Anxiety disorders
- Generalized anxiety disorder (GAD)
- Panic disorder
- Phobias
  - Obsessive-compulsive disorder (OCD)
  - Trauma- & stressor-related disorders
    - Post traumatic stress disorder (PTSD)
    - Adjustment disorder
    - Acute Stress disorder

Generalized Anxiety Disorder (GAD)
- Persistent, excess anxiety over general life events for ≥ 6 mos
- Dx criteria: ≥ 3
  - restlessness or feeling on edge
  - easy fatigability
  - irritability
  - sleep disturbance
  - muscle tension
  - difficulty concentrating
Generalized Anxiety Disorder (GAD)

- Age of onset early 20’s
- R/O medical disorders (substance abuse, thyroid dysfunction, ETOH withdrawal)
  - Tx – behavior/insight-oriented therapy + meds
    - SSRIs, SNRIs, buspirone
    - benzos as short term adjunct
    - TCAs may help – 2nd line

Panic Attack

- Extreme anxiety or intense fear
  - peaks within 10 mins. & lasts 5-20 minutes
  - typically declines within 30 mins.
  - rarely lasts >1 hr
- May/may not have identifiable trigger

Panic Attack - Symptoms

- palpitations
- tachycardia
- sweating
- trembling
- dyspnea
- sensation of choking
- chest discomfort
- nausea
- depersonalization
- fear of losing control or going crazy
- fear of dying
- light-headedness
- numbness
- tingling
- chills or hot flashes
- derealization
Panic Disorder

- Recurrent, unexpected panic attacks
- Abruptly occur
- Accompanied by at least 1 month fear of having add’l attacks or change in behavior related to the attack
- 4 or more panic attack symptoms
- Often have major depression & substance abuse

Panic Disorder

- Tx
  - short course benzos (alprazolam, lorazepam)
  - then taper benzos, start SSRI - 1st line for long term tx (paroxetine, fluoxetine, sertraline, venlafaxine (SNRI))
  - TCA’s not as likely to be used
  - mild cases - relaxation or psychotherapy

Phobias–Specific, Social, Agoraphobia

- Irrational fear & persistent excess anxiety when presented with object/situation
- Exposure causes immediate anxiety, can lead to panic attack
- Situation or object feared & avoided or endured with apprehension
- Interferes with daily functioning
### Specific Phobia - 5 types

- Fear of specific object/place/situation lasting at least 6 months
  - animal/insects
  - natural phenomena (storms, heights, water)
  - blood-injection injury (invasive procedures, blood, needles, contamination)
  - situational (bridges, flying, confined spaces)
  - other (vomiting, choking, becoming sick, death)
- **Onset is in childhood**

### Specific Phobia

- **Tx**
  - desensitization/exposure therapy/flooding most effective
  - short term benzos, B-blockers as adjuncts
  - insight-oriented therapy, hypnosis

### Social Phobia

- Fear of social situations in which embarrassment or humiliation may occur, lasting 6 months or more
- Inciting events -
  - public speaking
  - using public restrooms
  - eating in public
### Agoraphobia – Dx criteria

- Anxiety about placing self in situation in which incapacitating problem may occur & help unavailable
- Fear of being in public places where escape may be difficult
- Situations are avoided, endured with severe distress, or faced only with a companion
- Duration of 6 months or more

### Agoraphobia

- Inciting events may include being fearful about 2 or more:
  - outside the home alone
  - in a crowd, standing in line
  - public transportation (bus/train)
  - open spaces (bridge, parking lot)
  - enclosed spaces (cinema, store)
- 50–70% have co-existing panic disorder
- F 2-3x >M
- Symptoms – same as panic attack

### Agoraphobia & Social Phobia

- Tx
  - 1st line med - SSRIs (paroxetine, fluoxetine, sertraline), venlafaxine (SNRI)
  - 2nd line benzos, TCAs
  - beta-blockers (propanolol) can reduce hyperarousal & tremor with performance situations
  - Insight-oriented therapy, gradual exposure
Obsessive-Compulsive Disorder (OCD)

- Obsessions – persistent, recurrent thoughts/images/impulses that are intrusive & inappropriate resulting in anxiety
- Compulsions - ritualistic/repetitive behaviors or thoughts pts. do to relieve anxiety caused by obsessions
  - behaviors/mental acts are excessive
  - have no connection between events pt. is trying to avoid
- Some, not all - realize thoughts & behaviors irrational

Common Obsessions-Compulsions

- Contamination – excess hand washing, avoiding objects presumed contaminated
- Doubt - worry (forget to lock door, turn off stove)
- Intrusive thoughts - obsessive thoughts without compulsion; may be sexual/aggressive
- Symmetry - order & arrange objects, extreme precision
- Other - religious obsessions, compulsive hoarding, nail biting, trichotillomania, excoriation (skin-picking), counting/repeating a phrase, body dysmorphic disorder
Obsessive-Compulsive Disorder (OCD)

Tx
- Behavioral therapy + meds
  - 1st line med - SSRIs, often higher dose than normally Rx'd
  - TCAs (clomipramine) can help
- If refractory – gabapentin, venlafaxine, olanzapine, clonazepam, lithium, or anti-psychotic + SSRI

Body dysmorphic disorder

- Preoccupation with imagined defect in physical appearance/exaggerated distortion of minor flaw
- Common concerns – face/hair/skin/breasts/genitalia
- High co-morbidity with depressive/anxiety disorders; linked to psychotic disorder & OCD
- Tx – cognitive –behavioral therapy + SSRIs reduce symptoms in >50%
### Post traumatic stress disorder (PTSD)

- Exposure to actual/threatened death/serious injury or sexual violence, witnessing, learning about event occurring to friend/family
- Symptoms...
  - **last greater than one month**
  - develop in as little as one week or…
  - develop 6 months or years after event
  - fluctuate over time, worsen during stress
- Feelings of helplessness, fear, horror that impair daily function

### PTSD

- 4 major elements- 1 or more for dx
  - re-experience trauma (dreams, memories, flashbacks)
  - avoidance of reminders
  - symptoms of hyperarousal
  - emotional numbing, negative emotional state
- Common causes
  - men: combat
  - women: rape/assault
  - both: natural disasters

