Psychiatry & Behavioral Health Rotation
EOR: March 12, 2018

DEPRESSIVE DISORDERS; BIPOLAR AND RELATED DISORDERS	ANXIETY DISORDERS; TRAUMA- AND STRESS-RELATED DISORDERS
Major depressive disorder	Generalized anxiety disorder
Bipolar I disorder	Panic disorder
Bipolar II disorder	Post-traumatic stress disorder
Cyclothymic disorder	Phobic disorders
Persistent depressive disorder (dysthymia)	Specific phobias
PARAPHILIC DISORDERS; SEXUAL DYSFUNCTIONS	**SCHIZOPHRENIA SPECTRUM AND OTHER PSYCHOTIC DISORDERS**
Exhibitionistic disorder	Schizophrenia
Fetishistic disorder	Delusional disorder
Pedophilic disorder	Schizoaffective disorder
Sexual masochism disorder	Schizophreniform disorder
Female sexual interest/arousal disorder	
Male hypoactive sexual desire disorder	**FEEDING OR EATING DISORDERS**
Voyeuristic disorder	Anorexia nervosa
	Bulimia nervosa
PERSONALITY DISORDERS; OBSESSIVE-COMPULSIVE AND RELATED DISORDERS	**SUBSTANCE-RELATED DISORDERS**
Antisocial personality disorder	Alcohol-related disorders
Avoidant personality disorder	Hallucinogen-related disorders
Borderline personality disorder	Opioid-related disorders
Dependent personality disorder	Stimulant-related disorders
Histrionic personality disorder	Sedative-, hypnotic-, or anxiolytic-related disorders
Narcissistic personality disorder	Cannabis-related disorders
Obsessive-compulsive personality disorder	Tobacco-related disorders
Paranoid personality disorder	Inhalant-related disorders
Schizoid personality disorder	
Schizotypal personality disorder	
Body dysmorphic disorder	
Obsessive-compulsive disorder	

Reviewed 2017

SOMATIC SYMPTOM AND RELATED DISORDERS; NONADHERENCE TO MEDICAL TREAMENT	DISRUPTIVE, IMPULSE-CONTROL AND CONDUCT DISORDERS; NEURODEVELOPMENTAL DISORDERS
Somatic symptom disorder	Attention-deficit/hyperactivity disorder
Factitious disorder	Conduct disorder
Illness anxiety disorder	Oppositional defiant disorder
	Autism spectrum disorder

Reviewed 2017

Psychiatry & Behavioral Health End of Rotation™ Exam Blueprint

Psychiatry & Behavioral Health 100-Question Exam		History & Physical	Diagnostic Studies	Diagnosis	Health Maintenance	Clinical Intervention	Clinical Therapeutics	Scientific Concepts	Totals
		(15%)	(10%)	(25%)	(10%)	(10%)	(20%)	(10%)	**(100%)**
Depressive disorders; Bipolar and related disorders	(18%)	3	2	4	2	2	3	2	**18**
Anxiety disorders; Trauma- and stress-related disorders	(18%)	3	2	4	2	2	3	2	**18**
Substance-related disorders	(14%)	2	1	4	1	1	3	2	**14**
Schizophrenia spectrum and other psychotic disorders	(12%)	2	1	4	1	1	2	1	**12**
Personality disorders; Obsessive-compulsive and related disorders	(8%)	1	1	2	1	1	2	0	**8**
Somatic symptom and related disorders; Nonadherence to medical treatment	(8%)	1	1	2	1	1	2	0	**8**
Feeding or eating disorders	(8%)	1	1	2	1	1	1	1	**8**
Paraphilic disorders; Sexual dysfunctions	(4%)	1	0	1	0	0	1	1	**4**
Disruptive, impulse-control and conduct disorders; Neurodevelopmental disorders	(10%)	1	1	2	1	1	3	1	**10**
Totals:	**(100%)**	**15**	**10**	**25**	**10**	**10**	**20**	**10**	**100**

Reviewed 2017

Depressive Disorders; Bipolar and Related Disorders (18%)			
General **Scientific Concepts**	**History/PE** **Clinical Manifestations**	**Diagnostic Studies** **Intervention**	**Treatment** **Maintenance**
Major Depressive disorder			
- Marked by episodes of depressed mood and loss of interest in daily activities - May not acknowledge or may have vague symptoms: fatigue, headache, abd pain, muscle tension - MC among those who commit suicide - age of onset peaks 20 Etiology: - ↑ 5-HIAA in CSF, ↓ catecholamines - high cortisol - abnormal thyroid axis - genetics - psychosocial/life events	- episodes of depressed mood w/ loss of interest in daily activities - Somatic complaints (fatigue, HA, abd pain, muscle tension) - anhedonia (inability to experience pleasure) - insomnia - difficulty w/ early morning awakenings SIG E(M)CAPS Sleep Interest Guilt Energy (Mood) Concentration Appetite Psychomotor Activity Suicide Ideation	- ≥ 5 of the following (MUST have 1 or 2) within 2 weeks - Depressed mood most of the time - Anhedonia – decreased interest/pleasure in activities - Change in appetite (increase or decrease) - Insomnia or hypersomnia - Psychomotor agitation/retardation → observable brothers - Fatigue or loss of energy - Feelings of worthlessness or inappropriate guilt - Diminished concentration - Recurrent thoughts of death or suicide - Symptoms cause significant distress/impairment in social or occupational functioning - Not d/t substance, or medical condition - *No history of mania or hypomania	- if risk of suicide or unable to care for themselves → hospitalization - 1st line= SSRIs + psychotherapy - 1st line – SSRI, SNRI - 2nd – Bupropion, Mirtazapine - 3rd – TCAs, MAOI - Minimum 3-6 weeks before switching Pharmacotherapy **SSRIs** SE: HA, GI disturbance, sexual dysfunction, anxiety **TCAs** - most lethal in OD d/t cardiac arrhythmias - SE: sedation, weight gain, orthostatic hypotension, anticholinergic effects **MAOIs** - risk of hypertensive crisis w/ sympathomimetic or tyramine rich foods (wine, beer, aged cheese, liver and smoked meats) - risk of serotonin syndrome when used w/ SSRI - MC SE: orthostatic hypotension Psychotherapy Electroconvulsive therapy (ECT) - if unresponsive to meds, pregnant or if rapid reduction of Sx is desired - seizure is induced by passing a current of electricity across the brain - SE: retrograde and anterograde amnesia

Bipolar I Disorder			
- Episode of mania & major depression → Depression NOT REQUIRED for diagnosis - Onset before 30, mean age: 18 - Highest genetic link → 10x more likely in first degree relative - Earlier onset → greatest likelihood of psychiatric features, poor prognosis	- episodes of mania - major depression	- Must have manic episode, may have been preceded/followed by hypomanic or depressive episode - Period of abnormally/persistently elevated expansive or irritable mood - And increase activity/energy - At least 1 week (or less if hospitalized) - ≥ 3 of the following - ↑ self-esteem or grandiosity - ↓ need for sleep - Talkative (unusual), pressured speech - Flight of ideas/racing thoughts - Distractibility - ↑ in goal-oriented activity (social, work, sex) or psychomotor agitation - Excessive involvement in risky activity (spending $, sexual activity, bad investments) - Causes social/occupational impairment - Need for hospitalization to prevent harm or psychotic features - Not due to substance or medical condition	- Mood stabilizer - 1st line: Lithium - ↓mania, ↓suicide risks - Anticonvulsants: carbamazepine, valproic acid → For rapid cycling (>4 episodes), mixed features - Atypical antipsychotics - Haloperidol or benzodiazepines – if psychosis or agitation - ECT, MAOI, SSRI, TCA - * Antidepressants can activate mania if used as monotherapy - Therapy: cognitive, behavioral, interpersonal - Good sleep hygiene

	Mania/mixed features	Major depression
Bipolar I	Yes	Typical, NOT required
Bipolar II	Hypomania only	Yes
Cyclothymia	No → but mood elevation	No → mild depression
MDD	No	Yes
Persistent DD	No	Mild but can meet major criteria
(Mixed features = simultaneous ≥ 3 manic/hypomanic + depression)		

Bipolar II Disorder			
- Onset before 30, slightly more in women - Chronic, better prognosis than bipolar II	- Hx of 1 or more major depressive episode and at least 1 hypomanic episode	- ≥ 1 major depressive episode and at least one hypomanic episode - Hypomanic episode: - Period of abnormal/persistent elevated, expansive or irritable mood, energy - At least 4 days - ≥ 3 of the manic symptoms - Unequal change that's uncharacteristic - Not severe enough to cause impairment - Not due to substance or medical condition - ** if full manic episode → Bipolar I	- Similar to bipolar I - Acute mania → mood stabilizer - Depression → lithium, valproate, carbamazepine, SGA - Mixed → atypical antipsychotics
Cyclothymic Disorder			
- Similar to bipolar II, but less severe - Prolonged period, milder elevation/depression - Can coexist with BLPD - Chronic, can become bipolar I/II	- alternating periods of hypomania and periods with mild-to-mod depressive Sx	- For at least 2 years, numerous hypomanic symptoms (but not hypomania) and depressive symptoms (but not depression) - Symptoms present for at least half the time, no more than 2 m without symptoms - Don't meet criteria for MDD< manic, or hypomanic - Not caused by substance or medical condition - Clinically significant distress in social/occupational	- Similar to bipolar I - Mood stabilizers and neuroleptics

