The Anxiety Disorders

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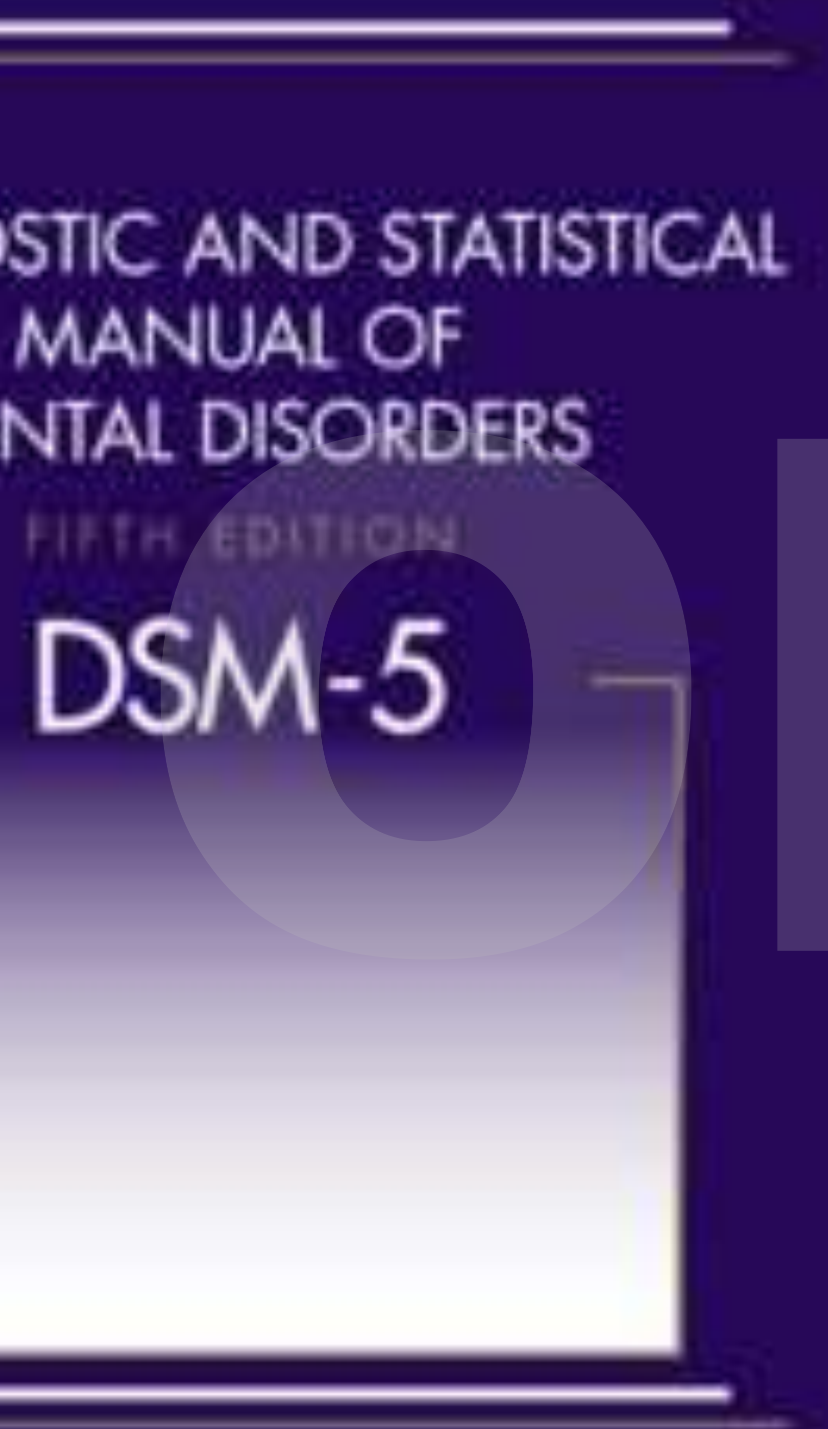
“The Desperate Man” (1844-45) Gustave Courbet



