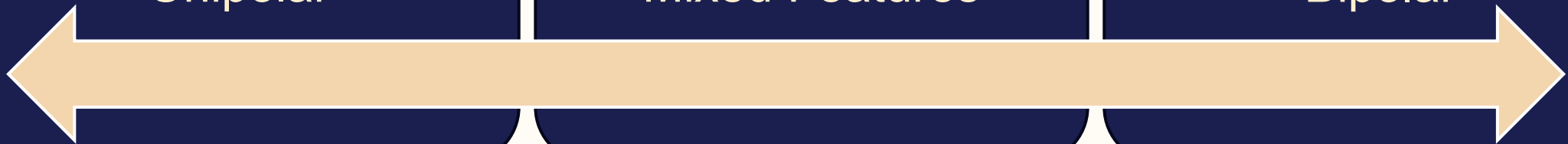
Persistent Depressive
Disorder/MDD with
Mixed
Features/Cyclothymia/
Bipolar II Disorder

Mixed Features



Bipolar I Disorder

Bipolar



Mood Disorders

- Major depressive disorder (“classic depression”) with multiple specifiers
- Persistent depressive disorder (e.g. dysthymia)
- Cyclothymia
- Bipolar II disorder
- Bipolar I disorder



Major Depressive Disorder (Unipolar Depression)

Episodic in nature but must occur for at least 2 weeks

Characterized by depressed mood and/or anhedonia (loss of interest or lack of pleasure)

5 of the following symptoms:

- Sleep disturbances (often including early morning awakenings) or increased drive to sleep
- Appetite often with accompanying weight changes – decreased or increased
- Decreased energy
- Concentration and memory difficulties
- Psychomotor slowing or agitation/restlessness
- Decreased motivation
- Suicidal ideation – either passive or active

Persistent Depressive Disorder (Dysthymia)



Chronic, low-lying depression for at least 2 years in adults and at least 1 year in children/adolescents with less than 2-month period free of depressive symptoms



Similar symptoms as MDD but can also include low self-esteem and difficulties with decision making



Symptoms are less severe than a major depressive episode but always persistent



Major depressive disorder episodes can occur with dysthymia – “double depression”



Common Co-morbidities of Unipolar Depression

Alcohol
abuse/dependence
and other
substance use
disorders

Anxiety disorders

Obsessive-
compulsive disorder
(OCD)



Clues to bipolar spectrum depression

Early age of onset (especially in childhood or early adolescence)

Psychotic depressive episode occurring prior to age 25

Atypical features of depression

Seasonality of depression

Multiple depressive episodes during a one-year span

Family history of bipolar disorder

Hypomania or increased irritability with trial of antidepressants

Loss of efficacy of antidepressants despite initial efficacy (at least 3 times)



Bipolar I Disorder

- Historically known as manic-depressive disorder
- Characterized by at least 1 manic episode lasting for 1 week or that leads to hospitalization - 3-4 of the following symptoms must be present for mania:
 - Abnormally elevated or irritable mood (required)
 - Decreased need for sleep (e.g. feeling rested after 3 hours of sleep)
 - Increased activity (e.g. working on multiple projects)
 - Increased talkativeness – speech content as well as speed
 - Racing thoughts
 - Grandiosity
 - Impulsivity (e.g. shopping sprees, impulsive decisions)
 - Distractibility



Bipolar I Disorder

- Mania is an observable change in behavior from others – family and friends are often the first to notice
- Treatment with standard antidepressants alone - without a mood stabilizer medication - can worsen this condition



Bipolar II Disorder

- Most of the time is spent in major depressive episodes
- Characterized by at least 1 hypomanic episode lasting for at least 4 days - 3-4 of the following symptoms must be present for hypomania:
 - **Abnormally elevated or irritable mood** (required)
 - Decreased need for sleep (e.g. feeling rested after 3 hours of sleep)
 - Increased activity (e.g. starting multiple projects at once)
 - Increased talkativeness – increased speech content as well as faster speed
 - Racing thoughts
 - Grandiosity
 - Impulsivity (e.g. shopping sprees, impulsive decisions)
 - Distractibility



Bipolar II Disorder

- **Hypomania is not significant enough to impair functioning or lead to hospitalization**
- Hypomania is an observable change in behavior from others – family and friends are often the first to notice
- Treatment with standard antidepressants alone - without a mood stabilizer medication - can worsen this condition



Cyclothymia



Cycling mood for at least a 2-year period for adults
and for at least a 1-year period in
children/adolescents



Elevated mood phases do not meet full criteria for hypomania/mania and depressive phases do not meet full criteria for a major depressive episode



Treatment of Depression – Psychotherapy

- Behavioral therapy
- Cognitive behavioral therapy (CBT)
- Interpersonal therapy
- Psychoanalysis/psychodynamic therapy
- Family therapy



Reasons to Hospitalize

Danger to self –
active suicidal plan
with intent and/or
preparatory
behavior

Danger to others or
society

Unable to take care
of self, including
basic activities of
daily living



Treatment of Unipolar Depression – Antidepressant Medications

- SSRIs – Prozac, Zoloft, Lexapro, Celexa, Luvox
 - SNRIs – Cymbalta, Effexor, Pristiq, Fetzima
 - NDRIs – Wellbutrin and related medication, Auvelity
 - Atypical Antidepressants – mirtazapine, trazodone, vilazodone, vortioxetine
 - MAO-inhibitors
 - TCAs
- * All these medications often require 2-3 months at an adequate dose to see full benefit
- * These medications above can precipitate hypomania, mania, or a mixed depressive episode in individuals with susceptibility to underlying bipolar spectrum depression – mood stabilizer is also required in these individuals



Treatment of Bipolar Depression – Mood Stabilizer Medications

- Lithium
- Antiepileptic Medications
 - Depakote (valproic acid)
 - Tegretol (carbamazepine)
 - Trileptal (oxcarbazepine)
 - Lamictal (lamotrigine)
- Antipsychotic medications
 - Abilify (aripiprazole)
 - Caplyta (lumateperone)
 - Geodon (ziprasidone)
 - Risperdal (risperidone)
 - Seroquel (quetiapine)
 - Vraylar (cariprazine)
 - Zyprexa (olanzapine)



Pharmacogenetic Testing

- Main use is to determine how the medications will be metabolized in the liver or excreted in the kidneys, which can lead to higher or lower blood levels compared to the dosage prescribed
- Can help predict how one will tolerate the medication
- Not generally predictive of which medication will work best for the patient



Neuromodulation Treatments



Electroconvulsive Therapy (ECT) – major depression, bipolar depression, mixed depressive episode, hypomania, mania, catatonia



Transcranial Magnetic Stimulation (TMS) – FDA approved for unipolar depression only for both adolescents and adults



Spravato® (esketamine) nasal spray – FDA approved for treatment resistant depression and acute suicidality



Light Therapy – for seasonal major depression, bipolar depression



Vagal Nerve Stimulation





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Questions?



Thank you for
coming!

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your feedback.



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