Persistent Depressive Disorder (Dysthymia)			
- MDD is episodic, while PDD is pervasive - Chronic depressed mood ≥ 2 years (1 in children) - Loss of interest, pessimism, ↓productivity, social withdrawal - Milder than MDD - Usually able to function → ↓ productivity - MC in women; late teens – early adults - Can progress to bipolar or MDD	- 2 or more of **CHASES**: Poor **C**oncentration or difficulty making decisions **H**opelessness Poor **A**ppetite or overeating In**S**omnia or hypersomnia Low **E**nergy Low **S**elf- esteem	- Depressed for most of the day, most days for ≥ 2 years - ≥ 2 of the following - Poor appetite/overeating - Insomnia/hypersomnia - ↓energy, fatigue - Low self esteem - Poor concentration - Feeling hopeless - Never without symptoms for > 2 months No hypomania, mania, or psychosis; no cyclothymia	- cognitive therapy, interpersonal therapy, and insight-oriented psychotherapy are the most effective - psychotherapy and pharmacotherapy together is more effective than either alone - Antidepressants are beneficial (SSRI, TCA, MAOI)

Paraphilic Disorders; Sexual Dysfunctions (4%)			
General **Scientific Concepts**	**History/PE** **Clinical Manifestations**	**Diagnostic Studies** **Intervention**	**Treatment** **Maintenance**
Paraphilia			
- Para = beyond usual; Philia = love - Engagement in unusual sexual activities - Preoccupation with unusual sexual urges/fantasies for at least 6 months - Acted on with nonconsenting person - Cause significant distress/impairment - Considered disorders only if: intense, recurrent, interfere with daily life - Mostly only in men, expect S/M and pedophilic		- Course/prognosis o Poor factors: multiple, early age, substance use, ↑ frequency, referred by law enforcement o Good factors: 1 paraphilia, self-referral, guilt, history of normal sexual activity - Treatment o Difficult to treat o ↓ sex drive with antiandrogens, long acing gonadotropin-releasing hormones, SSRI, naltrexone o CBT, social skills training, 12-step, group	
Exhibitionistic Disorder			
- Recurrent, intense sexual arousal from exposure of one's genitals to an unsuspecting person o Manifested by fantasies, urges or behaviors - Element of shock - Also: suggestive gestures of masturbation			
Fetishistic Disorder			
- Recurrent, intense sexual arousal, manifested by fantasies, urges, or behaviors; from either: o Use of nonliving things o Highly specific focus on nongenital body part(s) - Not limited to articles of clothing in cross dressing or devices used for tactile genital stimulation - Holding, smelling, or rubbing objects			
Pedophilic Disorder			
- Recurrent, intense, sexual arousal, fantasies, urges, or behaviors involving activity with prepubescent child or children o Usually 13 years or younger - At least 16 years old; 5 years older than child - MC – manual or oral contact with genitals o Rarer: penetrative anal/vaginal sex - Nearly all male - Victims – 2/3 girls, ages 8-11			

Sexual Masochism Disorder

- Recurrent, intense sexual arousal from being humiliated, beaten, bound, or made to suffer
    - Manifested by fantasies, urges, behaviors

Voyeuristic Disorder

- Recurrent, intense sexual arousal from observing unsuspecting person who is naked, disrobing, or engaging in sexual activity
    - Manifested by fantasies, urges, behaviors
- At least 18 years old
- Often with binoculars
- AKA peeping toms → MC illegal sexual activity

Male Hypoactive Sexual Desire Disorder

- Persistent/recurrent deficient/absent sexual/erotic thoughts/fantasies and desire of sexual activity
    - Consider: life factors, age, social, cultural
- Approximately 6 months

Female Sexual Interest/Arousal Disorder

- Lack of/significantly reduced sexual interest/arousal. At least 3 of the following:
    - Absent/reduced interest
    - Absent/reduced sexual/erotic thoughts
    - Absent/reduced initiation of sexual activity
        - Typically, unreceptive of partners attempt
    - Absent/reduced sexual excitement/pleasure during activity in ≥ 75% of encounters
    - Absent/reduced sexual interest/arousal in response to internal/external sexual/erotic cues (written, verbal, visual)
    - Absent/reduced genital/non-genital sensations during activity
- Approximately 6 months
- Significant distress and impairment

Personality Disorder; Obsessive-Compulsive and Related Disorders (8%)		
Etiology	**Presentation**	**Treatment**
Cluster A Disorders [social detachment with unusual behaviors – weird, odd, eccentric behavior]		
Schizoid Personality Disorder		
- **Voluntary social withdrawal & anhedonic introversion** - MC in males	- Loner ***"hermit-like behavior"*** - Inability to form relationships - **LIFELONG** pattern of social withdrawal - **Anhedonic** o Appears indifferent to others o Lacks response to praise/ criticism/ feelings expressed by others o Prefers to be alone – little enjoyment in close relationship - Appears eccentric, isolated or lonely – cold flattened affect	- Psychotherapy – 1st - Pharmacologic o +/- short term low dose antipsychotics, antidepressants or psychostimulants
Schizotypal Personality Disorder		
- **ODD, ECCENTRIC & PECULIAR** thought patterns – w/o psychosis - Usually adulthood onset	- ***"Odd"*** in behavior or appearance, inappropriate affect or speech - *MAGICAL THINKING* [clairvoyance, telepathy, superstition, bizarre fantasies] - May talk to self in public - Pervasive discomfort with close relationships	- Psychotherapy – TOC o Cognitive behavioral, individual or group - Pharmacologic o +/- short term low dose antipsychotics, antidepressants or benzodiazepines
Paranoid Personality Disorder		
- PERVASIVE pattern of distrust & suspiciousness of others - MC males - Begins in early adulthood	- **Distrust & suspiciousness** - Misinterprets the actions of others as malevolent - Sees hidden messages - Appears cold & serious - Bears grudges, doesn't forgive, blames problems on others - Preoccupation w/ doubt regarding the loyalty of others	- Psychotherapy – TOC o Cognitive behavioral, individual or group - Pharmacologic o Short term low dose antipsychotics or benzodiazepines if severe

Cluster B Disorders [Dramatic, wild, erratic, impulsive & emotional]		
Histrionic Personality Disorder		
- Overly emotional, dramatic, seductive & attention seeking	- **Self-absorbed** - Temper tantrums - Center of attention – makes efforts to draw attention to themselves - **Inappropriate, sexually provocative & seductive** – w/ shallow or exaggerated emotions - Seeks reassurance & praise often - May believe relationships are more intimate than they are in actually - Easily influenced	- Psychotherapy – TOC o Cognitive behavioral, individual or group therapy
Narcissistic Personality Disorder		
- **Grandiose** often excessive sense of self-importance [but needs praise & admiration] - MC males	- Inflated self-image - Considers themselves special, entitled, requires extra special attention o BUT fragile self-esteem [occupied w/ fantasies, jealousy of others, believes others envious of them] - Lack of empathy for others - Rejection/ criticism → rage - Often becomes depressed	- Psychotherapy – TOC o Individual or group therapy
Antisocial Personality Disorder		
- Behaviors deviating sharply from the norms, values & laws of society - MUST be ≥ 18 yo o May begin in childhood as **CONDUCT disorders**	- Commit criminal acts w/ disregard to laws - Inability to **conform to social norms** → disregard & violation of rights of others - Lack of empathy - Little anxiety - EXTREMELY manipulative, deceitful - Impulsive, promiscuous - Spouse/ child abuse - Lacks remorse, lies frequently - Endangers others → i.e. drunk-driving	- Psychotherapy – establishing limits - Pharmacologic NOT helpful

Borderline Personality Disorder		
- Unstable, unpredictable mood & affect - Unstable self-image & relationships	- **'Mood swings'** - Extreme pattern of instability in relationships BUT → cannot be alone - Sensitivity to criticism/ rejection - ***Black and white thinking*** → EXTREMES [all good/ all bad] - Impulsivity in self-damaging behaviors o Suicide THREATS o Self-mutilation o Substance abuse o Reckless driving o Binge eating/ spending	- Psychotherapy TOC o Dialectical, cognitive behavior & group therapy - Pharm +/- short term low dose antipsychotics, antidepressants or benzos
Cluster C Disorders [Anxious, Worried & Fearful]		
Avoidant Personality Disorder		
- Desires relationships but AVOIDS relationships due to **inferiority** complex	- Timid, shy, lacks confidence - Intense feelings of inadequacy, sensitive to criticism, fears rejection & humiliation	- Psychotherapy o Social training, cognitive behavioral or group therapy - Pharmacologic o Beta blockers for anxiety, SSRIs for depression
Dependent Personality Disorder		
- Dependent, submissive behavior – needy & clingy	- **Constantly** needs to be reassured - **Relies on others** for decision-making & emotional support - WILL NOT initiate things - Intense comfort when alone - Volunteers for unpleasant tasks	- Psychotherapy o Behavioral, group - Anxiolytics or antidepressants – cases for symptomatic control
Obsessive-compulsive Personality Disorder		
- Perfectionists who require a great deal of ORDER & CONTROL → rigid adherence to routine o Rules, lists, inflexible, stubborn, lacks spontaneity - Preoccupied with minute details o Difficult to finish projects, hesitates to delegate work to others, devotes themselves to their work - May avoid intimacy		- Psychotherapy - Pharmacologic o BB – anxiety o SSRIs – depression