Generalized Anxiety Disorder
Panic Disorder
Specific Phobia
Social Phobia (Social Anxiety Disorder)
Adjustment Disorder with Anxiety
Posttraumatic Stress Disorder
Obsessive-Compulsive Disorder
Substance/Medication-Induced Anxiety Disorder
Anxiety Disorder Due to Another Medical Condition
Illness Anxiety Disorder
Major Depressive Disorder, with anxious distress
Bipolar Disorder, most recent episode manic, with anx
Borderline Personality Disorder

What I'm talking about…

DSM-5 Anxiety Disorders

- Generalized Anxiety Disorder
- Panic Disorder
- Specific Phobia
- Social Anxiety Disorder (Social Phobia)
- Substance/Medication-Induced Anxiety Disorder
- Anxiety Disorder Due to Another Medical Condition

DSM-5 Trans-diagnostic Specifiers

- Panic Attack
- Anxious Distress

and what I'm not talking about*.

DSM-5 Anxiety Disorder (diagnosed in children)

- Selective Mutism
- Separation Anxiety

DSM-5 Trauma- and Stressor-Related Disorders

- Posttraumatic Stress Disorder
- Adjustment Disorder with Anxiety

DSM-5 Obsessive-Compulsive and Related Disorders

- Obsessive-Compulsive Disorder

DSM-5 Somatic Symptom and Related Disorders

- Illness Anxiety Disorder
- Somatic Symptom Disorder

*well, maybe just a little

First
Things
First

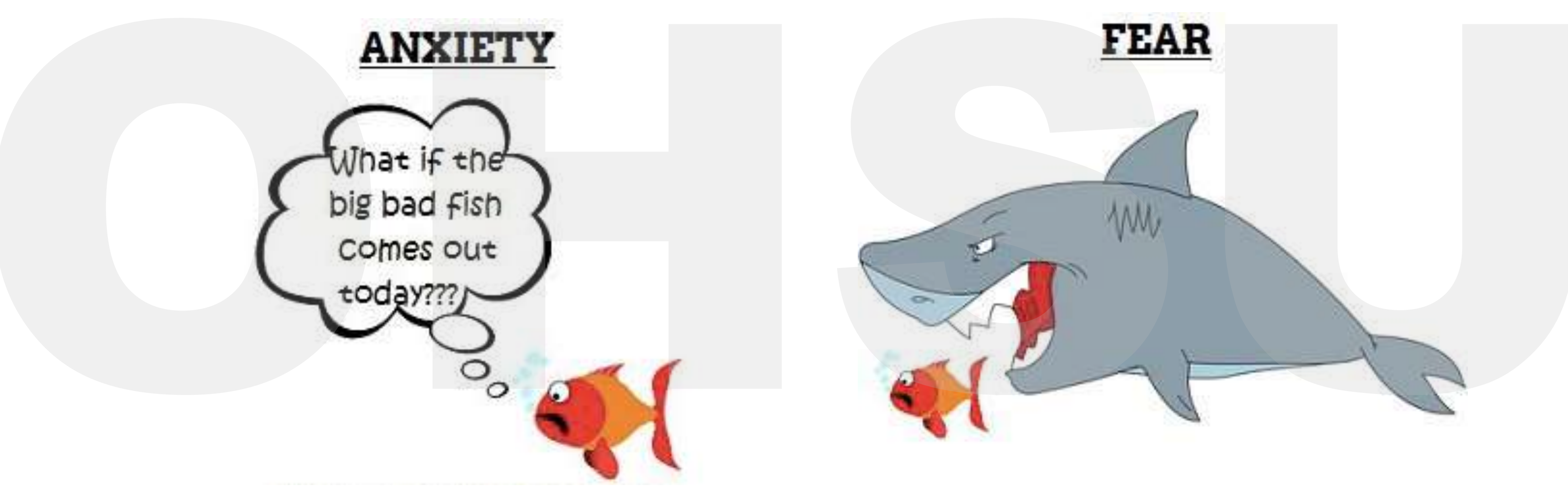
Is all anxiety bad?

