

## MOOD DISORDERS

- **Mood:** description of ones internal emotional status, may be triggered by external or internal stimuli
- **Mood disorders** (affective disorders): abnormal range of moods & lose control over them, may cause distress & social/occupational functioning, defined by their patterns of mood episodes, **chronic**, marked by *relapses with relatively normal functioning between episodes, which is a key factor in distinguishing a mood disorder from other chronic psychiatric disorders such as schizophrenia*, may be caused by another medical condition or drug
- **Ddx of mood disorders:**
  1. Mood disorders due to other medical conditions
  2. Substance/medication induced
  3. Major depressive disorder (MDD)
  4. Bipolar 1 disorder
  5. Bipolar 2 disorder
  6. Persistent depressive disorder (dysthymia)
  7. Cyclothymic disorder
  8. Premenstrual dysphoric disorder
  9. Disruptive mood dysregulation disorder (DMDD)
  10. Specified depressive/bipolar disorder (meet criteria of MDE or bipolar but shorter duration or fewer symptoms)
  11. Unspecified depressive/bipolar disorder

Substance/Medication-Induced Depressive Disorder	Substance/Medication-Induced Bipolar Disorder
EtOH	Antidepressants
Antihypertensives	Sympathomimetics
Barbiturates	Dopamine
Corticosteroids	Corticosteroids
Levodopa	Levodopa
Sedative-hypnotics	Bronchodilators
Anticonvulsants	Cocaine
Antipsychotics	Amphetamines
Diuretics	
Sulfonamides	
Opiates	
Withdrawal from stimulants (e.g., cocaine, amphetamines)	

- **Mood episodes:** distinct periods of time in which some abnormal mood is present. They include depression, mania, and hypomania.
- Ddx of mood episodes
  1. Major depressive episode
  2. Manic episode
  3. Hypomanic episode

Medical causes of a depressive episode	Medical causes of a manic episode
<ul style="list-style-type: none"> <li>• <b>Cerebrovascular disease</b> (stroke, MI), high risk poor outcome</li> <li>• Endo (DM, Addison, hypoglycemia, hyper/hypothyroid, hyper/hypocalcemia)</li> <li>• Parkinson</li> <li>• Viral illness (mononucleosis)</li> <li>• Carcinoid syndrome</li> <li>• CA (lymphoma &amp; <b>pancreatic CA (common)</b>)</li> <li>• Collagen vascular disease (SLE)</li> </ul>	<ul style="list-style-type: none"> <li>• Metabolic (hyperthyroid)</li> <li>• Neuro (temporal lobe features, MS)</li> <li>• Neoplasms</li> <li>• HIV</li> </ul>

