MOOD DISORDERS		
Name	*Description*	*Treatment*
Major Depressive	≥ 2 weeks with ≥ 5 of 9: - Depressed mood - SIGECAPS Significant functional impairment and no lifetime hx of mania Hyperactivity of HPO axis→ increased cortisol levels ↓ REM sleep latency and decreased slow wave sleep ***Atypical:*** mood reactivity, weight gain, increased appetite, hypersomnia, leaden paralysis (heavy limbs), hypersensitive to rejection ***Seasonal affective disorder:*** fall-winter with atypical features, add bright light therapy 10,000 lux light box after waking for 1-4 weeks can add antidepressant if severe ***With psychotic features:*** episode is accompanied by delusions or hallucinations with depressive themes (deserving punishment, worthlessness, nihilism) - ***antidepressant and antipsychotic/ECT ***Depression with salt cravings→*** think Addison's disease ***Suicide→*** low levels of 5-HIAA in CSF	- 2 trials (4-6 weeks) of antidepressant from same class then switch to antidepressant with different MOA - Suicide risk assessment - SI at all→ **hospitalization** - 1st episode in remission→ continue treatment for **6 months (continuation-phase treatment)** - ≥ 2 episodes, <18 yoa at onset, persistent depressive sx, comorbid psych condition then **continue maintenance therapy for 1-3 years** - ≥ 3 lifetime episodes, chronic episodes ≥ 2 years, severe episodes with suicide attempt then **lifetime treatment** - ***Antidepressant discontinuation syndrome:*** sudden onset of flu like illness within 2-4 days of medication being stopped (paroxetine and venlafaxine especially) restart and taper over 2-4 weeks **SSRI:** headache, nausea, insomnia, anxiety, dizziness, sexual dysfunction, weight gain - **Citalopram:** QTc prolongation (C for Cardiac) - **Fluoxetine:** first line for adolescents (F for freshmen) **Venlafaxine (SNRI):** causes HTN >300 mg daily **MAOI:** hypotension unless tyramine induced crisis
Grief		
Persistent Complex Bereavement	> 12 months after the loss with difficulty accepting the death, persistent yearning, avoidance of reminders **Focus of sadness is on lost one**	
Persistent Depressive/Dysthymia	≥ 2 years of chronic depressed mood with ≥ 2 of: - Appetite disturbance - Sleep disturbance - Low energy - Low self-esteem - Poor concentration - Hopelessness Types: - W/ pure dysthymic syndrome (never met MDD criterion) - W/ intermittent MDD episode	

	- W/ persistent MDD episodes	
Bipolar I	Depressive sx common but **<u>not required</u>** ***Manic:*** severe, ≥ 1 week or hospitalized, marked impairment, psychotic features ≥ 3 of: **D**istractible **I**mpulsive **G**randiosity **F**light of ideas/racing thoughts **A**ctivity increase **S**leep decreased need **T**alkative/pressured speech	- **Lithium** (S/E thyroid and renal dysfunction, 25% will get hypothyroidism just treat with levothyroxine) - **Valproate** (liver) - **Quetiapine or lurasidone** - *Treatment will ↓ suicide risk* - Lifelong therapy - Overdose of lithium treat with **hemodialysis** ***With psychotic features:*** antipsychotic
Bipolar II	≥ 1 major depressive episode **<u>required</u>** ***Hypomanic:*** less severe, ≥ 4 consecutive days, observable change in pt baseline, not severe enough to cause impairment or hospitalization, no psychotic features Occupational therapy can be improved	- **Lithium**
Cyclothymia	Chronic, fluctuating mood disturbance Less severe bipolar with ≥ 2 years duration, ≥ 1 year in children with insufficient sx and severity to meet criteria for hypomania, mania, or depressive episodes	
PMS/PMDD	Keep detailed **<u>menstrual diary</u>** for 2-3 periods, if symptoms prior to menstruation then PMS/PMDD - Fatigue, bloating, breast tenderness, mood swings, irritable If random, more likely psych disorder	- PMS: exercise and stress reduction - PMDD: SSRI (**fluoxetine**) both continuous and late-luteal phase effective (fluoxetine for your flow)

STRESS DISORDERS		
Name	*Description*	*Treatment*
Post-Traumatic Stress	Life-threatening trauma ≥1 month of: Nightmares, flashbacks, intrusive memories, avoidance of reminders, amnesia for event, emotional detachment, negative mood, decreased interest in activities Sleep disturbance, hypervigilance, irritability ↑ **risk of suicidal ideation and attempts** ***Children:*** distressing dreams, reenactment of trauma in play, emotional dysregulation and behavioral difficulties	- Trauma focused CBT - **SSRI/SNRI** - Prazosin for nightmares
Acute Stress	Reliving events (memories, flashbacks), avoidance, negative mood, dissociation, and hyperarousal lasting ≥ 3 days to < 1 month following life threatening, traumatic event	
Adjustment	Onset within 3 months of stressor Marked distress/functional impairment	Psychotherapy