### PTSD - Dx Criteria

2 or more increased arousal symptoms:
- difficulty falling or staying asleep
- **hyper-startle response**
- irritability/angry outbursts
- decreased concentration
- **hypervigilance**
- reckless or self-destructive behavior
PTSD - Dx Criteria -

2 or more mood alterations:
- unable to remember important aspect of event
- negative beliefs
- blaming self or others for event
- persistent negative emotional state
- anhedonia
- feelings of detachment from others

PTSD Management

• Tx
  – 1st line – SSRIs (sertraline, paroxetine)
  – SNRI (venlafaxine)
  – benzos reduce anxiety; trazodone for insomnia
  – prazosin reduces nightmares
  – therapy - crisis counseling/support groups, family

Adjustment Disorder

• Emotional symptoms in response to identifiable stressor
  – job loss, divorce, school/financial problems, moving out of home/relocation, substance abuse, becoming a parent, retirement
• Symptoms within 3 mos of stressor, ending within 6 mos after stressor resolved
• Reaction out of proportion to stressor or impairs daily functioning
Adjustment Disorder

- Symptoms
  - depressed mood, tearfulness, anxiety, palpitations, agitation, reckless driving, fighting, truancy, vandalism
- Tx
  - 1st line - Psychotherapy
  - Benzos, hypnotics (zolpidem), briefly if warranted
  - antidepressants (SSRI's) if depression present

Acute stress disorder

- Similar to PTSD - differ in onset & duration
  - PTSD symptoms develop anytime after event & last >1 mos
- Acute stress disorder symptoms -
  - occur within 1 mos of traumatic event
  - last 3 days to 1 mos
- Populations:
  - motor vehicle accident survivors
  - violent crime victims/witnesses
  - natural disaster survivors

Acute stress disorder – Dx Criteria

- Exposure to traumatic event involving threat of possible injury/death
- >/= 9 symptoms from 5 categories:
  - intrusion (memories, flashbacks)
  - negative mood
  - dissociative amnesia, being in a daze
  - Avoidance (reminders, feelings)
  - Arousal (hypervigilance, irritability, decreased concentration)
Acute stress disorder

- Adjustment disorder differs -
  - by a generally non-life-threatening, less severe stressor, less intense pathologic response
- Tx – similar to PTSD
  - therapy/support group
  - Short course benzodiazepines for severe anxiety
  - +/- SSRIs, TCAs, anticonvulsants, anxiolytics for insomnia & irritability if warranted

Attention-Deficit Disorder

- 20-50% have dysfunctional symptoms as adults
- M 2-5X >F, often firstborn son
- Dx Criteria:
  - hyperactivity, impulsivity, or inattentiveness manifesting before age 12
  - occurs in ≥2 settings
  - >6 symptoms of inattention, hyperactivity-impulsivity, developmentally inappropriate & present ≥6 mos
### Hyperactivity & Impulsivity symptoms
- Fidgets/squirms
- Leaves seat often
- Restlessness, unable to be still
- Runs/climbs in inappropriate situations
- Difficulty playing quietly
- Talking excessively
- Blurt out
- Difficulty awaiting turn
- Interrupts/intrudes on others

### Inattention symptoms
- Careless mistakes; trouble attending to details
- Problems sustaining attention
- Doesn't follow through/complete assigned work
- Doesn't seem to listen when spoken to directly
- Forgetful
- Easily distracted
- Loses items critical to assigned activities
- Avoids activities requiring sustained mental effort
- Difficulty organizing tasks

### Attention-Deficit Disorder (ADD or ADHD)
- Secondary symptoms:
  - emotional immaturity & lability
  - poor social skills
  - +/- motor incoordination
  - disruptive behavior causes peer rejection, deflated self-image
  - don’t comply with parents’ requests
  - can be explosive & irritable
Attention-Deficit Disorder - Tx

1st line meds – (caution: wt. loss & ↓ growth with stimulants!)
- methylphenidate (Ritalin, Concerta, Daytrana)
- dexamethylphenidate (Focalin)
- amphetamine/dextroamphetamine (Adderall, Dexedrine)

2nd line/adjuncts
- atomoxetine (Strattera) selective norepinephrine reuptake inhibitor (non-stimulant)
- antidepressants (guanfacine, clonidine, imipramine, bupropion)
- Behavior modification, family, educational mgmt

Autistic Disorder - Dx criteria

> 6 symptoms from these categories

- impaired social interaction
- impaired communication
- repetitive stereotyped patterns of behavior & activities

Impaired social interaction & communication

- problems with nonverbal behaviors (facial expression, gestures)
- fail to develop peer relationships
- does not seek sharing of interests/enjoyment with others
- lacks reciprocal social/emotional interaction
- lack of or delayed speech
- repetitive language use
Repetitive stereotyped patterns of behavior & activities
• At least 2
  – inflexible rituals
    • intense, rigid commitment to maintaining routines
    • become agitated if routine is interrupted
    • sit in specific chair, dress in certain way, eat specific foods, hypo or hyper sensory
  – preoccupation with parts of objects

Autism - Treatment
• Refer – Autism specialists
• Speech & language pathologist
• Audiology evaluation, +/- EEG
• Behavioral therapy
• Pharmacologics
  – 2nd gen. antipsychotics (risperidone, aripiprazole) for aggression/hyperactivity, mood lability
  – SSRIs for stereotyped/repetitive behaviors, OCD, depression

Ánorexia Nervosa
• Distorted body image
• Egosyntonic; average age 15-30 yrs. old
• Fear of becoming fat, even though underwt.
• BMI >/= 17 mild, 16-16.99 moderate, 15-15.99 severe
• 2 types:
  - Restricting
    eat very little fasting
    excessive exercise
    more withdrawn
    tend to have OC traits
  - Binge eating/purging
    binge/purge
    + laxatives
    excessive exercise
    +/- diuretics
    more depression & substance abuse
### Anorexia - findings & complications

- Amenorrhea, emaciation
- Hypochloremia, hypokalemia, elevated BUN, metabolic alkalosis, hyponatremia, hypocalcemia
- Hypothermia, cold extremities, salivary gland hypertrophy
- Bradycardia, arrhythmias, cardiac arrest, low BP
- Lanugo, dry skin, peripheral edema
- Constipation, acute pancreatitis
- Leukopenia, hypercholesterolemia, anemia
- Osteoporosis, muscle cramps
- Dental erosion, calluses/abrasions on back of hand