<table>
<tr><th colspan="3">Body Dysmorphic Disorder</th></tr>
<tr><td colspan="2">- MC F beginning in teens
- Excessive preoccupation that > 1 body part is deformed or an over exaggeration of a minor flaw→ ashamed or feel self-conscious & causes functional impairment
- May commit repetitive acts in response to this preoccupation of physical flaw/ defect
o Mirror checking
o Skin picking
o Seeking reassurance
o Mental acts [comparison to others]</td><td>- Antidepressants – SSRIs, TCAs
- Psychotherapy</td></tr>
<tr><th colspan="3">Obsessive-compulsive Disorder</th></tr>
<tr><td>- Anxiety disorder characterized by combination of <u>THOUGHTS + BEHAVIORS</u> (compulsions)
- M=F, M earlier in their teens [mean onset 20y]
- Obsessions = recurrent or persistent thoughts/ images
o Inappropriate, intrusive & unwanted
- Compulsions = repetitive behaviors the persons feel driven to perform to reduce/ prevent stress from obsession
o Interfere with lifestyle + time consuming
- Specifiers
o Good/ fair insight – recognizes OCD beliefs are not true
o Poor insight – thinks OCD beliefs are probably true
o Absent insight/ delusional beliefs – completely convinced that OCD beliefs are true</td><td>- Contamination –
o Compulsion may include cleaning or hand washing
- Pathologic doubt –
o Ex. Forgetting to unplug iron
- Symmetry/ precision –
o Must arrange objects with precision
- Intrusive obsessive thoughts w/o compulsion</td><td>- Antidepressants – SSRIs, TCAs, SNRIs
- Cognitive behavioral therapy
o Exposure & response prevention
o Psychoeducation</td></tr>
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Anxiety Disorders; Trauma and Stress Related Disorders (18%)			
General **Scientific Concepts**	**History/PE** **Clinical Manifestations**	**Diagnostic Studies** **Intervention**	**Treatment** **Maintenance**
Generalized Anxiety disorder			
Anxiety: emotional and physical fear response to a perceived threat. Considered pathological when: - Excessive, irrational, out of proportion to the trigger - without identifiable trigger GAD - Persistent excessive anxiety about many aspects of their daily lives - Highly comorbid with other anxiety or depressive disorders Epidemiology/Etiology - W>M 2:1 - 1/3 risk is genetic	- Symptoms of worry begin in childhood - Median age onset: 30 yo - Chronic, with waxing and waning sympts - May have somatic symptoms like fatigue and muscle tension S/S: - Constitutional: fatigue, diaphoresis, shivering - Cardiac: chest pain, palpitations, tachycardia, HTN - Pulm: SOB, hyperventilation - Neuro/MSK: vertigo, lightheadedness, paresthesias, tremor, insomnia, muscle tension - GI: abd discomfort, nausea, emesis, diarrhea, constipation GAD Mnemonic – **W**orry **WARTS** - **W**orried - **W**ound up, worn out - **A**bsent-minded - **R**estless - **T**ense - **S**leepless	**<u>DSM-5 Criteria</u>** - Excessive, anxiety about daily activities/events ≥6 months - Difficulty controlling worry - Associated ≥ 3 symptoms: o Restlessness o Fatigue o Impaired concentration o Irritability o Muscle tension o Insomnia - Symptoms not d/t substance or other mental/medical condition - Causes significant social or occupational dysfunction	Most effective tx combines psychotherapy & pharmacotherapy - Cognitive behavioral therapy - 1st line: SSRI (sertraline) or SNRI (venlafaxine) - Short-term use of benzodiazepine or augmentation with buspirone - Less common – TCAs, MAOIs - Beta-blockers – to control autonomic symptoms

Panic Disorder			
- **Spontaneous**, recurrent, panic attacks - Fear response → abrupt surge of intense anxiety → palpitation, fear of dying, sweating, SOB, etc. - Can occur multiple times per day or month - Develop debilitating anticipatory anxiety about future attacks Epi/Etio - ↑ risk if 1st degree relative has it - ↑ incidence of stressors prior to onset, hx of childhood abuse - W>M 2:! - Median age onset: 20-24 yo	- Chronic course with waxing and waning symptoms - Relapses common after stopping meds - Comorbidities: other anxiety disorders (esp agoraphobia), bipolar disorder, alcohol use disorder	**DSM-5 Criteria** - Recurrent, unexpected panic attacks w/o identifiable trigger - One or more panic attacks, followed by ≥1 m continuous worry about future attacks, and/or maladaptive changes in behavior to avoid triggers - Not caused by substance, or other mental/medical disorder	Most effective – pharmacotherapy and CBT - 1st line: SSRIs - TCAs Benzodiazepines – scheduled or PRN - For acute attacks

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<tr><th colspan="4">Post-Traumatic Stress Disorder</th></tr>
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<td>
- Develops after exposure to 1+ traumatic events
- Symptoms last for at least 1 month
- Can occur immediately or delayed
- MC in women and young adults
  o Women – usually rape or assault
  o Men – usually combat experience or urban violence

<u>Acute Stress Disorder</u>
- Same symptoms as PTSD, but symptoms <1 month
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- Begins within 3 m after trauma
- 50% have complete recovery within 3 m
- symptoms diminish with old age
- 80% have other mental disorder
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<u>DSM-5 Criteria</u>
- Exposure to death, injury, or sexual violence by direct experience or witnessing it
- Intrusion or re-experiencing the event – memories, nightmares, flashbacks,
- Intense distress or physiological reactions to cues relating to trauma
- Avoidance of triggering stimuli
- At least 2 negative cognitions/moods:
  o Dissociative amnesia
  o Negative feelings of self/others/world
  o Self-blame
  o Negative emotions
  o Anhedonia
  o Feelings of detachment
  o Inability to have positive experiences
- At least two sympts of increased arousal/reactivity:
  o Hypervigilance
  o Exaggerated startle response
  o Irritability/angry outbursts
  o Impaired concentration
  o Insomnia
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- Pharmacological:
  o SSRI – first line
  o TCAs, MAOI
  o Prazosin – for nightmares and hypervigilance
  o Trazodone – for insomnia
- Psychotherapy:
  o Specialized CBT
  o Supportive and psychodynamic therapy
  o Couples/family therapy
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<tr><th colspan="4">Phobic disorders/Specific Phobia</th></tr>
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Phobia: irrational fear that leads to endurance of the anxiety and/or avoidance of feared object or situation