	Anxiety, depression, disturbance of conduct Doesn't meet DMS-5 criteria for other disorder	

PSYCH DISORDERS IN PREGNANCY		
Name	*Description*	*Treatment*
Post-Partum Blues	2-3 days after birth, resolves by **2 weeks** Mild depression, tearfulness, irritability	- Reassure and monitor
Post-Partum Depression	4-6 weeks after birth, can last for up to a year **≥ 2 weeks** of moderate to severe depression, sleep or appetite disturbance, low energy, psychomotor changes, guilt, concentration issues, suicidal ideations	- Antidepressants and psychotherapy
Post-Partum Psychosis	Days to weeks after birth Delusions, hallucinations, thought disorganization, bizarre behavior	- Antipsychotics, antidepressants, mood stabilizers - Hospitalization do not leave mom alone with baby

ANXIETY DISORDERS		
Name	*Description*	*Treatment*
Generalized Anxiety	Excessive, uncontrollable worry ≥ 6 months ≥ 3 of (only 1 in children): - Restlessness, on edge - Fatigue - Difficulty concentrating - Irritable - Muscle tension - Sleep disturbance	- CBT and SSRI/SNRI - Start at lower dose than depression because increased risk of stimulating effects (anxiety and insomnia) if they have these effects **decrease dose**
Panic Disorder	Recurrent and unexpected panic attacks with ≥4 of: - Chest pain, palpitations, SOB, choking - Trembling, sweating, nausea, chills - Dizziness, paresthesia - Derealization, depersonalization - Fear of losing control or of dying GABA problem ***Agoraphobia*→** avoidance of ≥2 situations	- SSRI/SNRI and CBT - Acute: benzo
Phobia	Marked anxiety about a specific object or situation for > 6 months Avoidance behaviors Usually develops in childhood after traumatic event	- **CBT with exposure** - Short acting benzo may help if acute and therapist unavailable
Social Anxiety Disorder	Marked anxiety about ≥ 1 social situation for ≥ 6 months Fear of scrutiny by others, humiliation, embarrassment ***Performance only***	- **SSRI/SNRI** - CBT - **Performance only→ propranolol**
Separation Anxiety	Fear of separation with excessive concern that something bad will happen Can happen at **any age**	

	Associated with somatic symptoms, nightmares, difficulty sleeping and school avoidance Pathological when it is persistent, impedes child's development, causes functional impairment	

EATING DISORDERS		
Name	*Description*	*Treatment*
Anorexia	BMI < 18.5, fear weight gain, distorted body image ***Binge-Purge Type*** Complications: osteoporosis, amenorrhea, lanugo, hair loss, dry skin, enlarged parotid, hypotension, hypothermia, bradycardia, cardiac atrophy, arrhythmias	- Psychotherapy, nutritional rehab - Indications for hospitalization: unstable vitals, cardiac arrhythmias, electrolyte disturbances, organ involvement due to malnutrition, or very low weight - **Olanzapine** if severe/refractory
Bulimia	Parotid gland enlargement, hand abrasions (Russell sign), tachycardia, hypotension, dry skin, erosion of dental enamel, metabolic alkalosis and **hypokalemia, hypochloremia** **HIGH amylase** **Can also fast or excessive exercise** ***** Key→ normal BMI**	- CBT - Nutritional rehab - SSRI (**fluoxetine**) often in combo with first line treatments
Binge Eating	Recurrent episodes of binge eating No inappropriate compensatory behaviors Lack of control during eating	- CBT - Behavioral weight loss therapy - SSRI - Lisdexamfetamine, topiramate

PSYCHOTIC DISORDERS		
Name	*Description*	*Treatment*
Schizophrenia	Neuroimaging→ loss of cortical tissue volume with lateral ventricular enlargement, decreased volume for hippocampus and amygdala Age <18 at onset, more severe and impairing disease course - Youth with prodromal phase of social withdrawal and academic decline prior to onset of active psychotic symptoms, hallucinations common **Note:** imaginary friends decline around age 6 and are not associated with functional decline	- Acknowledge patients experience - 2 trials of antipsychotics - **Clozapine** in treatment resistant or with suicidality (S/E agranulocytosis, seizures, myocarditis, metabolic syndrome) - **Family interventions to decrease risk of hospitalization** **1st Gen:** extrapyramidal side effects, hyperprolactinemia→ infertility **2nd Gen:** weight gain, hyperglycemia, dyslipidemia - Olanzapine and clozapine greatest risk - Aripiprazole, lurasidone, ziprasidone least likely - Risperidone and paliperidone hyperprolactinemia→ infertility - Aripiprazole and quetiapine lease likely to cause infertility