### Anorexia Nervosa - Management

- Restore nutritional state!
- Hospitalize if >20% below expected wt. or severe electrolyte imbalance
- Out pt. –
  - Behavioral/family therapy
  - Supervised, *gradual* wt. gain, 500 cals over maintenance to start, more frequent small meals
- Pharmacologics DO NOT play major role
  - Bupropion contraindicated – lowers seizure threshold

### Bulimia Nervosa

- Binge eating, vomiting, laxatives, diuretics, excess exercise at least 1 day/week for 3 months
- Binging causes emotional distress, feel loss of control so *egodystonic*
- **Normal or overweight**
- Severity scale
  - Mild: 1-3 episodes/week
  - Moderate: 4-7
  - Severe: 8-13
  - Extreme: >/= 14
Bulimia – physical findings

- Dental erosion/caries; calloused, abraded knuckles (Russell’s sign)
- Esophagitis
- Hypochloremic, hypokalemic alkalosis
- Hypomagnesemia, hypocalcemia
- Parotid gland hypertrophy
- Gastric distention, elevated amylase
- Cardiac arrhythmias

Bulimia Nervosa - Management

- Restore nutritional state/metabolic balance!
- SSRIs (fluoxetine, sertraline, paroxetine)
  reduce binge/purge behaviors
- **Bupropion contraindicated**
- 2nd line meds - TCAs, MAOIs
- Behavioral/family/group therapy
- Hospitalization usually not needed

Endocrine Problems due to Eating disorders

- ↑ growth hormone
- ↑ plasma cortisol
- ↓ gonadotropins (LH, FSH)
- ↓ T3
- Abnl glucose tolerance test
- Abnl dexamethasone suppression
- ↓ estrogen
### Somatic signs of an eating disorder
- Arrested growth
- Marked change/frequent wt. fluctuation
- Inability to gain wt.
- Fatigue
- Constipation or diarrhea
- Susceptibility to fractures
- Delayed menarche
- Hyperphosphatemia, high serum amylase

### Behavioral signs of an eating disorder
- Change in eating habits
- Difficulty eating in social settings
- Reluctance to be weighed
- Depression
- Social withdrawal
- School or work absence
- Deceptive/secretive behavior
- Stealing (ie, to obtain food)
- Substance abuse
- Excess exercise

### Obesity/Binge-eating disorder
- >20% over ideal body wt. or BMI>30
- Dx criteria -
  - binge eating > once/wk for 3 mos
  - sense of lack of control during episode
  - no inappropriate wt. control
  - same severity scale as bulimia
  - ≥3 of following:
    - eating rapidly, until very full, large amounts when not hungry, alone out of embarrassment
    - feeling disgusted/depressed/guilty afterward
Obesity - Treatment

- 1st line - Behavior modification/group therapy
- Food diaries/exercise regimen
- New eating patterns (eat slowly/not between meals/only when seated)
- Tx underlying depression with SSRIs
- Others: as adjuncts
  - sympathomimetics - phentermine (Adipex), benzphetamine (Didrex), orlistat (Xenical)
  - gastric bypass

Mood Disorders

- Patterns of mood episodes (major depressive, manic, hypomanic, mixed) in which some mood impairment is present
- Types:
  - Major Depressive Disorder (MDD)
  - Dysthymia/Persistent depressive disorder
  - Bipolar (types I & II)
Major Depressive Disorders Subtypes

- seasonal affective disorder (SAD)
- atypical depression
- catatonic depression
- postpartum depression
- disruptive mood dysregulation disorder
- premenstrual dysphoric disorder

Major Depression Symptoms - SIG-E-CAPS
For Dx: 5 or more for at least 2 weeks

- Sleep: insomnia/hypersomnia
- Interest: depressed mood, loss of interest/pleasure
- Guilt: feelings of worthlessness/guilt
- Energy: decreased
- Concentration: diminished ability to think, make decisions
- Appetite: weight changes
- Psychomotor: retardation/agitation
- Suicide: or recurrent thoughts of death

Tx - Acute Major Depressive Episode

- Begin with SSRI
- If partial/no response after ~6 wks, re-assess dx &/or increase dose
- If inadequate response
  - change to another class of drugs
  - add another med
  - combine antidepressants from different classes
- Psychotherapy
- Consider ECT
### Seasonal affective disorder (SAD)

- Fall or winter onset
- Often remits in spring
- More common in colder climates
- Onset age 20-40 yrs
- Tx –
  - light therapy
  - SSRIs
  - Bupropion

### Atypical depression

- Overeating & wt. gain
- Oversleeping
- Reactive mood
- Leaden paralysis
- Oversensitivity to interpersonal rejection

- Tx –
  - MAOIs useful (Marplan, Parnate)
  - SSRIs, atypical antipsychotics may help

### Catatonic depression

- Motor immobility/stupor, blurred affect
- Purposeless motor activity
- Extreme withdrawal, negativism
- Bizarre mannerisms/posturing
- Echolalia/echopraxia

- Tx
  - Benzodiazepines
  - ECT
  - Valproic acid, lithium, risperidone as adjuncts
Postpartum depression
• Onset of symptoms within 4 wks of delivery
• Tx
  – Therapy plus…
  – SSRIs – sertraline (Zoloft) good choice if breastfeeding; fluoxetine (Prozac), escitalopram (Lexapro), venlafaxine (Effexor)
  – Estrogen may help

Disruptive Mood Dysregulation Disorder (DMDD)
• severe temper tantrums ≥3 times/week for at least 12 months
• sad, irritable or angry mood almost every day
• occurs in at least 2 settings
• symptoms began before age 10
• dx not made before age 6 or after age 18
• no manic episodes
• males > females
• risk for depression /anxiety in adulthood
Tx– individual/family therapy, +/- SSRIs, stimulants

Premenstrual Dysphoric Disorder – 5 or more for dx
• sadness or despair, even thoughts of suicide
• tension or anxiety
• mood swings or frequent crying
• irritability or anger that affects other people
• lack of interest in daily activities & relationships
• trouble thinking or focusing
• tiredness or low energy
• food cravings or binge eating
• trouble sleeping
• feeling out of control
• physical symptoms: bloating, breast tenderness, headaches, joint or muscle pain
Tx – SSRIs continuous or week prior to menses (fluoxetine, sertraline, paroxetine, escitalopram) Also: BCPs/low dose estrogen, diuretics
**Drug Treatment of Mood Disorders**