Anxiety/worry can help us:

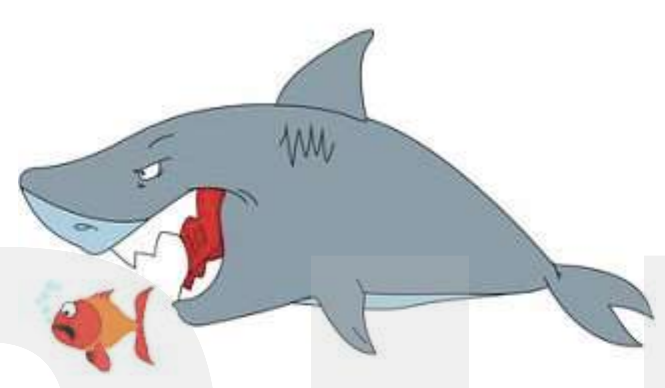
- Prepare for challenges
- Keep ourselves and others safe
- Keep up on responsibilities
- Be respectful to others

First
Things
First

What is the difference between anxiety and fear?



First Things First



Anxiety
Insidious onset for to prepare for challenge
Primarily Cognitive
Less Intense autonomic arousal
Muscle Tension, Vigilance, Ruminative Thought
Protracted

Fear
Rapid onset survival response
Primarily non-cognitive
Intense autonomic arousal
Fight or flight, Escape behaviors, Tachycardia
Brief/Discrete

Some overlap

First Things First

For most people, anxiety and fear are appropriately activated/deactivated.

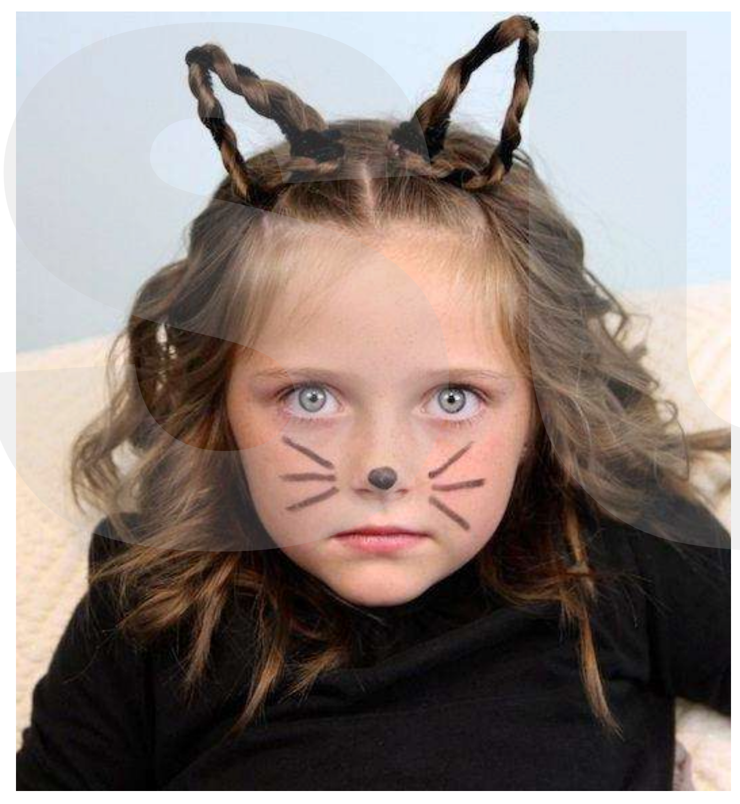
For some people

- If anxiety is not well modulated → Generalized Anxiety Disorder
- If fear is activated the wrong time → Panic Attacks

First Things First

Disorders v Specifiers

CAT



KID, with cat features

First Things First

Disorders v Specifiers

- , with panic attacks
- , with anxious distress

Anxiety Disorders

Where anxiety and fear are core primary features.