		- Serotonin 2A and dopamine D2 receptor blockade Extrapyramidal S/E: **STOP antipsychotic,** add treatment as follows ***Acute Dystonia:*** sudden, sustained contraction of <u>neck</u>, mouth, tongue, <u>eye muscles</u> - Tx: benztropine, diphenhydramine ***Akathisia***: subjective restlessness, inability to sit still, wandering around - Tx: propranolol, lorazepam, benztropine ***Parkinsonism (Dyskinesia)***: tremor, rigidity, bradykinesia, masked facies (can look like depression) - Tx: benztropine, amantadine - Reduce dose of antipsychotic, switch to a different antipsychotic or add an anticholinergic antiparkinsonian drug when antipsychotic is working well ***Tardive Dyskinesia***: gradual onset > 6 months therapy, dyskinesia of mouth, face, trunk and extremities (dopamine receptor super sensitivity) - Tx: valbenazine, deutetrabenazine - Switch medicine
Schizophreniform	≥1 month < 6 months of schizophrenia sx Functional decline not required Delusional thinking and behavior, hallucinations, negative sx (social withdrawal, poor eye contact, neglect of personal hygiene)	
Brief Psychotic	≥ 1 day but < 1 month of psychotic symptoms Excluded if condition can be explained by effects of medication or medical illness	- Supportive therapy
Delusional	≥ 1 delusions for ≥ 1 months No other psychotic symptoms Behavior not odd/bizarre, still able to function Subtypes: erotomanic, grandiose, jealous, persecutory, somatic	- Anti-psychotics - CBT
Schizoaffective	Major depressive or manic symptoms with schizophrenia Lifetime history of delusions or hallucinations for ≥ 2 weeks in absence of depressive or manic episode Mood episodes recur throughout illness Not due to substances	
Mood Disorder with Psychotic Features	Psychotic symptoms occur **during** mood episode only	
Psychotic Disorder due to Medical Condition	Delirium must be absent Must have causal link between medical condition and psych symptoms (brain tumor and hallucinations) Meds→ **steroids or children on cold medicine or antihistamine**	
Acute Manic Episode	Elevated, irritable mood Increased energy and activity Decreased need for sleep	- 1st and 2nd gen antipsychotics (**OLANZAPINE- IM AND QUICK)** - Lithium (not in renal disease) - Valproate (not in liver disease)

	Pressured speech, racing thoughts, distractibility Grandiosity, risky behavior, marked impairment	- Combo in severe with antipsychotic plus lithium/valproate - Adjunctive with benzo for insomnia and **agitation**
Acute Agitation	Poses safety risk	- Verbal de-escalation - **Lorazepam** (IM, rapid onset) - Antipsychotic (haloperidol, olanzapine, risperidone, ziprasidone) - **Severely agitated and combative lorazepam plus haloperidol**

OBSESSIVE DISORDERS		
Name	*Description*	*Treatment*
Obsessive Compulsive	**Obsessions:** recurrent intrusive anxiety provoking thoughts, urges, and images **Compulsions**: repetitive behaviors, mental acts, not realistic Time consuming > 1 hr a day Neuroimaging→ structural abnormalities in orbitofrontal cortex and basal ganglia	- SSRI and CBT - Exposure and response prevention
Hoarding	Accumulation of a large number of possessions and distress when attempting to discard possessions	- CBT→ education, motivational interviewing, skills training in organization and decision making, gradual exposure to discarding things
Body Dysmorphic		
Muscle Dysmorphic		
Trichotillomania		

GENDER DYSPHORIA AND SEX RELATED DISORDERS		
Name	*Description*	*Treatment*
Gender Dysphoria	≥ 6 months incongruence between assigned and felt gender, desired to be another gender, dislikes own anatomy, desires sexual traits of another gender, believes feelings/reactions are of another gender, feels insignificant distress/impairment	- Assess safety, support and psychotherapy, referral to specialist services - Hormonal therapy and gender confirmation surgery
Fetishistic	Sexual urges, fantasies or behaviors focused on non-genital part or inanimate object	
Transvestic	Sexual arousal from cross-dressing	

IMPULSE CONTROL DISORDERS		
Name	*Description*	*Treatment*
Intermittent Explosive	Recurrent episodes of impulsive verbal/physical aggression unplanned and out of proportion to provocation	- CBT and SSRI
Kleptomania		
Pyromania		