- May develop from negative or traumatic encounters with stimulus

Specific Phobia: intense fear of a specific object or situation

- Phobias are MC psychiatric disorder in women, 2nd MC in men
- Mean age onset: 10 yo
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Social Phobia
- Persistent intense fear of social /performance situations – where person is exposed to scrutiny of others
- Fear of embarrassment or rejection
- Treat: SSRI/SNRI, BZD, BB, CBT
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<u>DSM-5 Criteria</u>
- Persistent excessive fear of specific situation/object out of proportion to actual danger
- Exposure to trigger causes immediate fear response
- Trigger is avoided when possible
- ≥ 6 months
- everyday activities are impaired by distress or avoidance
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- CBT – exposure/desensitivity therapy
- childhood phobias usually disappear or lessen with age
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Schizophrenia Spectrum and Other Psychotic Disorders (12%) TJ			
General **Scientific Concepts**	**History/PE** **Clinical Manifestations**	**Diagnostic Studies** **Intervention**	**Treatment** **Maintenance**
Schizophrenia			
- psychiatric disorder characterized by a constellation of abnormalities in thinking, emotion, and behavior - typically chronic - significant psychosocial and medical consequences to the patient - Men and women equally affected w/ different presentations - rarely presents before 15 or after 55 - Strong genetic predisposition - Lower socioeconomic groups have higher rates of schizophrenia → downward drift hypothesis → people suffering from schizo are unable to fxn well in society → end up in lower socioeconomic groups **Patho** - Exact cause unknown - Partly related to ↑ dopamine activity Three Phases **1. Prodromal** - Decline in functioning that precedes the first psychotic episode. - Become socially withdrawn and irritable. - May have physical complaints, declining school/work performance, and/or newfound interest in religion or the occult. **2. Psychotic** - Perceptual disturbances - Delusions - Disordered thought process/content **3. Residual** - Following an episode of active psychosis. - Marked by - mild hallucinations or delusions, social withdrawal, and negative symptoms.	Positive Symptoms - Hallucinations ▪ Auditory = MC ▪ visual ▪ olfactory ▪ tactile ▪ somatic ▪ gustatory - Delusions ▪ Persecutory ▪ reference ▪ control ▪ grandiose ▪ nihilism ▪ erotomanic ▪ jealousy ▪ doubles - bizarre behavior - disorganized speech. - These tend to respond more robustly to antipsychotic medications. Negative Symptoms - Flat or blunted affect - Anhedonia - Apathy - Alogia - lack of interest in socialization - Symptoms are comparatively more often treatment resistant and contribute significantly to social isolation Cognitive Symptoms - Impairments in attention, executive function, and working memory. - Symptoms lead to poor work and school performance PE - Disheveled appearance - Flat affect - Disorganized thought process - Intact procedural memory and orientation - Auditory hallucinations - Paranoid delusions - Ideas of reference - Lack of insight into their disease	**DSM-5 Criteria** 2 or more of the following must be present for at least 1 month - Delusions - Hallucinations - Disorganized speech - Grossly disorganized or catatonic behavior - Negative symptoms *note: at least one must be delusions, hallucinations, or disorganized speech - Symptoms bust cause significant social, occupational, or self-care functional deterioration - Duration of illness for at least 6 months → including prodromal or residual periods in which the above full criteria may not be met - Symptoms not d/t effects of a substance or another medical condition	- Multimodal approach is most effective - Hospitalization for acute psychotic episodes First generation/typical antipsychotic meds - Butyrophenones → haloperidol, droperidol - Phenothiazines → chlorpromazine, fluphenazine, perhenazine, thioridazine - primarily dopamine antagonist - tx positive symptoms mostly - SE: extrapyramidal, neuroleptic malignant syndrome, tardive dyskinesia Second generation/atypical antipsychotic - aripiprazole, asenapine, clozapine, iloperidone, lurasidone, olanzapine, quetiapine, risperidone, ziprasidone - antagonize serotonin receptors as well as dopamine receptors - ↓ incidence of extrapyramidal SE, but ↑ risk for metabolic syndrome - Clozapine → reserved for pts who have failed multiple antipsychotic trials d/t ↑ risk for agranulocytosis Associated with Better Prognosis - Later onset - Good social support - + symptoms - mood symptoms - acute onset - Female - Few relapse Associated with Worse Prognosis - Early onset - Poor social support - - symptoms - family history - gradual onset - Male - Many relapses - Substance use

Delusional disorder

- Occurs more often in middle-aged or older pts → after age of 40

Pts w/ ↑ risk
- immigrants
- hearing impaired
- family hx of schizophrenia

- > or = 1 delusion lasting > or = 1 month **without** other psychotic symptoms

DSM-5 Criteria
- One or more delusions for at least 1 month.
- Does not meet criteria for schizophrenia.
- Functioning in life not significantly impaired, and behavior not obviously bizarre.
- While delusions may be present in both delusional disorder and schizophrenia, there are important differences

- Difficult to tx
- Antipsychotic meds recommended
- Supportive therapy often helpful
- Group therapy should be avoided

Prognosis
- Better than schizophrenia w/ tx
- >50% = Full recovery
- >20% = ↓ symptoms
- <20% = no change

Schizophrenia	Delusional Disorder
- Bizarre or nonbizarre delusions - Daily fxning significantly impaired - Must have 2 or more of following ▪ Delusions ▪ Hallucinations ▪ Disorganized speech ▪ Disorganized behavior ▪ (-) symptoms	- usually nonbizarre delusions - dialing fxning not significantly impaired - does not meet criteria for schizophrenia as described

Schizoaffective disorder

- schizophrenia + mood disturbance (major depressive or manic episode)

Pts must:
- Meet criteria for either a major depressive or manic episode during which psychotic symptoms consistent with schizophrenia are also met.
- Delusions or hallucinations for 2 weeks in the absence of mood disorder symptoms (this criterion is necessary to differentiate schizoaffective disorder from mood disorder with psychotic features).
- Mood symptoms present for a majority of the psychotic illness.
- Symptoms not due to the effects of a substance (drug or medication) or another medical condition.

- Hospitalization (if necessary)
- Supportive psychotherapy

Medical Therapy
- Antipsychotics → 2nd generation target both psychotic and mood symptoms
- Mood stabilizers
- Antidepressants
- Electroconvulsive therapy → indicated for tx of mood symptoms

Schizophreniform disorder			
- Meets criteria for schizophrenia but < 6 months duration		**DSM-5 Criteria** 2 or more of the following must be present for at least 1 month - Delusions - Hallucinations - Disorganized speech - Grossly disorganized or catatonic behavior - Negative symptoms *note: at least one must be delusions, hallucinations, or disorganized speech - Symptoms must have lasted only 1-6 months	- Hospitalization (if necessary) - 6-month course of antipsychotics and supportive psychotherapy Prognosis - 1/3 of pts recover completely - 2/3 of pts progress to schizoaffective or schizophrenia

Feeding or Eating Disorders (8%)			
General **Scientific Concepts**	**History/PE** **Clinical Manifestations**	**Diagnostic Studies** **Intervention**	**Treatment** **Maintenance**
Anorexia Nervosa			
- preoccupied with their weight, their body image, and being thin - often associated with obsessive-compulsive personality traits - 10:1 F:M ratio - Bimodal age of onset → 13-14 (hormonal influences), 17-18 (environmental influences) - common in sports that involve thinness, revealing attire, subjective judging, and wt classes <u>Restricting Type</u> - not regularly engaged in binge-eating or purging behavior - wt loss is achieved through diet, fasting, and/or excessive exercise - reduced caloric intake, diet pills <u>Binge-eating/purging type</u> - eating binges followed by self-induced vomiting, and/or use of laxatives, enemas, or diuretics - some individuals purge after eating small amounts of food without binging ** anorexia and bulimia are characterized by a desire for thinness. Both may binge and purge. Anorexia nervosa involves **<u>low body weight</u>** and restriction of calorie intake, and this distinguishes it from bulimia	- Amenorrhea - Cold intolerance/hypothermia - Hypotension (orthostatic) - Bradycardia - Arrhythmias - Acute coronary syndrome - Cardiomyopathy - Mitral valve prolapse - Constipation - Lanugo hair - Alopecia - Edema - Dehydration - Peripheral neuropathy - Seizures - Hypothyroidism - Osteopenia - Osteoporosis	- BMI < 17.5 kg/m^2 or body wt <85% of ideal wt **DSM-5 Criteria** - Restriction of energy intake relative to requirements, leading to significant low body wt → defined as less than minimally normal or expected - Intense fear of gaining wt or becoming fat. - Persistent behaviors that prevent wt gain - Disturbed body image, undue influence of wt or shape on self-evaluation, or denial of the seriousness of the current low body wt **Lab/Imaging Abnormalities** - Hyponatremia - Hypochloremia, hypokalemic alkalosis → from vomiting - Arrhythmia (QTc prolongation) - Hypercholesterolemia - Transaminitis - Leukopenia - Anemia - Elevated blood urea nitrogen (BUN) - ↑ growth hormone - ↑ cortisol - reduced gonadotropins - hypothyroidism - hypoglycemia - osteopenia	- Food is the best medicine - pts may be treated as outpt unless they are dangerously below ideal body wt or if there are serious medical or psychiatric complications - Tx involves cognitive-behavior therapy, family therapy, and supervised wt-gain programs - SSRIs not effective in tx of anorexia nervosa, but may be used for comorbid anxiety or depression Prognosis - Chronic and relapsing illness - Variable course → may completely recover or progressively deteriorate - Most remit within 5 yrs

Bulimia Nervosa

- Involves binge eating combined with behaviors intended to counteract wt gain → vomiting, use of laxatives, enemas, diuretics, fasting, excessive exercise
- Pts embarrassed by their binge eating and are overly concerned w/ body weight
- Unlike anorexia, pts usually maintain a normal wt (may be overwt)
- W>M
- Onset in late adolescence or early adulthood
- ↑ incidence of comorbid mood disorders, anxiety disorders, impulse control disorders, substance use, prior physical/sexual abuse
- Childhood obesity and early pubertal maturation ↑ risk

- Salivary gland enlargement (sialadenosis)
- Dental erosion/caries
- Callouses/abrasions on dorsum of hand → **Russell's sign** from self-induced vomiting
- Petechiae
- Peripheral edema
- Aspiration

1. Binge eating → recurrent episodes characterized by eating within a 2 hr period more than people would in a similar period with lack of control during eating episode
   - Occurs at least weekly for 3 months
   - May be triggered by stress/mood changes
2. Compensatory behavior
   - Purging type → primarily engages in self-induced vomiting, diuretic/laxative/enema abuse
   - Non-purging type →reduced calorie intake, dieting, fasting, excessive exercise, diet pills

DSM-5 Criteria

- Recurrent episodes of binge eating.
- Recurrent, inappropriate attempts to compensate for overeating and prevent weight gain (such as laxative abuse, vomiting, diuretics, fasting, or excessive exercise).
- The binge eating and compensatory behaviors occur at least once a week for 3 months.
- Perception of self-worth is excessively influenced by body weight and shape.
- Does not occur exclusively during an episode of anorexia nervosa.