- 1st line - SSRI(s) (fluoxetine, paroxetine, sertraline)
- Also effective- venlafaxine; nefazodone, bupropion, mirtazapine – least assoc. with sexual dysfunction
- 2nd line – TCAs/tetracyclics (overdose more lethal)
- 3rd line - MAOIs - least likely used

**Precautions/Side Effects**

- SSRIs - GI upset, headache, sexual dysfunction
- TCAs/tetracyclics - wt. gain, orthostatic hypotension, anticholinergic effects, somnolence
- MAOIs - need tyramine-free diet (no wine, beer, most cheeses, aged foods, smoked meats) to avoid HTNsive crisis

**Precautions/Side Effects**

- MAOIs, demerol, triptans, dextromethorphan
  + SSRIs can cause *serotonin syndrome – rapid onset*:
    - mental status changes, restlessness
    - *hyperthermia*, diaphoresis
    - tremor, *hypertonicity*, seizures
    - renal failure, coma, death
- Tx
  - benzodiazepines
  - aggressive cooling
  - cyproheptadine in severe cases
ECT for Tx of Mood Disorders
- Beneficial for
  - severely depressed
  - unresponsive
  - intolerant of psych meds
- Safely used in elderly & pregnancy
- Side effects
  - memory loss (temporary)
  - postictal confusion
  - headache
  - nausea
  - muscle soreness

Suicide Risks
- prior attempt
- white male
- >45 yrs old
- detailed plan
- self-destructive pattern
- recent severe loss
- poor support system
- poor health
- substance abuse
- psychotic symptoms
- inability to accept help

Dysthmic/Persistent depressive disorder
- Chronic persistent mild depression
- Pessimism, brooding, loss of interest, decreased productivity, feelings of inadequacy, social withdrawal
- No psychotic or manic/hypomanic features
- MDD may develop in 10–20%, bipolar in others, 25% will always have symptoms
- Young adult onset
Dysthymic/Persistent depressive – Dx Criteria

- Depressed mood most of day, more days than not, >2 yrs (≥1 yr in children/adolescents)
- During 2 yr period, not w/o symptoms for >2 mos at a time, no major depressive episode during first 2 yrs

At least 2:
- poor concentration/indecisiveness
- hopelessness
- poor appetite or overeating
- insomnia or hypersomnia
- low energy/fatigue
- lack self-esteem

Dysthymic/Persistent depressive -Treatment

- Antidepressants-
  - SSRIs 1st choice
  - SNRIs
  - bupropion
  - TCAs
  - occasionally MAOIs (last choice)

PLUS
- Insight-oriented, behavior, cognitive therapies

Bipolar I disorder

- >1 manic/mixed episodes, often cycle with depressive episodes
- Manic episodes - sudden mood escalation, abnormally euphoric, expansive, or irritable
  - may go for days without sleep
  - excessively talkative or loud
  - socially outgoing
  - overly self-confident
  - hypersexual, disinhibited
  - flamboyant clothing style
### Bipolar I Disorder

- Racing thoughts
- Flight of ideas
- Easily distracted
- Impaired judgment
  - spending sprees
  - promiscuity
  - foolish business investments
- Psychotic symptoms (hallucinations, paranoia, delusions) may be present

### Bipolar I Disorder - Treatment

- **Acute mania** – Lithium,* valproate, SGAs (olanzapine, aripiprazole), carbamazepine
- **Mania maintenance** - SGAs, Gabapentin, lamotrigine (Lamictal)
- If agitation – add antipsychotics (haloperidol, risperidone) or benzos
- **Depressive episodes** - SSRIs, quetiapine, or olanzapine + fluoxetine
- **MAOIs, TCAs** – least likely used

* narrow therapeutic window; wt. gain, tremor, nausea, excess thirst/urination, drowsiness, hypothyroidism, arrhythmias, seizures

### Bipolar II Disorder

- ≥1 major depressive & ≥1 hypomanic episode
- No manic or mixed episodes
- Hypomanic symptoms –
  - similar to manic symptoms but less severe & less social impairment
  - usually no psychotic symptoms, racing thoughts, or excess psychomotor agitation
- **Tx** - same as bipolar I
  - lithium &/or lamotrigine (Lamictal) 1st line
Psychotic Disorders - Delusional disorder, Schizophrenia, Schizoaffective disorder

- In general -
  - disordered thought content & thought processes
  - perceptual disturbances (illusions, hallucinations, delusions, impaired reality)
  - social, occupational function disrupted due to affect, motivation, perception, communication
  - memory or consciousness not adversely impacted

Psychotic Disorders

- Brief psychotic –
  - symptoms > 1 day but < 1 mos
  - often after catastrophic event
  - return to premorbid functioning

- Schizophreniform -
  - same symptoms as schizophrenia
  - symptoms last 1-6 mos

Psychotic Disorders

- Symptoms categorized as -
  - positive
    - hallucinations, bizarre behavior, delusions
  - negative
    - flat affect, apathy, anhedonia
    - poor grooming, social withdrawal
    - poor eye contact, poverty of speech
Delusional Disorder

- **Delusions** for ≥1 mos
- Behavior not obviously odd; **daily function not significantly impaired**
- Subtypes of delusions -
  - erotomanic - another person in love with them
  - somatic - having a physical/medical condition
  - jealous - sexual partner’s infidelity
  - persecutory - mistreatment or persecution
  - grandiose - inflated self-worth, power, knowledge
- Treatment – antipsychotics

Schizophrenia

- Chronic, debilitating course
- Lack insight, don’t think their behavior is abnl
- Better prognosis if…
  - acute or late onset
  - obvious precipitating factor
  - presence of positive symptoms
- Onset before age 15 or after 50 is rare
Schizophrenia – Dx Criteria
>2 out of 5 bolded for 1 month (including one of three listed here) and continuous signs for at least 6 months

- **Delusions**
- **Hallucinations** - auditory (most common), tactile, olfactory, visual
- **Disorganized speech/thought processes**
  - unable to stay on topic (loose associations)
  - unable to provide answer related to questions (tangential response)

- **Disorganized behavior** - unpredictable agitation, inappropriate sexual behavior, child-like silliness, catatonic motor behavior, lacking self-care/hygiene
- **Negative symptoms** - blunted affect, poor posture, lack goal-directed activities/initiative
- severe enough to disrupt communication, social & occupational functioning