CATATONIC SYNDROMES		
Name	*Description*	*Treatment*
Malignant Catatonia	Immobility or excessive purposeless activity Mutism, stupor, decreased alertness Negativism (resistance to instruction and movement) Posturing Waxy flexibility Echolalia, echopraxia	- Benzos (**lorazepam**) challenge test with 1-2 mg - **ECT** - REM suppressing drugs like antidepressants and sodium oxybate
Akinetic Mutism	Lesion in frontal cortex Presents similar to catatonia, but NO echophenomena	
Hypertensive Crisis from Tyramine	MAO-I and food/wine with tyramine causing ↑ adrenaline/epinephrine ↑ HTN and headache Intracranial bleeding, stroke, death	
Neuroleptic Malignant Syndrome	Autonomic instability→ hyperthermia, tachycardia, hypertension, lead-pipe rigidity, AMS ↑ CK and WBC count Due to **use of antipsychotic** **Dopamine dysregulation** Fever >104	- Stop antipsychotics or restart dopamine agent (bromocriptine or amantadine) - Supportive care (cooling, hydration) - Dantrolene or bromocriptine
Serotonin Syndrome	Autonomic instability from serotonergic medication use SSRI + MAOI or linezolid Mental status change, autonomic dysregulation, neuromuscular hyperactivity	- Discontinue serotonergic meds - Supportive care, sedation, benzos - **Cyproheptadine** (serotonin antagonist)
Malignant Hyperthermia		

PERSONALITY DISORDERS		
Name	*Description*	*Treatment*
Paranoid	Suspicious, distrustful, hypervigilant	- Psychodynamic psychotherapy
Schizoid	Prefers to be a loner, detached, unemotional	- Psychodynamic psychotherapy
Schizotypal	Unusual thoughts, perceptions, behaviors	- Psychodynamic psychotherapy
Borderline	Chaotic/unstable relationships, abandonment fears, labile mood, impulsive, inner emptiness, self-harm Transient psychotic symptoms in times of stress Splitting (display loving alternating with hateful behavior)	- **Dialectical behavioral therapy** - 2nd gen antipsychotic, mood stabilizer, or antidepressants as needed
Histrionic	Superficial, theatrical, attention-seeking	- Psychodynamic psychotherapy
Narcissistic	Grandiosity, lack of empathy	- Psychodynamic psychotherapy
Anti-Social	Disregard and violation of rights of others	- Psychodynamic psychotherapy
Avoidant	Fears of criticism or rejection	- Psychodynamic psychotherapy
Dependent	Submissive, clingy, needs to be taken care of	- Psychodynamic psychotherapy
Obsessive Compulsive	Rigid, controlling, perfectionist	- Psychodynamic psychotherapy

DISSOCIATIVE DISORDERS		
Name	Description	Treatment
Dissociative Identity	Marked discontinuity of identity and loss of personal agency with fragmentation into ≥ 2 distinct personalities Associated with severe trauma/abuse	
Dissociative Amnesia	Inability to recall important personal info usually of traumatic or stressful event Not explained by another disorder	
Dissociative Fugue		
Depersonalization/Derealization	Persistent or recurrent experiences of 1 or both: ***Depersonalization***: feelings of detachment from or being observer of one's self ***Derealization***: experience surroundings as unreal Intact reality	

PEDS NEURODEVELOPMENTAL		
Name	*Description*	*Treatment*
Autism	Deficits in social communication and interactions with onset in early development - Sharing of emotions or interests - Nonverbal communication - Developing and understanding relationships Restricted, repetitive patterns of behavior - Repetitive movements or speech - Insistence on sameness/routine - Intense, fixated interests - Adverse responses to sensory input With or without language/intellectual impairment	
ADHD	Inattentive and hyperactive/impulsive sx for ≥ 6 months present before age 12 with at least 2 settings (home and school) and cause functional impairment	- Stimulants (**methylphenidate and amphetamines**) - Nonstimulants (atomoxetine, alpha-2 agonist) - Alpha 2 agonist for kids only - Atomoxetine can be used for adults who should avoid addictive medications - Behavior therapy
Specific Learning	Difficulty acquiring and using a core academic skill like reading, writing, or math ***Dyslexia:*** difficulties in sound decoding, word recognition, reading fluency, and spelling F/U anxiety, depression, ADHD, autism	
Tic		
Childhood-Onset Fluency		