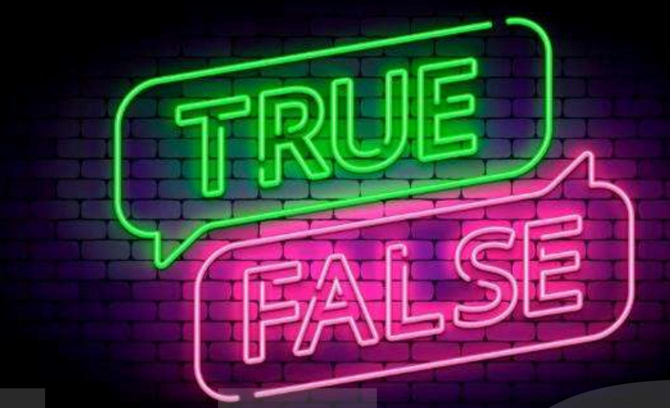
- Generalized Anxiety Disorder
- Panic Disorder
- Specific Phobia
- Social Phobia

Non-Anxiety Disorders

Panic attacks and *anxious distress* MAY be present is other disorders, but are not a core feature.

Examples:

- Major Depressive Disorder, with anxious distress
- Bipolar I Mania, with anxious distress
- Schizophrenia, with anxious distress
- PTSD, with panic attacks
- OCD, with panic attacks
- Adjustment Disorder, with panic attacks
- On and on and on…



- Medications have no role in the treatment of Specific Phobia.
- Sustained outcomes for Social Anxiety Disorder come from a combination of long-term treatment with psychotherapy and medications.
- Rates of full recovery in Generalized Anxiety Disorder are high.
- Panic attacks are the unique feature of Panic Disorder.

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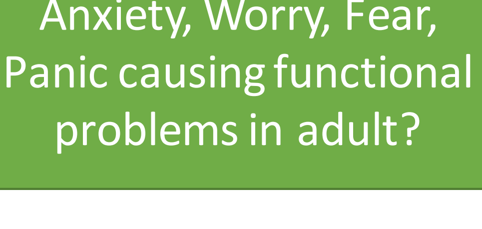

Clear correlation with medical problem onset or exacerbation?

- Anxiety Disorder Due to Another Medical Condition

Clear correlation with substance or medication use or withdrawal?

Other psychiatric cluster symptoms more predominant than anxiety?

Symptoms	Diagnosis
Obsessions/compulsions	Obsessive Compulsive Disorder, +/- panic or anxious distress
Mood/motivation depression	Major Depressive Disorder, +/- panic or anxious distress
Hallucinations or delusions	Schizophrenia, +/- panic or anxious distress

Recent life-threatening trauma or life stressor, with little to no pre-existing dysfunctional anxiety?

Symptoms	Diagnosis
Nightmares, flashbacks, hypervigilance	1mo or less: **Acute Stress Disorder**, +/- panic or anxious distress >1 mo: **Posttraumatic Stress Disorder**, +/- panic or anxious distress
Distress or impairment without re-experiencing symptoms	Start within 3 mo, last <6 mo: **Adjustment DO with anxiety**

If none of those, more likely an Anxiety Disorder.

Evolution of the Anxiety Disorder Diagnoses

DSM (1952)	DSM II (1968)	DSM III (1980)	DSM-IV (2000)	DSM-5 (2013)
Psychoneurotic Phobic Reaction	Phobic Neurosis	Simple Phobia	**Specific Phobia**	**Specific Phobia**
		Social Phobia	Social Phobia	**Social Anxiety Disorder**
Psychoneurotic Anxiety Reaction	Anxiety Neurosis	**Generalized Anxiety Disorder**	**Generalized Anxiety Disorder**	**Generalized Anxiety Disorder**
		Panic Disorder	**Panic Disorder**	**Panic Disorder**
Psychoneurotic Obsessive-Compulsive Reaction	Obsessive-Compulsive Neurosis	**Obsessive-Compulsive Disorder**	**Obsessive-Compulsive Disorder**	**Obsessive-Compulsive Disorder**
Gross Stress Reaction	Adjustment Reaction of Adult Life	Posttraumatic Stress Disorder, chronic	**Posttraumatic Stress Disorder**	**Posttraumatic Stress Disorder**
		Posttraumatic Stress Disorder, acute	**Acute Stress Disorder**	**Acute Stress Disorder**