Lab/Imaging Abnormalities

- Hypochloremic hypokalemic alkalosis
- Metabolic acidosis (laxative abuse)
- Elevated bicarb (compensation)
- Hypernatremia
- ↑ bum
- ↑ amylase
- Altered thyroid hormone
- Cortisol homeostasis
- Esophagitis

- Antidepressants plus therapy → more effective combo for bulimia than for anorexia
- SSRI = first line
- Fluoxetine = only FDA-approved med for bulimia (60-80 mg/day)
- Nutritional counseling and education
- Cognitive-behavioral therapy, interpersonal psychotherapy, group therapy, family therapy
- Avoid bupropion d/t SE to ↓ seizure threshold

Prognosis

- Chronic and relapsing illness
- Better prognosis than anorexia nervosa
- Symptoms usually exacerbated by stressful conditions
- ½ recover fully w/ treatment
- ½ have chronic course w/ fluctuating symptoms
- ↑ risk of suicide

Substance-Related Disorders (14%)

- MC in men
- Alcohol and nicotine – MC substances
- Mood, psychotic, personality disorders, and other psych comorbidities are common
- **Withdrawal:** development of substance-specific syndrome due to cessation/reduction of heavy, prolonged use
- **Tolerance:** need for increased amounts of substance to achieve desired effect

DSM-5 Criteria (the same for all substances)

Substance Use Disorder: Characterized by problematic pattern of substance use → impairment or distress manifested by at least two of the following within 12m period

- Using substance more than originally intended
- Persistent desire or unsuccessful efforts to cut down on use
- Significant time spent in obtaining, using, or recovering from substance
- Craving to use substance
- Failure to fulfill obligations at work, school, or home
- Continued use despite social or interpersonal problems due to the substance use
- Decrease social, occupational, or recreational activities because of substance use
- Use in dangerous situations
- Continued use despite subsequent physical or physiological problem
- Tolerance
- Withdrawal

Direct testing for Substance Use

Alcohol	- Stays in system for few hours - Breathalyzer test – common - Blood/urine – more accurate
Cocaine	- Urine – positive for 2-4 days
Amphetamines	- Urine – positive for 1-3 days - Tests not adequate sensitivity/specificity
Sedative-hypnotics	- Urine or blood – timing varies - Barbiturates - Short acting (pentobarbital): 24h - Long acting (phenobarbital): 3 w - Benzodiazepines - Short acting (lorazepam): 5 d - Long acting (diazepam): 30 d
Opioids	- Urine – positive for 1-3 days (varies) - Methadone & oxycodone come up negative on general tests
Marijuana	- Urine - Single use - 3 days - Heavy use – up to 4 weeks

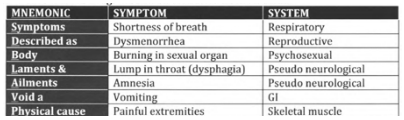
General Scientific Concepts	History/PE Clinical Manifestations	Treatment Maintenance
Alcohol-related disorders		
- CNS depressant o Activates GABA, dopamine, and serotonin receptors in CNS o inhibits glutamate receptor (excitatory) - Metabolism: alcohol → acetaldehyde → acetic acid - Absorption and elimination rates depend on: age, sex, weight, use, food in stomach, etc - Biochemical markers to detect prolonged drinking: BAL, LFTs → AST, ALT, GGT, MCV Long term complications - Wernicke's encephalopathy – d/t thiamine deficiency from poor nutrition o Ataxia, confusion, ocular abnormalities - Korsakoff syndrome – from untreated encephalopathy o Chronic amnestic syndrome → impaired memory, confabulation	Intoxication - Effects depend on blood alcohol level (BAL) - BAL 20-100: decreased fine motor control, impaired judgement & coordination - BAL 100-250: ataxic gait & poor balance, lethargy, difficulty sitting upright, difficulty with memory, N/V - BAL 300-400: coma in novice drinker, respiratory depression, death possible Withdrawal - Mild: Insomnia, anxiety, hand tremor, irritability, anorexia, N/V - Moderate: autonomic hyperactivity (tachycardia, htn, diaphoresis), fever - Severe: seizures, hallucinations, delirium - Early symptoms: 6-24 hrs after last drink - Tonic-clonic seizures: between 12-48 hrs o 1/3rd develop delirium tremens (DTs) – most serious reaction → delirium, hallucinations, tremor, etc o Medical emergency	Intoxication - Monitor: airway, breathing, circulation, glucose, electrolytes, acid-base status - Thiamine: for Wernicke's encephalopathy - Naloxone: if co-ingestion of opioids - CT: r/o subdural hematoma or brain injury - GI evacuation: only if ingested within 30-60 minutes Withdrawal - Benzodiazepines – keep pt calm, lightly sedated. - Antipsychotics for severe agitation - Thiamine, folic acid, multivitamin - Clinical Institute Withdrawal Assessment - Check for signs of liver failure Alcohol Use disorder - First line: o Naltrexone: ↓ desire/craving o Acamprosate: post-detoxificatoin for relapse prevention - Second line: o Disulfram: causes aversive rxn (N/V, HA, flushing, SOB, palpitations) o Topiramate: reduces cravings
Hallucinogen-related disorders		
- Includes: psilocybin, mescaline, LSD - Do not cause physical dependence or withdrawal - May cause flashbacks later in life	- Perceptual changes – illusions, hallucinations, body image distortions; labile affect, dilated pupils, tachycardia, hyperthermia, tremors, incoordination, sweating, palpitations - Lasts 6-12 hrs, can last for days - "Bad trip" → anxiety, panic, paranoia, hallucination, psychotic symptoms	- monitor for dangerous behavior - first-line: benzodiazepines for agitated psychosis

Opioid-related disorders		
- Stimulate opioid receptors - Used for analgesia, sedation, dependence - Includes: heroin, oxycodone, codeine, dextromethorphan, morphine, methadone, meperidine, etc - MC used: Rx – OxyContin, Vicodin, Percocet	Intoxication - Drowsiness, N/V, constipation, slurred speech, **constricted pupils**, seizures, resp depression → coma, death - serotonin syndrome with meperidine & MAOI - Red flags: losing medication, "doctor shopping", running out of meds early Withdrawal - Not life threatening but unpleasant - Dysphoria, insomnia, lacrimatin, rhinorrhea, yawning, N/V, fever, dilated pupils, htn, tacycardia	- ABCs - Naloxone – for overdose. May cause severe withdrawal - Ventilation support - Methadone – reduces morbididty & mortality o Must be in substance abuse program o Can cause QT prolongation - Buprenorphine – safer than methadone but easier to overdose - Naltrexone – monthly injection
Stimulant-related disorders		
Cocaine: blocks reuptake of dopamine, epinephrine, and norepinephrine → stimulant, leads to "reward" effect Classic Amphetamines: block reuptake and facilitate release of dopamine and norepinephrine - Methamphetamines: easily made in home labs with OTC meds - Can be used to treat narcolepsy, ADHD, and depressive disorders Substituted amphetamines (designer drugs): MDMA (ecstasy) - Release dopamine, NE, and serotonin - Stimulant and hallucinogenic properties	- General: Euphoria; ↑ self-esteem; Change in bp and HR; nausea; **dilated pupils**; weight loss; psychomotor agitation or depression; chills; sweating - Dangerous: resp depression; seizures; arrhythmias; hyperthermia; paranoia; hallucinations o Mimics fight-or-flight response - Deadly: vasoconstrictive effect → MI; intracranial hemorrhage; stroke - MDMA – sense of closeness to others - Overdose → hyperthermia, dehydration, rhabdomyolysis, renal failure - Withdrawal → prolonged depression	- Rehydrate - correct electrolyte imbalance - treat hyperthermia
Sedative-, hypnotic-, or anxiolytic-related disorders		
Includes: benzodiazepines, barbiturates, zolpidem, zaleplon, gamma-hydroxybutyrate (GHB), neprobamate, etc Benzodiazepines (BDZs) - used for anxiety - potentiates effects of GABA Barbiturates: - used for epilepsy and as anesthetics - potentiated effect of GABA; at high doses, it acts as GABA agonist - combining sedatives can lead to resp depression	Intoxication - Drowsiness, confusion, hypotension, slurred speech, incoordination, ataxia, mood lability, impaired judgement, nystagmus, resp depression, coma, death - Symptoms are synergistic with alcohol or opioids - Long term use → dependence & depression Withdrawal - Abrupt abstinence is life threatening - Like alcohol. Can cause tonic-clonic seizures	Intoxication - Maintain ABCs. Monitor vitals - Activated charcoal & gastric lavage (if ingested prior 4-6 hrs) - For barbiturates → alkalinize urine with NaHCO3 - For benzos → Flumazenil in overdose Withdrawal - Taper benzos - Carbamazepine or valproic acid taper not as effective