## Mood episodes

	symptoms	notes
<b>Major depressive episode (MDE)</b>	<p><b>at least 5 symptoms</b> (must include no. 1 or 2) for at least a <b>2-week period</b></p> <ol style="list-style-type: none"> <li>1. Depressed mood most of the time.</li> <li>2. Anhedonia (loss of interest in pleasurable activities).</li> <li>3. Change in appetite or weight (↑ or ↓).</li> <li>4. Feelings of worthlessness or excessive guilt.</li> <li>5. Insomnia or hypersomnia.</li> <li>6. Diminished concentration.</li> <li>7. Psychomotor agitation or retardation (i.e., restlessness or slowness).</li> <li>8. Fatigue or loss of energy.</li> <li>9. Recurrent thoughts of death or suicide.</li> </ol>	<p>Symptoms of major depression— <b>SIG E. CAPS</b> (Prescribe Energy Capsules)  <b>S</b>leep, <b>I</b>nterest, <b>G</b>uilt, <b>E</b>nergy, <b>C</b>oncentration, <b>A</b>ppetite, <b>P</b>sychomotor activity, <b>S</b>uicidal ideation</p> <p>Not due to substance or medical condition, cause significant distress or social/occupational impairment</p> <p>Suicide Risk Factors: <b>SAD PERSONS</b>  <b>S</b>: Male sex / <b>A</b>: 45 years / <b>D</b>: Depression / <b>P</b>: Previous attempt / <b>E</b>: Excess alcohol or substance use / <b>R</b>: Rational thinking loss / <b>S</b>: Social supports lacking / <b>O</b>: Organized plan / <b>N</b>: No spouse / <b>S</b>: Sickness</p>
<b>Manic episode</b>	<p>distinct period of abnormally and persistently elevated, expansive, or irritable mood +</p> <p><b>at least 3</b> of the following (four if the mood is only irritable):</p> <ol style="list-style-type: none"> <li>1. Distractibility.</li> <li>2. Inflated self-esteem or grandiosity.</li> <li>3. ↑ in goal-directed activity (socially, at work, or sexually) or psychomotor agitation.</li> <li>4. ↓ need for sleep.</li> <li>5. Flight of ideas or racing thoughts.</li> <li>6. More talkative than usual or pressured speech (rapid and uninterruptible).</li> <li>7. Excessive involvement in pleasurable activities that have a high risk of negative consequences (e.g., shopping sprees, sexual indiscretions)</li> </ol>	<p><b>at least 1 week</b>            cause severe distress or social/occupational impairment            May necessitate hospitalization to prevent harm to self or others <b>&gt;50% have psychotic symptoms</b></p> <p><b>Psychiatric emergency!!</b>            Not due to substance or medical condition</p> <p>Symptoms of mania—<b>DIG FAST</b> Distractibility            Insomnia/Impulsive behavior <b>G</b>randiosity            Flight of ideas/Racing thoughts <b>A</b>ctivity/Agitation            Speech (pressured) <b>T</b>houghtlessness</p>
<b>Hypomanic episode</b>	<p>Same symptoms as manic            Differences mentioned in notes section</p>	<p><b>at least 4 days</b>            No marked impairment in social or occupational functioning Does not require hospitalization <b>No psychotic features</b></p>
<b>Mixed features</b>	<p>Criteria of manic/hypomanic + at least 3 MDE symptoms present most of time nearly daily</p>	<p><b>at least 1 week</b></p>

## Mood disorders

### Major depressive disorder (MDD)

DSM-5	Epidemiology/etiology	Course/prognosis
<ul style="list-style-type: none"> <li>At least one MDE</li> <li>No history of manic or hypomanic episode</li> </ul>	<ul style="list-style-type: none"> <li>prevalence: 12% &amp; &lt;10% in elderly. Onset at any age, peaks in the 20s.</li> <li>More in women (esp. in reproductive years)</li> <li>No ethnic or socioeconomic differences.</li> <li>Depression cause ↑ mortality in patients with other illnesses ( diabetes, stroke, CVS disease)</li> </ul>	<ul style="list-style-type: none"> <li>Untreated, depressive episodes are self-limiting but last from 6-12 mo.</li> <li>Episodes occur more frequently as the disorder progresses</li> <li>The risk of a subsequent MDE is 50–60% within the first 2 years after the first episode. Up to 15% of patients with MDD eventually commit suicide.</li> <li>60–70% of patients show a significant response to antidepressants. The <b>gold standard for treatment</b> of MDD is the combined use of both an antidepressant and psychotherapy</li> </ul>

### Treatment

- Hospitalization** (risk for suicide, homicide, or is unable of selfcare)
- Pharmacotherapy** (details in psychopharmacology file)
  - Antidepressants:**
    - SSRIs*: Safer and better tolerated than other classes; side effects (headache, *GI disturbance*, *sexual dysfunction*, rebound anxiety)
    - SNRIs*
    - $\alpha$ 2-adrenergic receptor antagonist mirtazapine & DA-NE reuptake inhibitor bupropion
    - TCA*s: Most lethal in overdose *MAOIs*: Older medications rarely used for refractory and atypical depression
    - Novel agents*: vilazodone (Viibryd) → serotonin partial agonist, or vortioxetine (Trintilix) → interacts with additional serotonin receptors.
  - Adjunct medications:** (used after multiple failed trials of antidepressants)
    - 2<sup>nd</sup> gen antipsychotics + antidepressants are 1<sup>st</sup>-line treatment in patients with **MDD with psychotic feature &** pts with treatment resistant/refractory MDD without psychotic features.
    - T3, T4, & lithium showed some benefit when augmenting antidepressants in treatment refractory MDD.
    - stimulants (methylphenidate) for geriatric & terminally ill but have limited efficacy
- Psychotherapy**

CBT, interpersonal, supportive therapy, psychodynamic psychotherapy, problem-solving , and family/couples therapy

CBT and interpersonal psychotherapy are often selected as initial treatment, May be used alone or in conjunction with pharmacotherapy.