PEDS BEHAVIORAL		
Name	*Description*	*Treatment*
Enuresis	Repeated urination in clothes or in bed Causes: voluntary, acting out, anatomic, medications, regression (new sibling or abuse)	Never was dry at night and <7→ + reinforcement, water restriction, alarm - **DDAVP** New problem or >7→ urinalysis and US to r/o UTI/STI/sexual abuse or anatomical defect - If these are negative→ regression - R/O ABUSE
Encopresis		
Conduct Disorder	Criminal <18, antisocial but younger Hurts peers and fights authority Bullying: hurt animals, torture, rape Destruction: set fires, lie, cheat, steal Rule violator: running away from home > 2, defy authority No remorse, always rationalizes	- Juvenile Detention→ try to rehab before they become antisocial
Oppositional Defiant Disorder	Angry/irritable/argumentative for ≥ 6 months Teen acting out Fights authority but cooperates with peers DON'T HURT FRIENDS, DON'T HURT ANIMALS, DON'T TORTURE Incongruent parenting Lie, cheat, steal	- Teach parents how to parent - Psychotherapy - No pharm, but assess for comorbid ADHD
Disruptive Mood Dysregulation	Poor frustration tolerance and persistent irritability that result in frequent temper outbursts (verbal or physical) out of proportion of the situation	
Confusion/Hallucination due to Drugs	Antihistamines, phenylephrine, pseudoephedrine, dextromethorphan	

SLEEP DISORDERS		
STAGE **I:** theta waves, absent alpha **II:** k-komplex, sleep spindles **III:** delta **REM:** awake brain, atonia, rapid eye movement, erection	Sleep latency: bed→ I - ↑ in insomnia - ↓ in sleep deprivation REM latency: I→ REM 40 min - ↓ in narcolepsy - ↓ in deprivation (OSA and EtOH) - REM rebound when controlled	Serotonin ↑ sleep Ach ↑ dreaming Norepi ↑ awake Dopamine ↑ awake GABA ↓ sleep latency, ↓ NIII - EtOH, benzo cause ↑ GABA - Zolpidem will help sleep works on GABA
Name	*Description*	*Treatment*
Obstructive Sleep Apnea	1 point for each: Snoring Excessive daytime tiredness Observed apneas > 15 apneas/hr or >5 apneas with snoring High BP BMI > 35 Age > 50 Neck size >17 in men > 16 in women	- CPAP - Lose weight

	Male gender **R sided heart failure**	
Central Sleep Apnea	Patient forgets to breath, CO2 accumulation Opiates, idiopathic, COPD, stroke	- Bi-Pap
REM Sleep Behavior Disorder	Complex motor behaviors that occur during REM Degeneration of brainstem nuclei responsible for inhibiting spinal motor neurons during normal REM leads to incomplete or absent muscle atonia Dream enactment in latter half of the night Easily awakened, alert and oriented Older men, prodrome for neurodegeneration like Parkinson or dementia with Lewy bodies	
Nocturnal Seizures	Repetitive and stereotypical movements during non-REM sleep during first half of the night Postictal confusion upon awakening	-
Narcolepsy	Startle and have loss of tone Rapid REM ↓ sleep latency 3x per week for 3 months Wake up feeling refreshed Cataplexy or wake up paralyzed Hypnogogic and hypnopompic ***Low hypocretin (orexin) in CSF***	- Modafinil - Schedule naps
Insomnia	Usually due to another disorder usually a mood disorder 3x per week for 3 months <6 hours **Note:** in elderly, normal sleep related changes include decreased total sleep time, increased night time awakenings, sleepiness earlier in the evening and early morning awakening, napping	- Sleep hygiene (bed for sex and sleep, lights off go to sleep and if cannot sleep turn lights on and go do something, avoid stimulants, exercise and alcohol before sleep) - Diphenhydramine, trazadone, quetiapine, zolpidem (sleep walking/sleep talking) - In elderly, ramelteon
Nightmare	Recall highly disturbing and frightening dreams, full alert when awakening, remembers dream and can be consoled **Occur during REM** Second half of the night	-
Sleep Terror Disorder/Night Terror	**Occur during NIII** Non-REM incomplete awakenings, unresponsive to comfort, no recall of dream Marked autonomic arousal and amnesia First third of the night	- **REASSURANCE** - Low dose benzo at bedtime if episodes are frequent, persistent or distressing

SOMATIC SYMPTOM DISORDERS		
Name	*Description*	*Treatment*
Somatic Symptom	Excessive anxiety and preoccupation with ≥ 1 unexplained, real symptom ≥ 6 months No organic cause	- Regular visits with same provider - Limit unnecessary work-up - Legitimize sx but make functional improvement the goal