Schizophrenia - Treatment

- Hospitalize if suicidal, unable to care for self, pose threat to self/others
- **1st line- serotonin & dopamine antagonists (SDAs):** (risperidone, olanzapine, aripiprazole, ziprasidone, quetiapine, asenapine, paliperidone) for negative symptoms & less side effects
- Typical neuroleptics - dopamine antagonists (haloperidol, chlorpromazine, thioridazine, loxapine, fluphenazine) best for positive symptoms
Schizophrenia - Treatment

- Resistant cases – clozapine or antipsychotic + another med (benzo, carbamazepine, valproate, lithium)
- Behavior-oriented/group/family therapy
- Watch for side effects!
  - extrapyramidal, parkinsonian symptoms, neuroleptic malignant syndrome, tardive dyskinesia - more likely with typical neuroleptics; clozapine may \( \rightarrow \) agranulocytosis

Schizoaffective disorder

- Meets criteria for major depressive, manic, or mixed episode, during which criteria for schizophrenia also met
- Hallucinations or delusions present for 2 or more weeks without mood symptoms
- Better prognosis than schizophrenia, worse than mood disorder
- Tx – 2nd gen. antipsychotics (paliperidone)
  - can add antidepressant/lithium/valproate
  - ECT as adjunct for mania/depression

Timeline/Prognoses of Psychotic disorders

- < 1 month – brief psychotic disorder
- 1-6 months – schizophreniform disorder
- > 6 months – schizophrenia

Best \( \rightarrow \) worst prognosis

mood disorder->brief psychotic disorder->schizoaffective disorder->schizophreniform disorder->schizophrenia
Somatic Symptom Disorders

- Somatic symptom disorder
- Illness anxiety disorder
- Conversion disorder

In general –
- Physical symptoms that defy medical work-up
- Drug treatment rarely indicated
- Goal is to improve function

Somatic Symptom Disorder

- 1 or more physical complaints for at least 6 months
- Persistent concerns about seriousness of symptoms
- Symptoms relate to GI tract, reproductive, neurologic systems, pain, cardiac, MSS
- Chronic, debilitating course

Tx –
- Regular visits with healthcare provider
- Therapy to develop coping strategies
- Minimize secondary gain
- Avoid medications/use cautiously
Illness Anxiety Disorder

- Preoccupation with belief of having/contracting a serious disease; duration at least 6 months
- Somatic symptoms may not be present/may be mild
- Normal bodily sensations falsely interpreted as manifestation of disease
- Onset in early-middle adulthood

Tx -

- Individual/cognitive-behavioral therapy
- Regular appts with provider for reassurance
- Meds (SSRIs), esp. if concurrent anxiety/depression

Conversion disorder

- ≥1 neurological complaints not explained by medical/neuro disorder
- Symptoms –
  - paralysis, abnl movements, blindness, aphonia
  - paresthesia/anesthesia, deafness, seizures
  - may have unexpected lack of concern to symptoms (la belle indifference)

Tx –

- Spontaneous remission rate is high
- Reassurance, improve quality of life, reduce stress

Substance Use Disorders

Impairment manifested by 2 or more in 1 yr:

- tolerance
- withdrawal
- larger amounts over longer period
- unsuccessful efforts to stop/decrease amount
- continued use despite adverse consequence
- lots of time spent obtaining or recovering
- fails to meet home/school/work obligations
- repeatedly uses substance in hazardous situations
- craving/urge for substance

Severity - mild (2-3), moderate (4-5), severe (6+)
### ETOH – signs/symptoms/treatment

<table>
<thead>
<tr>
<th>Intoxication</th>
<th>Withdrawal</th>
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<tbody>
<tr>
<td>Slurred speech</td>
<td>Tremors (after 10-18 hrs)</td>
</tr>
<tr>
<td>Euphoria</td>
<td>Anxiously, nausea/vomiting</td>
</tr>
<tr>
<td>Ataxia/incoordination</td>
<td>Seizures (7-38 hrs)</td>
</tr>
<tr>
<td>Facial flushing</td>
<td>Hallucinations (within 2 days)</td>
</tr>
<tr>
<td>Reduced inhibition</td>
<td>Delirium tremens (2-5 days)</td>
</tr>
<tr>
<td>Erratic behavior</td>
<td></td>
</tr>
<tr>
<td><strong>Chronic abuse</strong></td>
<td><strong>Treatment</strong></td>
</tr>
<tr>
<td>Elevated GGT, AST, ALT</td>
<td>Benzos (diazepam, chlordiazepoxide) for agitation</td>
</tr>
<tr>
<td>Increased HDL, LDH, MCV</td>
<td>Thiamine (prevents Wernicke’s encephalopathy)</td>
</tr>
<tr>
<td>Decreased LDL, BUN, RBC volume</td>
<td>MVI, folic acid</td>
</tr>
<tr>
<td>Acne rosacea, palmar erythema</td>
<td>Haloperidol or risperidone if hallucinations</td>
</tr>
<tr>
<td>Hepatomegaly</td>
<td>Disulfiram + ETOH=nausea</td>
</tr>
<tr>
<td>Gynecomastia/testicular atrophy</td>
<td>Detox, AA/Alateen/Al-Anon</td>
</tr>
<tr>
<td>Dupuytren’s contractures</td>
<td></td>
</tr>
</tbody>
</table>

### Stimulants (amphetamines, cocaine, crack)

<table>
<thead>
<tr>
<th>Intoxication Signs/symptoms</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euphoria</td>
<td>Benzo/diazepines (diazepam, lorazepam) for agitation</td>
</tr>
<tr>
<td>Agitation/Aggression</td>
<td>Short term antipsychotics if psychotic symptoms</td>
</tr>
<tr>
<td>Transient psychosis</td>
<td>Rehabs/detox</td>
</tr>
<tr>
<td>Hallucinations</td>
<td>Psychotherapy</td>
</tr>
<tr>
<td>Impaired Judgment</td>
<td></td>
</tr>
<tr>
<td>Tachycardia</td>
<td></td>
</tr>
<tr>
<td>Elevated BP</td>
<td></td>
</tr>
<tr>
<td>Dilated pupils</td>
<td></td>
</tr>
<tr>
<td><strong>Withdrawal Signs/symptoms</strong></td>
<td></td>
</tr>
<tr>
<td>Fatigue/depression</td>
<td></td>
</tr>
<tr>
<td>Headache</td>
<td></td>
</tr>
<tr>
<td>Profuse sweating</td>
<td></td>
</tr>
<tr>
<td>Muscle cramps</td>
<td></td>
</tr>
<tr>
<td>Hunger</td>
<td></td>
</tr>
</tbody>
</table>