Early dropout is common (as with pharmacotherapy). So track patient adherence
- Electroconvulsive Therapy (ECT)** (details in psychopharmacology file)
 

Used if unresponsive or cant tolerate pharmacotherapy (pregnancy, etc.), or if rapid reduction of symptoms is desired (suicide risk, refusal to eat/drink, catatonia)), ECT is extremely safe (primary risk is from anesthesia) and may be used alone or in combination with pharmacotherapy.

ECT steps: atropine→ GA (methohexital) & muscle relaxant (succinylcholine) → induce generalized seizure by passing a current of electricity across the brain (either bilateral or unilateral) for 30 and 60 seconds, and no longer than 90 seconds.

Retrograde and anterograde amnesia are common side effects, which usually resolve within 6 months.

## Mood disorders

### Major depressive disorder (MDD)

#### notes

episodes of depressed mood associated with loss of interest in daily activities.

Patients may not acknowledge their depressed mood or may express vague, somatic complaints (fatigue, headache, abdominal pain, muscle tension, ...).

#### **Sleep Problems Associated with MDD**

- Most commonly: **Initial and terminal insomnia** (hard to fall asleep and early morning awakenings). Hypersomnia (excessive sleepiness) is less common.
- Multiple awakenings.
- Rapid eye movement (REM) sleep shifted earlier in the night and for a greater duration, with reduced stages 3 and 4 (slow wave) sleep.
- Caution: medical conditions like OSA can cause sleep disturbances with associated changes in energy/mood that can mimic symptoms of depression.

#### **SPECIFIERS FOR DEPRESSIVE DISORDERS**

- **Melancholic features:** *anhedonia (inability to experience pleasure)*, early morning awakenings, depression worse in the morning, psychomotor disturbance, excessive guilt, and anorexia. (25–30% of pts and more in severely ill inpatients, or with psychotic features)
- **Atypical features:** hypersomnia, hyperphagia, reactive mood, leaden paralysis, and hypersensitivity to interpersonal rejection.
- **Mixed features:** Manic/hypomanic symptoms present during the majority of days during a MDE
- **Catatonia:** catalepsy (immobility), purposeless motor activity, extreme negativism (resistance to instructions), staring, mutism, bizarre postures, and echolalia. Treatment is lorazepam (Ativan) though catatonia is especially responsive to ECT. (May also be applied to bipolar disorder.)
- **Psychotic features:** presence of delusions and/or hallucinations. (24–53% of older, hospitalized patients)
- **Anxious distress:** feeling keyed up/tense, restless, difficulty concentrating, fears of something bad happening, and feelings of loss of control.
- **Peripartum onset:** Onset of MDD symptoms occurs during pregnancy or 4 weeks following delivery.
- **Seasonal pattern:** Temporal relationship between the onset of a MDE and particular time of the year (most commonly winter). Patients with fall-onset SAD (seasonal affective disorder or “winter depression”) often respond to light therapy (a 10,000 lux white light for 30 minutes in the early morning).  
Triad: irritability, carb craving, hypersomnia
  
- The Hamilton Depression Rating Scale (HAM-D) measures the severity of depression and is used in research to assess the effectiveness of therapies. PHQ-9 is a depression screening form often used in the primary care setting.
- Loss of a parent before age 11 is associated with the later development of major depression.
- Most adults with depression do not see a mental health professional, but they often first present to a primary care physician for other reasons.

#### BEREAVEMENT (simple grief)

Normal reaction to major loss usually to a loved one (not a mental illness), lasts for months and is self limited, no psychotic symptoms, disorganization, suicidality