	- *Don't forget to ask about suicidal ideation if they report feeling hopeless*	- Focus on stress reduction and coping strategies - Mental health referral
Illness Anxiety (hypochondriasis)	Fear of having serious illness despite few or **no symptoms** and consistently negative evaluations	
Conversion	Neurologic symptom incompatible with known disease (weakness/seizures/sensory disturbance) Not intentional ***Psychogenic nonepileptic seizure:*** forceful eye closure, side to side head or body movements, rapid alerting and reorienting, memory recall of the event usually in front of a witness and pt may have a friend or relative with epilepsy - Dx with video EEG to capture event and show no epileptiform activity	- Education about the disorder - CBT - Physical therapy for motor sx
Factitious	Intentional falsification of symptoms with goal of assuming the **sick role** Eagerly accept invasive procedures By proxy→ onto someone else	
Malingering	Falsification or exaggeration of symptoms to obtain **external rewards** Avoid invasive procedures	

DEMENTIA DISORDERS		
Name	*Description*	*Treatment*
Dementia	Memory loss→ family more concerned than patient, forgets recent important events or convos Word finding difficulty Becomes dependent on others for ADLs, unable to operate common appliances, loses interest in social activities, get lost while in familiar territory	-
Delirium	Fluctuating disturbance in attention and arousal acutely from medical illness Visual hallucinations and changes to sleep and behavioral	- Identify and treat underlying condition
Creutzfeldt Jakob	Rapidly progressive dementia with ≥ 2 out of: - Myoclonus - Akinetic mutism - Cerebellar or visual disturbance - Pyramidal/extrapyramidal dysfunction ≥1 of: - Periodic sharp wave complexes on EEG - Positive 14-3-3 CSF assay - Caudate nucleus/putamen MRI findings Neuropathology: spongiform changes, neuronal loss without inflammation	- No treatment - Fatal within 12 months of dx

Anti-NMDA Receptor Encephalitis	Psychiatric symptoms like psychosis and anxiety, autonomic instability, memory impairment, rigidity 4:1 women, around 21 years old High NMDA receptor antibody	
Parkinsons	Low alpha-synuclein Asymmetric rigidity, resting tremor, bradykinesia ***Parkinson Disease Dementia:*** when parkinsonism predates cognitive impairment by > 1 year, impaired attention and planning, unable to recognize familiar people, getting lost in familiar locations Psychosis common→ underlying disease process, dopamine precursors (levodopa) and dopamine agonists (pramipexole) or both	- Dementia: **donepezil** - Psychosis: **dose reduction**, if fails then add low potency second gen antipsychotic (**quetiapine**, pimavanserin)
Lewy Body Dementia	Low alpha-synuclein Visual hallucinations, spontaneous parkinsonism, fluctuating cognition	
Alzheimer	Early, insidious short-term memory loss Language deficits and spatial disorientation Later personality changes	
Vascular Dementia	Stepwise decline Early executive dysfunction Cerebral infarct or deep white matter changes on neuroimaging	
Frontotemporal Dementia	Early personality changes Apathy, disinhibition, compulsive behavior Frontotemporal atrophy on neuroimaging	
HIV- Associated Dementia	CD4+ < 200 with long standing HIV Macrophage mediated signaling path and toxicity to neurons Subacute presentation with increased apathy and impaired attention Subcortical (basal ganglia and nigrostriatal) dysfunction→ slowed movement and cannot smooth limb movement	- Treat the HIV
Korsakoff	Retrograde and antegrade amnesia with intact long-term memory, confabulation, apathy, lack of insight, hx of alcohol use disorder Lesions in anterior and medial thalami, mamillary body atrophy, dorsomedial thalamic neuron loss	RECOVERY RARE
Marchiafava-Bignami	Dementia, motor dysfunction, dysarthria Damage to corpus callosum and surrounding white matter in context of chronic alcohol use disorder and malnutrition	