Cannabis-related disorders		
- MC used illicit substance in the world - main active component is THC - may be used to treat N/V in chemotherapy patients, ↑ appetite in AIDS, chronic pain, ↓IOP in glaucoma	- Euphoria, anxiety, impaired motor coordination, perceptual disturbances, mild tachycardia, red eyes, dry mouth, ↑appetite - Cannabis-induced psychotic disorders with paranoia, hallucinations and delusions - Chronic use can cause resp problems like asthma and bronchitis - Withdrawal: irritability, anxiety, restlessness, aggression, strange dreams, depression, headaches, chills, insomnia, ↓appetite	- Supportive - Psychosocial interventions - Tx for withdrawal: supportive and symptomatic
Tobacco-related disorders		
- Nicotine derived from tobacco plant - Highly addictive - Smoking → tolerance & physical dependence - Leading cause of preventable morbidity & mortality in US	- Effects: restlessness, insomnia, anxiety, ↑ GI motility - Withdrawal: intense craving, dysphoria, anxiety, poor concentration, ↑ appetite, weight gain, irritability, restlessness, insomnia - Relapse is common	- Varenicline (Chantix): mimics action of nicotine, reduces rewarding aspect, prevents withdrawal symptoms - Bupropion: Antidepressant. Reduces cravings & withdrawal - Nicotine replacement therapy (NRT): transdermal patch, gum, lozenge, nasal spray, inhaler - Behaviors support
Inhalant-related disorders		
- Wide range of drugs that are inhaled & absorbed through lungs - Act as CNS depressants - Common in preadolescents or adolescents - Include: solvents, glue, paint thinners, fuels	- Perceptual disturbances, paranoia, lethargy, dizziness, N/V, nystagmus, tremor, muscle weakness, hyperreflexia, ataxia, slurred speech, euphoria, stupor, coma - Acute intoxication: 15-30 mins - Overdose: fatal secondary to resp depression or cardiac arrhythmias - Long term use can cause permanent CNS damage, peripheral neuropathy, myopathy, aplastic anemia, malignancy, glomerulonephritis, myocarditis, etc	- ABCs - O_2 for hypoxia - Some substances may require chelation (ex. lead)

<table>
<tr><th colspan="4">Somatic Symptom and Related Disorders; Non-Adherence to Medical Treatment (8%)</th></tr>
<tr><th>General
Scientific Concepts</th><th>History/PE
Clinical Manifestations</th><th>Diagnostic Studies
Intervention</th><th>Treatment
Maintenance</th></tr>
<tr><td colspan="4">Somatic symptom disorder</td></tr>
<tr>
<td>- Chronic condition in which the patient has physical symptoms involving >1 part of the body but NO PHYSICAL CAUSE CAN BE FOUND.
- incidence in F > M

Risk Factors
- Older age
- Fewer years of education
- Lower socioeconomic status
- Unemployment
- Hx of childhood sexual abuse</td>
<td>- Presents with at least one (and often multiple) physical symptom
- Frequently seek treatment from many doctors → resulting in extensive lab work, diagnostic procedures, hospitalizations, and/or surgeries

- 2 or more means a high likelihood of somatization disorder
 
<table>
<tr><th>MNEMONIC</th><th>SYMPTOM</th><th>SYSTEM</th></tr>
<tr><td>Symptoms</td><td>Shortness of breath</td><td>Respiratory</td></tr>
<tr><td>Described as</td><td>Dysmenorrhea</td><td>Reproductive</td></tr>
<tr><td>Body</td><td>Burning in sexual organ</td><td>Psychosexual</td></tr>
<tr><td>Laments &</td><td>Lump in throat (dysphagia)</td><td>Pseudo neurological</td></tr>
<tr><td>Ailments</td><td>Amnesia</td><td>Pseudo neurological</td></tr>
<tr><td>Void a</td><td>Vomiting</td><td>GI</td></tr>
<tr><td>Physical cause</td><td>Painful extremities</td><td>Skeletal muscle</td></tr>
</table></td>
<td>DSM-5 Criteria
- One or more somatic symptoms (may be predominantly pain) that are distressing or result in significant disruption.
- Excessive thoughts, feelings, or behaviors related to the somatic symptoms or associated health concerns.
- Lasts at least 6 months.</td>
<td>- Course tends to be chronic and debilitating
- Symptoms may periodically improve and then worsen under stress
- Pt should have regularly scheduled visits with PCP → minimize unnecessary medical workups and treatments
- Address psychological issues slowly
- Pts will likely resist referral to a mental health professional</td>
</tr>
<tr><td colspan="4">Factitious disorder</td></tr>
<tr>
<td>- MC in W
- Higher incidence in hospital and health care workers → have learned how to feign symptoms
- Associated with personality disorders
- Many pts have hx of illness and hospitalization, as well as childhood physical or sexual abuse</td>
<td>- Pts intentionally falsify medical or psychological signs or symptoms in order to assume the role of a sick patient
- Often do this in a way that can cause legitimate danger → central line infections, insulin injections
- Absence of external rewards is a prominent feature of this disorder
- Commonly Feigned Symptoms
▪ Psychiatric → hallucinations, depression
▪ Medical → fever (by heating thermometer), infection, hypoglycemia, abdominal pain, seizures, and hematuria</td>
<td>DSM-5 Criteria
- Falsification of physical or psychological signs or symptoms, or induction of injury or disease, associated with identified deception.
- Deceptive behavior is evident even in the absence of obvious external rewards (such as in malingering)
- Behavior is not better explained by another mental disorder, such as delusional disorder or another psychotic disorder.
- Individual can present him/herself, or another individual (as in factitious disorder imposed on another)</td>
<td>- Collect collateral info from medical treaters and family
- Collaborate w/ pcp and treatment team to avoid unnecessary procedures
- Pts may require confrontation in a nonthreatening manner → pts may leave ama and seek hospitalization elsewhere
- Repeated and long-term hospitalizations are common</td>
</tr>
</table>

Illness anxiety disorder (formerly hypochondriasis)			
- Onset 20-30 YO - Men affected as often as women - 67% have a coexisting major mental disorder	- Care seeking type - Frequently get tested - Doctor shop	- Symptoms last >6 months - Preoccupation with the fear or belief one has or will contract a serious, undiagnosed disease - Somatic symptoms usually not present. → if they are = mild in intensity -	- Regularly scheduled appointments with their medical provider for continued reassurance - CBT = most useful psychotherapy - Comorbid anxiety and depression treated with SSRI Prognosis - Chronic but episodic → symptoms wax and wane - Can result in significant disability - Better prognosis = fewer somatic symptoms, shorter duration of illness, absence of childhood physical punishment

Disruptive, Impulse-Control and Conduct Disorders, Neurodevelopmental Disorders (10%)			
General **Scientific Concepts**	**History/PE** **Clinical Manifestations**	**Diagnostic Studies** **Intervention**	**Treatment** **Maintenance**
Attention-deficit/hyperactivity disorder			
- Neurodevelopmental disorder characterized by problems paying attention, difficulty controlling behaviors and hyperactivity that is not age appropriate - Onset prior to age 12, but can be diagnosed retrospectively in adulthood - M>F 2:1 - Females present more often with inattentive symptoms Etiology - Genetic factors → ↑ rate in 1st degree relatives of affected individuals - Environmental factors → ↓ birth wt, smoking during pregnancy, childhood abuse/neglect, neurotoxin/alcohol exposure <u>3 Subcategories</u> - Predominantly inattentive type - Predominantly hyperactive/impulsive type - Combined type	- inattention, hyperactivity, impulsivity inconsistent with the pts developmental stage	- Two symptom domains: inattentiveness and hyperactivity/impulsivity - At least 6 inattentive symptoms ▪ Fails to give close attention to details or makes careless mistakes ▪ Difficulty sustaining attention ▪ Does not appear to listen ▪ Struggles to follow through on instructions ▪ Difficulty with organization ▪ Avoids or dislikes tasks requiring a lot of thinking ▪ Loses things ▪ Easily distracted ▪ Forgetful in daily activities AND/OR - At least 6 hyperactivity/impulsivity symptoms ▪ Fidgets with hands or feet or squirms in chair ▪ Difficulty remaining seated ▪ Runs about or climbs excessively in childhood; extreme restlessness in adults ▪ Difficulty engaging in activities quietly ▪ Acts as if driven by a motor; may be an internal sensation in adults ▪ Talks excessively ▪ Blurts out answers before questions have been completed ▪ Difficulty waiting or taking turns ▪ Interrupts or intrudes upon others - Symptoms >6 months and present in 2 or more settings - Symptoms interfere with or reduce quality of social/academic/occupational functioning	- Multimodal treatment plan Pharm Tx - First-line = stimulants → methylphenidate (Ritalin) compounds, dextroamphetamine (Adderall), mixed amphetamine salts ▪ MOA= blocks norepinephrine and dopamine reuptake → ↑ release of norepinephrine and dopamine in the extraneuronal space ▪ SE = anxiety, HTN, tachycardia, wt loss, growth delays, addiction - Second-line → atomoxetine, a norepinephrine reuptake inhibitor ▪ MOA = selective norepinephrine reuptake inhibitor. Similar efficacy and SE profile as stimulants - Alpha-2 agonist can be used instead of or as adjunct therapy Nonpharm Tx - Behavior modification techniques and social skills training - Educational interventions - Parent psychoeducation