If pt meets criteria of MDD after the major loss, we diagnose w/ MDD

## Mood disorders

	DSM-5	Epidemiology/etiology	Course/prognosis	treatment
<b>Bipolar I</b>	<p><b>Episodes of mania &amp; depression (also called manic depression)</b> The only requirement for this diagnosis is the occurrence of a <b>manic episode</b> (Between manic episodes, there may be interspersed euthymia, MDEs, or hypomanic episodes, but none of these are required for the diagnosis). There is usually a return to baseline functioning in between mood episodes</p>	<ul style="list-style-type: none"> <li>No gender differences</li> <li>Twice the risk in high income countries</li> <li>Onset before 30 (1<sup>st</sup> mood episode at 18)</li> <li>Frequently misdiagnosed and treated as unipolar depression</li> <li>Biological, environmental, psychosocial, and genetic factors</li> <li>1<sup>st</sup>-degree relatives → *10 risk</li> <li>monozygotic twins → 40-70%, dizygotic twins → 5%-25%.</li> <li>Bipolar I has the highest genetic link of all major psychiatric disorders.</li> </ul>	<p>last several months (if untreated). Chronic episodic progressive 90% of individuals after one manic episode will have a repeat mood episode within 5 years. poorer prognosis than MDD: treatment refusal in patients with mania (enjoy their increased creativity/energy, and lack insight) Maintenance treatment with mood stabilizing medications between episodes helps to ↓ the risk of relapse. 25–50% attempt suicide, &amp; 10-15% die by suicide.</p>	<p><b>Pharmacotherapy:</b></p> <ol style="list-style-type: none"> <li>Lithium is the <b>gold standard</b> (mood stabilizer) ; 50–70% show partial reduction of mania &amp; long-term use <b>reduces suicide risk</b> but overdose can be fatal (narrow therapeutic index).</li> <li>anticonvulsants (carbamazepine &amp; valproic acid) are also mood stabilizers → useful for rapid cycling bipolar disorder and those with mixed features.</li> <li>Atypical antipsychotics (e.g., risperidone, olanzapine, quetiapine, ziprasidone) are effective for acute mania, many patients (especially with severe mania and/or with psychotic features) are treated with a combination of a mood stabilizer and antipsychotic; &amp; show better response)</li> <li>Antidepressants to treat depressive episodes when patients concurrently take mood stabilizers (taken as monotherapy due to concerns of activating mania or hypomania)</li> </ol>
<b>Bipolar II</b>	<p><b>recurrent MDEs with hypomania</b> one or more MDEs and at least one <b>hypomanic</b> episode</p>	<ul style="list-style-type: none"> <li>Slightly more in women</li> <li>Onset before 30</li> <li>Frequently misdiagnosed &amp; treated</li> <li>as unipolar depression</li> <li>Etiology same as bipolar I</li> </ul>	<p>Chronic, needs long term treatment Better prognosis than bipolar I</p>	<p><b>Psychotherapy:</b> Supportive, family therapy, group therapy (may prolong remission on after controlling manic episode). <b>ECT:</b> quick response, reduce suicide, effective for refractory or life-threatening acute mania or depression Some patients require more treatments (up to 20) than for depression.</p>

### SPECIFIERS FOR BIPOLAR DISORDERS

- Anxious distress**
- Mixed features:** Depressive symptoms present during the majority of days during mania/hypomania
- Rapid cycling:** At least four mood episodes (manic, hypomanic, depressed) within 12 months.
- Melancholic features** (*during depressed episode*)
- Atypical features** (*during depressed episode*)
- Psychotic features**
- Catatonia**
- Peripartum onset** (post partum mania pt have recurrence risk in future deliveries so give mood stabilizers as prophylaxis (some of them are contraindicated in breastfeeding))
- Seasonal pattern**

### 8 & 12 rule of mood stabilizers:

- Lithium: 0.8–1.2 mEq/L
- Carbamazepine: 8–12 mcg/mL
- Valproic acid: 80–120 mcg/mL

### Lithium side effects:

wt gain, tremor, GI upset, fatigue, arrhythmias, seizures, goiter/hypothyroidism, leukocytosis (benign), coma (in toxic doses), polyuria (nephrogenic diabetes insipidus), polydipsia, alopecia, metallic taste