### Opioids (heroin, morphine, oxycodone)

<table>
<thead>
<tr>
<th>Intoxication Signs/symptoms</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euphoria</td>
<td>Methadone OR</td>
</tr>
<tr>
<td>Drowsiness/Lethargy</td>
<td>Clonidine tapering dose</td>
</tr>
<tr>
<td>Impaired concentration</td>
<td>Benzos for mild withdrawal</td>
</tr>
<tr>
<td>Hypotension, bradycardia</td>
<td>NSAIDs for muscle aches</td>
</tr>
<tr>
<td>Slurred speech</td>
<td>Dicyclomine for GI distress</td>
</tr>
<tr>
<td>Constriicted pupils</td>
<td></td>
</tr>
<tr>
<td>Flushing</td>
<td></td>
</tr>
<tr>
<td><strong>Withdrawal Signs/symptoms</strong></td>
<td></td>
</tr>
<tr>
<td>Lacrimation, rhinorrhea</td>
<td></td>
</tr>
<tr>
<td>Sweating, hot/cold flashes</td>
<td></td>
</tr>
<tr>
<td>Yawning</td>
<td></td>
</tr>
<tr>
<td>Hypertension, tachycardia</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td></td>
</tr>
<tr>
<td>Nausea/vomiting/abd cramps</td>
<td></td>
</tr>
<tr>
<td>Muscle/joint pain</td>
<td></td>
</tr>
<tr>
<td><strong>Dependence</strong></td>
<td></td>
</tr>
<tr>
<td>Methadone maintenance program</td>
<td></td>
</tr>
<tr>
<td>Naltrexone</td>
<td></td>
</tr>
<tr>
<td>Buprenorphine (Subutex)</td>
<td></td>
</tr>
<tr>
<td>Buprenorphine +naloxone (Suboxone)</td>
<td></td>
</tr>
<tr>
<td>Detox, psychotherapy</td>
<td></td>
</tr>
</tbody>
</table>
Treatment - Substance Use Disorders

- CNS depressants
  - gradual withdrawal of drug
  - pentobarbital or diazepam if needed
- Nicotine cravings
  - nicotine patch, nasal spray, gum, inhaler
  - bupropion (Zyban), clonidine, varenicline (Chantix)
- Marijuana, PCP, hallucinogen withdrawal
  - meds not usually needed; can use anxiolytics
  - if psychotic symptoms from PCP, hallucinogen withdrawal - can use neuroleptics (haloperidol)

Personality Disorders

- Rigid/inflexible traits cause dysfunction
  - lack insight into their problems
  - not distressed about maladaptive behavior
- Manifested by >2
  - affect = appropriateness of emotional response
  - impulse control
  - interpersonal relations
  - cognition = ways of perceiving environment

Personality Disorders

- Cluster A – “MAD” odd, eccentric, weird
  - schizoid
  - schizotypal
  - paranoid
- Cluster B – “BAD” emotional, impulsive, dramatic
  - antisocial
  - borderline
  - histrionic
  - narcissistic
- Cluster C – “SAD” anxious, fearful
  - avoidant
  - obsessive-compulsive
<table>
<thead>
<tr>
<th>Schizoid – Dx criteria – &gt;4 of following</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Emotional detachment, social withdrawal, discomfort with human interaction</td>
</tr>
<tr>
<td>• No desire for close relationships</td>
</tr>
<tr>
<td>• Chooses solitary activities</td>
</tr>
<tr>
<td>• Takes pleasure in few (if any) activities</td>
</tr>
<tr>
<td>• Little/no interest in sex</td>
</tr>
<tr>
<td>• Few/no close friends</td>
</tr>
<tr>
<td>• Aloof, indifferent to criticism/praise</td>
</tr>
<tr>
<td>• Constricted affect, emotional coldness</td>
</tr>
<tr>
<td>• Reality testing intact</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Schizoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Schizoid differs from…</td>
</tr>
<tr>
<td>– avoidant in that schizoid prefers to be alone</td>
</tr>
<tr>
<td>– schizotypal in that latter have “magical thinking”</td>
</tr>
<tr>
<td>Tx –</td>
</tr>
<tr>
<td>• Individual cognitive, group therapy</td>
</tr>
<tr>
<td>• +/- low dose antipsychotics (olanzapine, risperidone) antidepressants (SSRIs or bupropion)</td>
</tr>
<tr>
<td>• stimulants may help</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Schizotypal</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Disturbed thinking, perceptual distortion</td>
</tr>
<tr>
<td>• Eccentric behavior</td>
</tr>
<tr>
<td>• Social/interpersonal deficits</td>
</tr>
<tr>
<td>• Few (if any) friends</td>
</tr>
<tr>
<td>• Inner world based on magical thinking (bizarre fantasies/preoccupations), illusions, derealization</td>
</tr>
<tr>
<td>• May be involved in cults, the occult, strange religious practices</td>
</tr>
<tr>
<td>• May progress to schizophrenia</td>
</tr>
</tbody>
</table>
### Schizotypal Dx Criteria – ≥5 of following

- Ideas of reference
- Odd beliefs, magical thinking influences behavior (i.e., superstitiousness, clairvoyance)
- Unusual perceptual experiences (i.e., bodily illusions)
- Odd thinking & speech (vague, over-elaborate)
- Suspiciousness or paranoia
- Inappropriate or constricted affect
- Odd/peculiar behavior or appearance
- Lack of close friends
- Excessive social anxiety assoc. with paranoid fears

### Schizotypal…

- differs from schizoid & avoidant -
  - by bizarre behavior, thinking, perception, communication
- differs from schizophrenia -
  - by lack of frank psychosis but can have psychotic symptoms in times of stress
- differs from paranoid personality -
  - by exhibiting very odd behavior

### Schizotypal

- May be manifested during childhood or adolescence
- Tx
  - Therapy, social skills training +/−
    - antipsychotics (risperidone, olanzapine)
    - antidepressants if depressive aspect
Paranoid (Who me? You talking about me?!)