SUBSTANCE ABUSE DISORDERS TX with Motivational Interviewing			
Cut back **A**nger **G**uilty **E**ye opener	**C**ar **R**elax **A**lone **F**riends **F**orget **T**rouble	**F**eedback **R**esponsibility **A**dvice **M**enu of options **E**mpathy (5 stages) **S**elf-efficacy	*Pre-contemplative:* denial *Contemplative:* accepted *Preparation:* take 1st steps *Action:* behavior change *Maintenance:* sustain
Name		*Description*	*Treatment*
Opioids		Risks: <45, psych disorder, personal or family hx, legal hx Intoxication: euphoria, coma, constricted pupils, constipation, ↓ RR Withdrawal: pain, N/V/D, cramps, irritable Dx: naltrexone challenge	- Review states prescription-monitoring program data - Random urine drug screens - Regular follow up **Overdose→ naltrexone** **Chronic→ methadone/suboxone and NA**
Inhalants		Glue, toluene, NO (whip-its), amyl nitrates (poppers), and spray paint Sniffing, huffing (inhaled from saturated cloth), bagging (bag over mouth or nose) Transient euphoria, loss of consciousness with immediate effects that last 15-45 minutes CNS depressant→ death Dermatitis (glue sniffers rash) around mouth or nostrils ↑ liver enzymes Chronic NO use associated with B12 deficiency and polyneuropathy	-
Cocaine/Stimulants-		Increased energy, decreased appetite, reduced need for sleep, grandiosity, impaired judgement and psychiatric symtpoms Erythema of nasal mucosa and perforation of nasal septum ***Cocaine:*** bugs crawling with withdrawal ***Meth:*** paranoid delusions, tactile hallucinations (bugs), aggressive behavior, insomnia, poor dentation, bruxism, skin sores ***Caffeine:*** anxiety, jitteriness, insomnia, palpitations, and tremors ***Ecstasy/Molly/MDMA:*** synthetic amphetamine increase sociability, empathy, sexual desire, looks like amphetamine and serotonin toxicity ***Bath salts*** WITHDRAWAL - Increased appetite, hypersomnia, intense psychomotor retardation,	

	severe depression with suicidal ideation	
Alcohol	***Alcohol use disorder:*** abnormal liver enzymes, macrocytosis, alcohol tolerance, GERD, mild tremor, sleep disturbance and anxiety WITHDRAWAL - 6-24 hrs: anxiety, insomnia, tremors, diaphoresis, palpitations, GI upset, intact orientation - 12-48 hrs: seizures and hallucinations - 48-96 hrs: delirium tremens (confusion, agitation, fever, tachycardia, HTN, diaphoresis, hallucinations)	**<u>Liver disease</u>**: lorazepam, oxazepam, temazepam **Overdose→ flumazenil** **Quitting→** naltrexone (mu-opioid anatagonist) and acamprosate (glutamate modulator) No liver disease: chlordiazepoxide, diazepam, lorazepam - Diazepam and lorazepam come in IV - Chlordiazepoxide and diazepam half long half life and ↑ toxicity in liver pt
Heroin	WITHDRAWAL - N&V, cramps, diarrhea, muscle aches, dilated pupils, yawning, piloerection, lacrimation, hyperactive bowel	
Cannabis	Increased appetite, euphoria, dysphoria and panic, slow reflexes, impaired time perception, dry mouth, red eyes	
PCP	Aggressive psychosis, nystagmus vertical and horizontal, impossible strength, blunted senses WITHDRAWAL - Severe random violence	**Haldol to subdue** **Acidify urine to ↑ excretion**
LSD/Psilocybin	Rare, hallucinations, flashbacks, ↑ senses, tachycardia, hypertension, euphoria, dysphoria and panic	Supportive
Nicotine	Jittery, stimulated, vtach	NRT Varenicline: ACH receptor partial agonist, ↑ risk CV events in pt with preexisting conditions Bupropion: norepi and dopa reuptake inhibitor - C/I seizure or bulimia Therapy
Anabolic Steroids	Acne, baldness, gynecomastia, hepatic dysfunction, altered lipid profiles, virilization, testicular failure, possible mood and behavior changes	

URINE DRUG SCREEN			
Drug	*Short Term Use + Test*	*Long Term Use + Test*	*False Positives*
Amphetamines ****MDMA and bath salts may not show up on urine screen**	< 2 days	< 4 days	Atenolol, propranolol, bupropion, nasal decongestants
Cocaine	< 2 days	< 7 days	NONE
Cannabis	< 3 days	1-2 months	Hemp containing foods
Opioids	<3 days	< 3 days	Poppy seeds Don't show up→ oxycodone, fentanyl, meperidine, methadone, tramadol
Phencyclidine	< 7 days	< 7 days	Dextromethorphan, diphenhydramine, doxylamine, ketamine, tramadol, venlafaxine

DEFENSE MECHANISMS	
Immature	- **Acting Out:** expressing unacceptable feelings through actions - **Denial:** behaving as if an aspect of reality doesn't exist - **Displacement:** transferring feelings to less threatening object/person - **Intellectualization:** focusing on non-emotional aspects to avoid distress o Doctor with cancer diagnosis only focuses on work and analyzes his test results and researches experimental therapy instead of grieving with his family and addressing his family - **Passive Aggression:** avoiding conflict by expressing hostility covertly - **Projection:** attributing ones own feelings to others - **Rationalization:** justifying behavior to avoid difficult truths - **Reaction Formation:** transforming unacceptable feelings/impulses into the opposite - **Regression:** reverting to an earlier developmental stage - **Splitting:** experiencing a person/situation as either all positive or all negative
Mature	- **Sublimation:** channeling impulses into socially acceptable behaviors - **Suppression:** putting unwanted feelings aside to cope with reality