## Mood disorders

	DSM-5	Epidemiology/ etiology	Course/ prognosis	treatment
<b>Persistent depressive disorder (dysthymia)</b>	<ol style="list-style-type: none"> <li>Depressed mood for most days for at least 2 years (in children or adolescents 1 year).</li> <li>At least two of the following: <b>(CHASES)</b>                      Poor Concentration or difficulty making decisions / Feelings of Hopelessness / Poor Appetite or overeating / InSomnia or hypersomnia / Low Energy or fatigue / Low Self-esteem</li> <li>During the 2-year period: Never asymptomatic for &gt;2 mo. , may have MDE(s) or meet criteria for MDD continuously, pt must never have had a manic or hypomanic episode</li> </ol> <p>Persistent <b>D</b>epressive <b>D</b>isorder (<b>DD</b>) = 2 <b>D</b>s                      2 years, 2 listed criteria, Never asymptomatic for &gt;2 months</p>	<ul style="list-style-type: none"> <li>12 mo. prevalence: 2%.</li> <li>More in women.</li> <li>Onset often in childhood, adolescence, and early adulthood.</li> </ul>	Early and insidious onset, chronic Depressive symptoms much less likely to resolve than in MDD.	Combination psychotherapy and pharmacotherapy is more effective <ul style="list-style-type: none"> <li>CBT, interpersonal therapy, and insight-oriented psychotherapy are the most effective.</li> <li>Antidepressants found to be beneficial include SSRIs, SNRIs, novel antidepressants (e.g., bupropion, mirtazapine), TCAs, and MAOIs</li> </ul>
<b>Cyclothymic disorder</b>	<ol style="list-style-type: none"> <li>Numerous periods with hypomanic symptoms (but not a full hypomanic episode) and periods with depressive symptoms (but not full MDE) for at least 2 years.</li> <li>Never asymptomatic for &gt;2 mo. during those 2 years.</li> <li>No history of MDE, hypomania, or manic episode.</li> </ol>	<ul style="list-style-type: none"> <li>May coexist with BPD.</li> <li>Onset 15-25</li> <li>1:1 gender</li> </ul>	Chronic 1/3 develop bipolar I or II	Antimanic agents (mood stabilizers or second-generation antipsychotics) are used to treat bipolar disorder
<b>Premenstrual dysphoric disorder</b>	<ol style="list-style-type: none"> <li>most menstrual cycles, at least 5 symptoms (of the below) present in the final week before menses, improve few days after menses, and are minimal/absent in the week postmenses (confirmed by daily ratings for at least two cycles).</li> <li>At least one of the following: affective lability, irritability/anger, depressed mood, anxiety/tension.</li> <li>At least one of the following: anhedonia, problems concentrating, anergia, appetite changes/food cravings, hypersomnia/ insomnia, feeling overwhelmed/out of control, physical symptoms (breast tenderness/ swelling, joint/muscle pain, bloating, wt gain).</li> <li>Symptoms not due to a substance or another medical condition &amp; cause significant distress or impairment in functioning.</li> <li>Symptoms are not only exacerbation of another disorder (MDD, panic disorder, persistent depressive disorder).</li> </ol>	<ul style="list-style-type: none"> <li>Onset at any time after menarche.</li> <li>Environmental and genetic factors</li> </ul>	Symptoms may worsen prior to menopause but cease after menopause	SSRIs are first-line treatment (daily or luteal phase-only, starting on cycle day 14 and stopping upon menses or shortly thereafter). OCPs may reduce symptoms. GnRH agonists have also been used, and, in rare, severe cases, bilateral oophorectomy with hysterectomy will resolve symptoms.
<b>Disruptive mood dysregulation disorder (DMDD)</b>	<ol style="list-style-type: none"> <li>Severe recurrent verbal and/or physical outbursts out of proportion to situation.</li> <li>Outbursts ≥3 per week and inconsistent with developmental level.</li> <li>Mood between outbursts is persistently angry/irritable most of the day nearly every day, and is observed by others.</li> <li>Symptoms for at least 1 year, and no more than 3 months without symptoms.</li> <li>Symptoms in at least two settings (e.g., home, school, peers).</li> <li>Symptoms must have started before age 10, but diagnosis can be made from ages 6-18.</li> <li>No episodes meeting full criteria for manic/hypomanic episode lasting &gt; 1 day.</li> <li>Behaviors do not occur during MDD and not better explained by another mental disorder (this disorder cannot coexist with oppositional defiant disorder, intermittent explosive disorder, or bipolar disorder).</li> <li>Symptoms not due to a substance (medication or drug) or another medical condition.</li> </ol>	<ul style="list-style-type: none"> <li>6–12 mo. prevalence rates of chronic/ severe persistent irritability in children: 2-5%.</li> <li>More in males</li> </ul>	Must occur before age 10 & 50% still meet criteria after 1 year. ↓ conversion to bipolar & ↑ rates of comorbid (ADHD, MDD, and substance use disorders)	no consensus evidenced-based treatments (cuz it's a new disease). Psychotherapy (parent management training) for the pt and family is 1 <sup>st</sup> line. Medications for comorbid disorders. Stimulants, SSRIs, mood stabilizers, and second-generation antipsychotics have all been used to treat the primary symptoms of DMDD.