- Long-standing mistrust & suspiciousness
- Often hostile, irritable
- Blame others for their difficulties
- Others motives thought to be malevolent
- Feel they’ve been treated unfairly
- Often unsuccessful intimate relationships due to jealousy
- Lack warmth, restricted affect

Paranoid Dx Criteria - ≥4 of following

- Suspects others being deceptive/exploitative
- Doubt loyalty/ability to trust friends or acquaintances
- Reluctant to confide in others
- Interprets benign remarks as demeaning or threatening
- Persistently bears grudges
- Perceives attack on character & counterattacks
- Recurrent suspicions about fidelity of significant other

Paranoid

- No fixed delusions or hallucinations
- Begins by early adulthood, M > F
- Higher risk with family hx of schizophrenia & delusional disorders
- Tx
  - 1st line – individual therapy
  - Behavioral techniques (social-skills role playing)
  - Low dose anxiolytics/antipsychotics may reduce anxiety & paranoia
Antisocial

- Inability to conform to social norms
- Disregard for rights/feelings of others
- Manipulative, deceitful, impulsive, lacking empathy
- On interview acts very charming, seems normal
- May have abnormal EEG
- M 3x >F, familial pattern, more common in urban areas, prisons
- Begins as conduct disorder
  - may be hx of physical/sexual abuse, hurting animals, starting fires
  - assoc. with violations of the law

Antisocial - Dx Criteria

>3 of following & at least 18 yrs old –
- Failure to conform to social norms by breaking the law
- Deceitful/lying/conning others
- Impulsivity/failure to plan ahead
- Irritability & aggressiveness manifested by repeated physical assaults
- Reckless disregard for safety of self/others
- Irresponsible, unable to sustain work
- No remorse for actions

Antisocial - Tx

- 1st line - therapy with socially based intervention
- Meds may reduce anxiety/impulsivity/aggression
  - SSRIs
  - lithium
  - valproate
  - carbamazepine
  - 2nd gen. antipsychotics
- Caution - high abuse potential!
Borderline

- Impulsive
- Moody
- Paranoid under stress
- Unstable self image
- Labile, intense relationships
- Suicidal
- Inappropriate anger
- Vulnerable to abandonment
- Emptiness

Borderline – Dx Criteria ≥5 of following

- Unstable mood/affect/behavior
- Poorly established self-image
- Impulsivity in ≥2 harmful ways ($$, drugs, sex)
- Transient psychotic episodes, paranoia, or dissociative symptoms
- Self-mutilation/manipulative suicide attempts
- Desperate attempts to avoid abandonment
- Feelings of emptiness
- Volatile/intense relationships
- Inappropriate anger/difficulty controlling anger

Borderline

- Splitting - people are either all good or all bad
- Tx - 1st line - dialectical behavior therapy (DBT)
  - social skills, cognitive-behavioral
- Meds (+ psychotherapy yields better results)
  - antipsychotics for hostility/psychotic episodes
  - antidepressants (SSRIs) to improve mood
  - neuroleptics can improve global functioning
  - +/- short term benzos for anxiety
### Histrionic – Dx Criteria

*≥5 of following*

- Needs to be center of attention
- Seductive/provocative behavior
- Uses physical appearance to get attention
- Speech lacking in detail, impressionistic
- Dramatic/exaggerated emotions
- Easily influenced by others
- Believes relationships are more intimate than they really are

### Histrionic

- Somatic symptom disorder, substance abuse common
- May use **defense mechanism of regression** – revert to childlike behaviors

**Tx**

- 1st line - group/individual therapy
- +/- antidepressants/anxiolytics can be used only for specific symptoms

### Narcissistic

- Inflated self-image/grandiose, lacking empathy; consider themselves special; arrogant
- Sense of entitlement, fragile self-esteem; need to be admired; prone to depression if criticized
- Fantasies of unlimited success, beauty, brilliance; aging “gracefully” is difficult
- Exploitative/takes advantage of others
- Envious of others, thinks others envious of him/her
Narcissistic

- **Tx** - 1st line - psychotherapy
- Pharmacotherapy – rarely indicated
  - lithium can be used if mood swings
  - antidepressants (esp. SSRIs) can be used if mood disorder

Avoidant

- Extreme sensitivity to rejection
- See themselves as unappealing
- Intense social anxiety, feelings of inadequacy leads to withdrawal, avoid situations where may be criticized
- Shy & desire companionship but need guaranteed acceptance
- May avoid job activities involving interpersonal contact due to fear of rejection
- Show restraint in intimate relationships for fear of rejection

Avoidant

- **Social phobia**, anxiety, depressive disorders common
- **Tx** - 1st line - social skills/assertiveness training
- For specific symptoms -
  - benzos for anxiety
  - SSRIs for anxiety/depression & may help decrease rejection sensitivity
**Obsessive Compulsive Personality**

- Preoccupied with orderliness/inflexible
- Stubborn/emotionally constricted; insist others submit to their ways, difficulty in relationships
- Perfectionism interferes with ability to complete tasks or form relationships
- Change in routine threatens perceived stability & causes anxiety
- Won’t delegate tasks; excess devotion to work/productivity
- Unable to throw out worthless objects/miserly

---

**Obsessive Compulsive Personality (OCPD)**

- Remember!
  - OCPD is ego-syntonic; no recurrent obsessions/compulsions
  - OCD is ego-dystonic; +obsessions/compulsions
- Tx
  - 1st line - cognitive-behavioral therapy
  - SSRIs help reduce anxiety/depression
  - Clomipramine - 2nd line med choice
Child Abuse – physical signs

- Injury not adequately explained or inconsistent with hx given
- Bruises/lacerations/soft-tissue swelling, dislocations/fractures, **spiral fractures**
- Burns (doughnut-shaped, stocking-glove, symmetrically round)
- Bruises or injuries with regular patterns on face, back, buttocks, thighs
- Internal hemorrhages, abdominal injuries, bite marks, injury with shape of instrument used

Child Abuse – can also be manifested by...