Conduct disorder			
- Persistent pattern of behaviors that deviate sharply from the age-appropriate norms and violate the rights of others - Social and academic difficulties - More common in males - High incidence of comorbid ADHD and ODD - Associated with antisocial personality disorder ** disorders involve problematic interactions or inflicting harm on others. While disruptive behaviors may appear within the scope of normal development, they become pathologic when the frequency, pervasiveness, and severity impair functioning of the individual or of others.	- Most serious disruptive behaviors, which violate the rights of other humans or animals - individuals inflict cruelty and harm through physical and sexual violence - May lack remorse for committing crimes or lack empathy for their victims	**DSM-5 Criteria** - Recurrently violating the basic rights of others or societal norms, with at least three behaviors exhibited over the last year and at least one occurring within the past 6 months. ▪ <u>Aggression to people and animals</u> → Bullies/ threatens/intimidates others; initiates physical fights; uses weapon; physically cruel to people; physically cruel to animals; stolen items while confronting victim; forced someone into sexual activity. ▪ <u>Destruction of property</u> → Engaged in fire setting; destroyed property by other means ▪ <u>Deceitfulness or theft</u> → Broken into a home/ building/car; lied to obtain goods/favors; stolen items without confronting a victim. ▪ <u>Serious violations of rules</u> → Stays out late at night before 13 years old; runs away from home overnight at least twice; often truant from school before 13 years old	- Multimodal tx approach w/ behavior modification, family, and community involvement - PMT can help parents w/ limit setting and enforcing consistent rules - Meds can be used to target comorbid symptoms and aggression → SSRI, guanfacine, propranolol, mood stabilizers, antipsychotics Prognosis - Poor prognosis - 40% develop antisocial personality disorder

Oppositional defiant disorder			
- Onset usually during preschool years - Seen more often in boys before adolescence - ↑ incidence of comorbid substance use and ADHD - ODD often precedes CD, most do not develop CD ** disorders involve problematic interactions or inflicting harm on others. While disruptive behaviors may appear within the scope of normal development, they become pathologic when the frequency, pervasiveness, and severity impair functioning of the individual or of others.	- Persistent pattern of negative, hostile, and **defiant behavior towards adults** - Maladaptive pattern of irritability/anger, defiance, or vindictiveness which causes dysfxn or distress in the pt or those affected - involves at least one non-sibling - ODD does not involve physical aggression or violating others' basic rights like conduct disorder	**DSM-5 Criteria** - Characterized by at least 4 symptoms present for >6 month with at least one individual who is not a sibling ▪ Anger/Irritable Mood → loses temper; touchy/easily annoyed; often angry/resentful ▪ Argumentative/Defiant Behavior → breaks rules; argues with authority figures; deliberately annoys others; blames others ▪ Vindictiveness → spiteful at least 2x in past 6 months ▪ Disturbance is associated with distress in the individual or others, or it impacts negatively on functioning ▪ Behaviors do not occur exclusively during another mental disorder	- Behavior modification → conflict management training and improving problem solving skills - Parent Management Training (PMT) can help with setting limits and enforcing consistent rules - Medications are used to tx comorbid conditions

Autism spectrum disorder			
- Disorder encompasses the spectrum of symptomology formally diagnosed as autism, Asperger's disorder, childhood disintegrative disorder, and pervasive developmental disorder - 4:1 M:F - Symptoms typically recognized b/t 12-24 months old Etiology - Prenatal neurological insults (infections, drugs), advanced paternal age, low birth weight - known genetic mutation - Fragile X syndrome = MC known single gene cause of ASD - Other genetic causes → Down's, Rett, tuberous sclerosis - High comorbidity w/ ID - Associated w/ epilepsy -	- Primary signs ▪ social interaction difficulties ▪ impaired communications ▪ restricted, repetitive, stereotyped behaviors - Other signs ▪ Persistent failure to develop social relationships ▪ Failure to show preference to parents over other adults ▪ Unusual sensitivity to visual, auditory, or olfactory stimuli ▪ Unusual attachments to ordinary objects ▪ Savantism → unusual talents - Chronic condition - Characterized by impairments in social communication/interaction and restrictive, repetitive behaviors/interest	- Problems with social interaction and communication ▪ impaired social/emotional reciprocity → can't hold conversation ▪ deficits in nonverbal communication skills → ↓ eye contact ▪ interpersonal/relational challenges - Restricted, repetitive patterns of behavior, interests, and activities ▪ intense, peculiar interests → preoccupation w/ unusual objects ▪ inflexible adherence to rituals ▪ stereotyped, repetitive motor mannerisms → flapping hands ▪ hyper/hyporeactivity to sensory input - Abnormalities in functioning begin in the early developmental period - Causes significant social or occupational impairment. - Not better accounted for by ID or global developmental delay. When ID and ASD co-occur, social communication is below expectation based on developmental level	- No cure - Various treatments for managing symptoms - Early intervention - Remedial education - Behavioral therapy - Psychoeducation - Low dose atypical antipsychotic medications → may help reduce disruptive behavior, aggression, and irritability ▪ Risperidone ▪ Aripiprazole <u>Prognosis</u> - level of intellectual fxning and language impairment → 2 most important predictors of adult outcome

PSYCHOPHARMACOLOGY

Side effects

- HAM – common in TCAs and antipsychotics
  - anti**H**istamine – sedation, weight gain
  - anti**A**drenergic - hypotension
  - anti**M**uscarinic – dry mouth, blurred vision, constipation
- Serotonin syndrome – too much serotonin
  - Common in SSRIs + MAOIs
  - Confusion, flushing, sweating, rhabdomyolysis, tremor, myoclonic jerks, hyperthermia, renal failure, death
- Hypertensive crisis – MAOI + tyramine rich foods
- Extrapyramidal symptoms – within hours-days, reversible
  - Parkinsonism – mask-like, rigidity, tremor, pill rolling
  - Akathisia – restless, agitation, need to move
  - Dystonia – painful contraction of neck, tongue, eyes
  - Common with high potency first generation antipsychotics
  - Antidote: benztropine (Cogentin)
- Hyperprolactinemia – high potency first generation antipsychotics and risperidone
- Tardive dyskinesia – involuntary muscle movements (chorea)
  - After years of antipsychotics
  - irreversible
- Neuroleptic malignant syndrome
  - Medical emergency
  - Mental status change, fever, tachycardia, hypertension, tremor, ↑CPK, lead pipe rigidity
  - Any antipsychotic
- Drug interactions – CYP450
  - in**D**uces → drug level **D**ecreases
    - Tobacco, carbamazepine, barbiturates, St. John's wort
  - **I**nhibitors – drug levels **I**ncrease
    - Fluvoxamine, fluoxetine, paroxetine
- Kinesias
  - TD: grimace, tongue protrusion
  - Acute dystonia – twisting, abnormal posture
  - Akathisia – inability to sit still

Antidepressants

- General
  - All have similar effectiveness, but different side effects
  - Most require ~3-4 weeks (more or less)
  - Withdrawal phenomenon: dizzy, headache, nausea, insomnia → taper down to avoid
  - SSRI - MC
- Selective Serotonin Reuptake Inhibitors – SSRIs
  - First line for depression
    - Low side effects, no food restriction, ↓risk OD
  - Use: Depression, OCD, panic disorder, GAD, PMDD, Bulimia (fluoxetine), PTSD, social anxiety
  - Drug interactions: fluoxetine & paroxetine – inhibit CYP450
  - Contraindication: Hepatic Impairment
  - AE: sexual dysfunction (switch to bupropion
    - Headache, sweating, anxiety, GI, hyponatremia, seizures
    - Sleep changes
      - Fluoxetine & sertraline → activating
      - Paroxetine & fluvoxamine → sedating
    - Suicide ideation in children and teens
    - Overdose → citalopram → QT prolongation
    - Serotonin syndrome with MAOIs

  1. Fluoxetine – Prozac
     - Longest half-life, don't need to taper down
     - Safe in pregnancy
     - Side effects: insomnia, anxiety, sexual dysfunction
  2. Sertraline – Zoloft
     - More GI issues
     - Decreased drug interactions
  3. Paroxetine – Paxil
     - Protein bound → more drug interactions
     - Side effects: anticholinergic (dry, sedating)
     - Short half0life → withdrawal phenomenon
  4. Citalopram – Celexa
     - Decreased drug interactions
     - Caution with QT prolongation
  5. Escitalopram – Lexapro
     - Less side effects than citalopram
     - Dose dependent QT prolongation