Neuroses

Transient Situational Disturbances

60 yrs →

Anxiety Disorders

Obsessive-Compulsive and Related Disorders

Trauma and Stressor-Related Disorders

The Anxiety Disorders

Anxiety Disorders	Case
Specific Phobia	Philip
Social Anxiety Disorder	Sofia
Generalized Anxiety Disorder	Gerald
Panic Disorder	Pandora

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Specific Phobia

Specific Phobia

Phobias from A to Z

You've probably heard of arachnophobia, thanks in part to the movie with the same name, and claustrophobia, but what about gamophobia or phobophobia? Here's a brief introduction to phobias, from the familiar to the more obscure.

Acrophobia: Fear of heights

Agoraphobia: Fear of being in a public place

Ailurophobia: Fear of cats

Androphobia: Fear of men

Anthropophobia: Fear of human companionship

Arachnophobia: Fear of spiders

Bathophobia: Fear of deep places

Claustrophobia: Fear of enclosed spaces

Cynophobia: Fear of dogs

Entomophobia: Fear of insects

Ereuthophobia: Fear of blushing

Gamophobia: Fear of marriage

Gephyrophobia: Fear of crossing a bridge

Gymnophobia: Fear of seeing a naked person

Gynephobia: Fear of women

Hedonophobia: Fear of pleasure

Hypengyophobia: Fear of responsibility

Hypnophobia: Fear of sleep

Ichthyophobia: Fear of fish

Mysophobia: Fear of dirt

Nostophobia: Fear of returning home

Nyctophobia: Fear of night or darkness

Ophidiophobia: Fear of snakes

Pathophobia: Fear of disease

Pediophobia: Fear of children or dolls

Phobophobia: Fear of phobias

Psychrophobia: Fear of the cold

Scopophobia: Fear of being stared at

Spectrophobia: Fear of mirrors

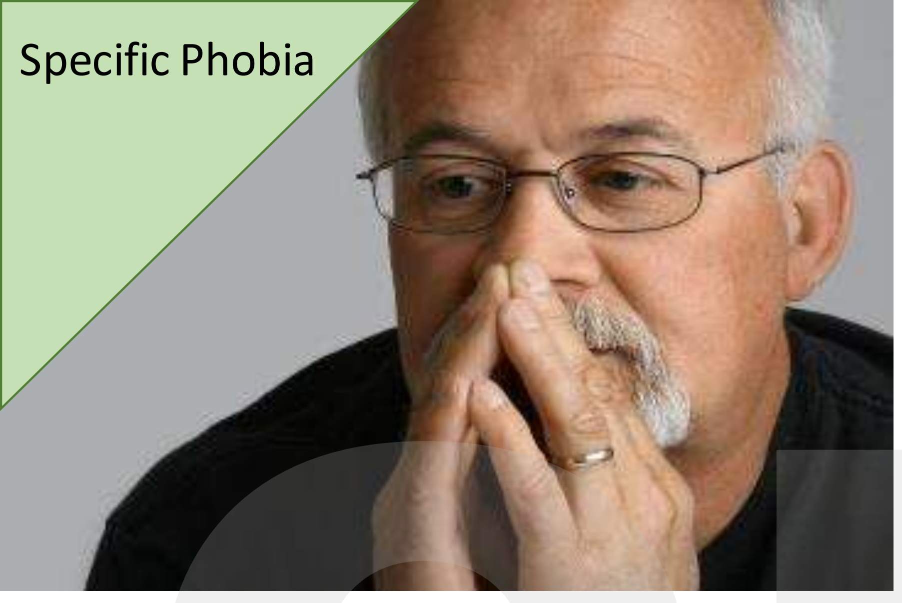
Tocophobia: Fear of childbirth

Theophobia: Fear of God

Triskaidekaphobia: Fear of the number thirteen

Zoophobia: Fear of animals

2018 – Harvard Health Publishing – "Phobia" – Dec 2018