- Anxiety
- Aggressive/violent behavior
- PTSD
- Depression or suicide
- Substance abuse
- Poor self-esteem
- Dissociative disorders
- Paranoic ideation
- Failure to thrive

Child Abuse

**Neglect can be considered if** -
- minor allowed to engage in potentially harmful behavior (ie, ETOH consumption)
- child is unattended; in some states, leaving child < age 13 home alone
### Child Sexual abuse

- Common ages 9-12
- Often by male known to child
- **Any** raises suspicion:
  - evidence of sexually transmitted infection
  - anal/genital bruises/pain/itching/trauma
  - knowledge about sexual acts inappropriate for age
  - initiates sexual acts with others, esp. peers
  - exhibits sexual knowledge through play

### Elder Abuse - Forms of abuse

- Physical or sexual abuse -
  - bruises/puncture wounds/fractures/cuts/burns
  - poor hygiene/soiled clothing, hair loss in clumps
  - wt. loss, poor nutrition, dehydration
  - lack of eyeglasses/hearing aids
  - injuries from restraints
  - genital/rectal injuries or bleeding
  - evidence of excessive drugging
  - lack of/delay seeking medical attention

- Psychological -
  - threats/insults/verbal abuse
  - refuse to allow travel, church attendance, family visits

- Financial -
  - misuse of funds

- Neglect -
  - withholding food/meds/clothing, routine health care, basic necessities
## Elder Abuse

Watch out for caregiver with…
- previous hx of abuse
- conflicting accounts of accidents
- unwilling to agree to implementation of tx plans
- inappropriate defensiveness
- Failure to allow/limits pt's responses to questions

## Domestic Violence - Precautions

The Abused…
- may close ranks with abuser, confront clinician for 'attempting to break up family'
- who leaves abuser has greater risk of being killed than one who stays
- suffer damage to ego defenses, may not be assertive enough to believe rights were violated
- may think they deserved it, must accept abuse as price to pay (food, home)

## Management of Domestic Violence

- Medical attention to address physical needs
- Recognition of abuse, non-threatening questioning to determine if it occurred; emphasize someone cares
- Contact numbers for referral agencies (legal, shelters, support groups)
- Present options, allow pt. to decide
### Grief Reaction/Bereavement

- **Symptoms:** Shock, confusion, sadness, numbness
- May report illusions (seeing/hearing deceased) or deny aspects of the death
- Hallucinations that persist, are intrusive, or belief that deceased still alive is not “normal”
- **Tx:**
  - Therapy/social contact/reassurance
  - +/- Benzos for insomnia, SSRIs, other antidepressants

### Possible Effects - 1st gen. antipsychotics

- **Movement disorders** (dystonias, bradykinesia, akathisia, choreoathetosis)
- Anhedonia
- Sedation
- Weight gain
- Temperature dysregulation/poikilothermy
- Hyperprolactinemia/galactorrhea/amenorrhea in women & gynecomastia in men; decreased sexual function in both
- Postural hypotension
- Sunburn
- Prolonged QT interval, risk of potentially fatal arrhythmia (with thioridazine)
Possible Effects - 2nd gen. antipsychotics

- Mod-severe wt. gain (olanzapine, clozapine)
- Diabetes
- Hypercholesterolemia
- Sedation
- Moderate movement disorder
- Hypotension
- Hyperprolactinemia (risperidone)
- Seizures, nocturnal salivation, agranulocytosis, myocarditis, lens opacities (clozapine)

psychiatric terms refresher

- Echolalia - mimicking sound
- Echopraxia - mimicking behavior
- Delusions - erroneous beliefs based on misinterpretation of reality such as paranoia, ideas of reference, thought broadcasting, delusions of grandeur, or delusions of guilt
- Hallucinations - false perceptions in any sensory modality, such as auditory/tactile/olfactory/visual
- Concrete thinking – thinking characterized by immediate experience rather than abstractions; may be seen in schizophrenia

psychiatric terms refresher

- Clang associations - connections based on similarities in sounds of words rather than meaning
- Loosening of association - ideas have no discernible connection to one another
- Word salad - incoherent speech from extreme loosening of associations; may be seen in schizophrenia (esp. disorganized type)
- Neuroleptic malignant syndrome - can occur with high-potency antipsychotics → confusion, high fever, elevated BP, tachycardia, “lead pipe” rigidity, sweating, greatly elevated creatine phosphokinase (CPK) levels
psychiatric terms refresher

- Secondary Gain – use of symptoms to benefit the pt. (to get more attention, decreased responsibilities, avoidance of the law)
- Tolerance - either a decreased effect over time when same amount of substance is used or need for an increased amount of a substance over time to achieve a baseline
- Withdrawal - need for substance use to relieve or avoid physical symptoms associated with deprivation of it
- Delayed response - latency before responding; at the extreme, pt. may be mute

psychiatric terms refresher

- Personality disorder - enduring & pervasive pattern of behavior that differs from the individual’s culture
- Pressured speech – rapid/accelerated/frenzied speech, difficult to interrupt; often seen in mania
- Primary Gain – expression of unacceptable feelings as physical symptoms in order to avoid facing them
- Tardive Dyskinesia – can occur with high-potency antipsychotics – darting or writhing movements of face, tongue, & head
- Tangentiality - answers become progressively less related to the original question

psychiatric terms refresher

- Affect – behavior that expresses emotion (ie, euphoria, anger, sadness); Types of disturbance:
  - Blunted – severely reduced intensity of expression
  - Flat – absence/near absence of signs of expression, often manifest as monotonous voice/immobile face
  - Inappropriate – discordance of voice & movements with content of speech or ideation; display of emotion not appropriate with reality or with content that it accompanies
  - Labile – abnormal variability with rapid shifts in expression
  - Restricted/constricted – reduction in expressive range & intensity of affect
psychiatric terms refresher

- Akathisia – subjective sense of restlessness with fidgeting, rocking from foot to foot, pacing or being unable to sit still
- Akinesia – state of motor inhibition or reduced voluntary motor movement
- Avolition – lack of initiative or goals; a negative symptom of schizophrenia
- Flight of ideas – continuous flow of rapid speech with abrupt changes from one topic to another; often seen in mania

- Munchausen by proxy - form of abuse usually initiated by the mother. Symptoms made up or clinical signs are induced in a child causing repeated visits to provider. Perpetrator gets attention as being an attentive, suffering parent.
- Negativism - refusal to cooperate with simple requests for no apparent reason.
- Blocking - halt in flow of speech, unable to continue train of thought even with cueing.

Thank You
### References