Antidepressants

- Monoamine hypothesis→ depressed because don't have enough happy NT's
  - Serotonin and norepi
  - ↓ NT= ↓ mood , but that's not it
  - Plasticity→ new neuronal connections over time of being exposed to NT
- ≥ 6 weeks at same dose, ≥ 6 months of treatment, ≥ 6 weeks wait before new drug
- <25 yoa small risk of becoming suicidal in initial treatment ↑ risk of suicidal thoughts

SSRI

- Escitalopram, fluoxetine, paroxetine, sertraline
- Sex dysfunction, ↓ libido, prolonged ejaculation
- Fluoxetine first line for adolescents
- Sertraline first line for post MI, avoid citalopram in post-MI
- Citalopram→ dose dependent QT prolongation
- **Antidepressant induced mania→** discontinue antidepressant and if sx persist add mood stabilizer

SNRI

- Venlafaxine, duloxetine
- Good choice for pt with **diabetic neuropathy**
- Cleaner but more expensive
- Tachycardia and increased BP

Atypical

- Bupropion: quit smoking, don't gain weight, don't use in bulimia

Serotonin Modulators

- Mirtazapine: appetite stimulant
- Trazadone: sleep aid, priapism

TCA

- Triptylines, imipramine, doxepin
- Enuresis, neuropathic pain
- Convulsions, cardiac, coma
- QRS> 100 msec treat with sodium bicarb

MAOI

- Selegiline, phenelzine
- HTN emergency with wine or cheese
- Serotonin syndrome if SSRI wasn't stopped >2 weeks before starting MAOI

Mood Stabilizers

- Acute mania→ lithium or valproate plus antipsychotic then leave on both medications
- 1st line: lithium
  - Teratogen, nephrotoxic, nephron DI, ataxia, tremor, seizures
  - Hyperparathyroidism and hypercalcemia
  - ↓ risk of suicide
  - Causes of toxicity: dehydration, thiazides, NSAIDs, ACE inhibitors
  - Tx toxicity→ hemodialysis
- 2nd line: Valproate
  - 1st line choice
  - S/E: drug-induced liver toxicity with malaise, anorexia, nausea, RUQ pain, ↑ liver enzymes
  - Teratogen- spina bifida, pancreatitis, ↓ PLT, agranulocytosis
- Adjunct/2nd line: Quetiapine
  - Weight gain, QTC prolongation, somnolence
- 2nd line: lamotrigine
  - No bad S/E, safe in prego
  - **Drug rash maculopapular**, SJS and TEN→ discontinue medicine

Anxiety

- Chronic: always there, can live with it
  - Psychotherapy
  - SSRI/SNRI
- OCD, PTSD also SSRI/SNRI
- Acute/Panic:
  - Benzos to abort
- Public speaking
  - Propranolol, nadelol, atenolol

Anti-Psychotics

PATHWAY	EFFECT
Mesolimbic	Antipsychotic efficacy
Nigrostriatal	EPS→ acute dystonia, akathisia, parkinsonism
Tuberoinfundibular	Hyperprolactinemia

- + Sx: mesolimbic D2C dopamine receptors
- - Sx: serotonin

Typical: D2 antagonist to ↓ + sx, as you ↑ potency you:
- Haloperidol, fluphenazine
- Thioridazine, chlorpromazine (weaker)
- Nigrostriatal: ↑ EPS
- Tuboinfundibular: gynecomastia, galactorrhea, amenorrhea
- Ach: dry mouth, urinary retention

Atypical: D2C antagonist (+ sx), 5HT antagonist (- sx)
- Quetiapine: somnolence, can treat insomnia/BP/mania
- Olanzapine: metabolic syndrome
- Risperidone: EPS, galactorrhea, orthostasis, metabolic syndrome
- Aripiprazole
- Ziprasidone
- ALL: QTc prolongation, Ach symptoms

Clozapine
- Best drug but last resort
- Agranulocytosis (absence of neutrophils)

CHOOSE THE DRUG
- Compliant: atypical PO
- Noncompliant
    - Agitated: IM olanzapine or haloperidol
    - Dysphagia: oral dissolving tablets olanzapine or risperidone
    - Chronic*:* depot olanzapine or risperidone
- Failed everything→ clozapine

ASSESSMENT OF DECISION-MAKING CAPACITY
1) Communicates a choice to clearly indicate preferred treatment option
2) Understands info provided on condition and treatment
3) Appreciates consequences
4) Rationale given for decision able to weigh risks and benefits and offer reasons for decision