- Serotonin Norepinephrine Reuptake Inhibitors – SNRIs
  - More side effects than SSRI due to NE; less than TCA
  - Use: depression with pain
  - ↑BP & HR, worsens glaucoma
  1. Venlafaxine – Effexor
     - Depression, GAD, neuropathic pain
  2. Desvenlafaxine – Pristiq
     - Like Effexor, but more expensive
  3. Duloxetine – Cymbalta
     - Depression, neuropathic pain, fibromyalgia
     - Dry mouth, constipation, ↓urine (off label for incontinence)
     - AVOID in hepatic impairment
- Atypical Antidepressants
  1. Bupropion – Wellbutrin
     - Norepinephrine-dopamine reuptake inhibitor
     - Use: depression, reduce cravings → smoking cessation, adult ADHD
     - No sexual dysfunction
     - CI: high risk seizures → lowers threshold
       - Epilepsy, anorexia, bulimia
  2. Mirtazapine – Remeron
     - α2 adrenergic receptor antagonist
     - Use: major depression (elderly), weight loss and insomnia
     - No sexual dysfunction
     - SE: weight gain, sedation
  3. Trazodone – Desyrel
     - Use: major depression with anxiety & insomnia
     - No sexual side effects → SE priapism
     - SE: sedation, orthostatic hypotension
     - Off label for insomnia
- Tricyclic antidepressants – TCAs
  - First in the market
  - Antidote for OD → sodium bicarbonate
  - ↓ used due to side effects
  - Use: depression, panic disorder, neuropathic pain relief
  - Side effects: orthostatic hypotension, sedation, weight gain, sex dysfunction, QT prolongation, anticholinergic (dry), seizures
  1. Amitriptyline – Elavil
     - Chronic pain, migraines, insomnia
  2. Imipramine – Tofranil
     - Helpful for enuresis & panic disorder
  3. Nortriptyline – Pamelor
     - Chronic pain
     - ↓risk orthostatic hypotension
- Monoamine Oxidase Inhibitors – MAOIs
  - Use: refractory depression, Parkinson's (selegiline)
  - Not used as often, newer drugs are safer
  - Side effects: serotonin syndrome with SSRI
    - Hypertensive crisis – with tyramine rich foods
      - No red wine, cheese, chicken liver, cured meats
    - Orthostatic hypotension, weight gain, sexual dysfunction, decreased sleep
  - Drug interaction:
    - Pseudoephedrine → agitation, insomnia
    - Meperidine → serotonin syndrome, hypertensive crisis
  1. Phenelzine – Nardil
  2. Isocarboxazid – Marplan
  3. Tranylcypromine – Parnate
  4. Selegiline – Edepryl
     - ↓HTN crisis
     - used for Parkinson's

Antipsychotics

- First Generation/Typical Antipsychotics
  - Use: psychosis, schizophrenia (positive symptoms)
  - ↓intensity of symptoms, Not curative
  - Side effects: EPS, dystonic reactions (tx with benztropine or diphenhydramine), tardive dyskinesia, parkinsonism, neuroleptic malignant syndrome
  1. Chlorpromazine – Thorazine
     - Low potency → less EPS
     - Also used: hiccups, N/V, Tourette's
     - Blue-gray discoloration
  2. Thioridazine – Mellaril
     - SE: retinitis pigmentosum – dose dependent
  3. Perphenazine – Trilafon
     - Mid-potency
  4. Haloperidol – Haldol
     - High potency → lower dose needed, ↑EPS/TD
     - Used to sedate someone in hospital (acute)
     - PO, IM, IV, long-acting
- Second Generation/Atypical Antipsychotics
  - Mostly used to treat negative symptoms
  - First line for schizophrenia
  - Also treats: depression (adjunct), bipolar, mania, BLPD, PTSD, childhood disorders (tics)
  - Side effects: metabolic disorders → diabetes, weight gain, etc.
  1. Clozapine – Clozaril
     - Most effective, used for refractory schizophrenia
     - Side effect: agranulocytosis → monitor WBC monthly
     - Contraindicated: elderly (dementia), paralytic ileus
     - Restricted program
  2. Risperidone – Risperdal
     - SE: ↑prolactin, gynecomastia
  3. Quetiapine – Seroquel
     - ↓EPS
     - Side effects: sedation, orthostatic hypotension, diabetes
  4. Olanzapine – Zyprexa
     - Use: schizophrenia, bipolar
       - Used with fluoxetine for depression episodes
     - Side effects: significant weight gain, hypercholesterolemia
  5. Ziprasidone – Geodon
     - Schizophrenic with agitation
     - Side effect: QT prolongation, rash
     - Minimal weight gain
     - Black box warning: dementia with psychosis
  6. Aripiprazole – Abilify
     - More activating, less sedating
     - SE: type 2 diabetes
  7. Lurasidone – Latuda
     - Must be taken with food
     - Used in bipolar depression

Mood Stabilizers

- Use: prevent mania, prevent relapses of mania in bipolar and schizophrenia
- Also:
  - Augment antidepressant
  - Potentiation of antipsychotics
  - Treat aggression and impulsiveness

1. Lithium
   - Use: DOC for acute mania, prophylaxis for bipolar/schizophrenic episode, cyclothymia
   - ↓ suicidality
   - Metabolized in kidneys → caution in renal dysfunction
   - Prior to starting: EKG, chemistries, TFT, CBC, pregnancy test
   - Narrow TI: monitor blood levels
   - Side effects: GI distress, hand tremor, hypothyroidism, cogwheel rigidity, headaches, polydipsia/uria/phagia
   - Ebstein's anomaly → cardiac defect in babies if taken in pregnancy
2. Anticonvulsants
   - Carbamazepine – Tegretol
     - Use: mania with mixed features
     - ↓impulsiveness and aggression
     - SE: GI, CNS, SJS, teratogenic
   - Valproic Acid
     - Increases GABA
   - Lamotrigine – Lamictal
     - Use: bipolar depression, acute mania
     - SE: SJS, sedation, dizziness
   - Gabapentin – Neurontin
     - Use: anxiety, sleep, neuropathic pain
   - Topiramate – Topamax
     - SE: weight loss

Anxiolytics/Hypnotics

- Indication: anxiety, muscle spasm, seizures, sleep disorders, alcohol withdrawal
- Benzodiazepines
    - Potentiates GABA
    - Addictive, causes dependence
    - Antidote: flumazenil
    1. Diazepam – Valium
        - Long acting: >20 hr. half-life
        - Rapid onset
        - Used for detox & seizures
        - Can cause euphoria in anxiety
    2. Clonazepam – Klonopin
        - Long acting
        - Use: anxiety, panic attack
        - Avoid in renal dysfunction
        - Daily or twice a day
    3. Alprazolam – Xanax
        - Intermediate: 6-20 hr. half-life
        - Use: anxiety, panic attacks
        - Euphoria → high abuse potential
    4. Lorazepam – Ativan
        - Intermediate
        - Use: panic attack, alcohol/sedative detox, agitation
        - Not metabolized by liver
    5. Temazepam – Restoril
        - Causes dependence → used less for insomnia
    6. Triazolam & Midazolam
        - Short acting: <6 hr. half-life
- Non-BDZ Anxiolytics/hypnotics
    1. Buspirone – Buspar
        - Slow acting
        - Not as effective on its own, used with SSRI
        - Does not potential CNS depression of alcohol, low potential for abuse
    2. Hydroxyzine – Atarax
        - Antihistamine
        - For quick acting, short-term, that can't take BDZ
    3. Barbiturates – butalbitol, phenobarbital, etc.
        - Overdose is lethal → used less often
        - Potential for abuse
    4. Propranolol
        - Beta blocker
        - Treat autonomic effects of panic attacks or social phobia
        - Also treats akathisia
    5. Zolpidem – Ambien; Zalepon – Sonata; Eszopiclone – Lunesta
        - Short term treatment of insomnia
        - ↓tolerance/dependence than BDZ
        - Half-life: Zal<Zol<Esz
        - Side effects: anterograde amnesia, hallucinations, parasomnia
    6. Diphenhydramine – Benadryl
        - Antihistamine

Psychostimulants

- Indication: ADHD, refractory depression

1. Dextroamphetamine & Amphetamines – Adderall, Dexedrine
    - Schedule II → abuse/diversion potential
    - Monitor BP, weight loss, insomnia, seizures
2. Methylphenidate – Ritalin, Concerta
    - CNS stimulant → schedule II
    - SE: leukopenia, anemia
    - Same as above
3. Modafinil – Provigil
    - Used for narcolepsy

OTHER CONCEPTS

- Thought process
    - Circumstantiality" point of conversation eventually reached, after over inclusion or irrelevant details
    - Tangentially: point of conversation is never reached
    - Loosening of associations: no logical connection from one thought to another
    - Flight of ideas: thoughts change abruptly, accompanies with rapid/pressured speech
    - Neologisms: made-up words
    - Word salad: incoherent collection of words
    - Clang associations: using words that sound the same; not connected otherwise
    - Thought blocking: abrupt cessation of communication before idea is finished
- Defense mechanisms
    - Projection: attributing your own feelings onto someone else
    - Denial: to avoid becoming aware of painful aspect of reality
    - Splitting: dividing things into good or bad
    - Blocking: temporary block in thinking
    - Regression: returning to earlier stage of development