Philip

- 56 year old male with >30 year history of fear of flying, aviophobia. Also has a history of Alcohol Use Disorder, in sustained remission for last 20 years.
- The prospect or thought of flying on an airplane provokes immediate tension, tachycardia, tachypnea, physical agitation despite his knowing that risk of injury due to flight is very low.
- He has family across the country and has bought a nice van to be able to take long road trips to visit family members in order to avoid flying. He drove halfway across the country in around 24 hours to visit his ailing father rather than fly a 3 hour flight.
- His daughter who is in graduate school in Germany, has gotten engaged and is planning to marry outside of Munich in 6 months.
- He wonders whether his PCP can prescribe him a medicine to help.

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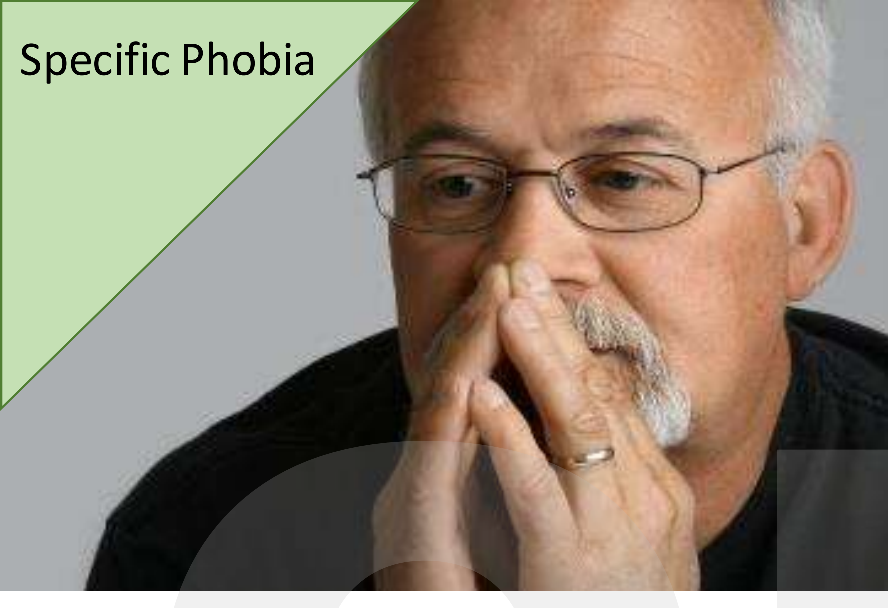

DSM-5 Diagnostic Criteria for Specific Phobia:

- marked fear or anxiety about a **specific** object or situation
- phobic object:
  - almost **always** provokes **immediate** fear/anx.
  - Is actively **avoided**
- Anxiety/fear/avoidance is:
  - **out of proportion** to actual danger
  - **persists >6mo**
  - **causes significant impairment**
- Common phobia categories: animals, natural phenomena, blood-injection-injury, situational.

Epidemiology

- Prevalence overall 7-9% (US and Europe)
  - 5% in kids, 16 % in teens, 3-5% in older adults
- 2:1 Female:Male
- Some genetic component – 1st deg relatives have high likelihood of spec phob.
- Can occur after traumatic event, observation of others, or after information
- Many phobias remit in childhood. If do not remit in childhood, less likely to remit spontaneously.

American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders: DSM-5. Arlington, VA, USA: American Psychiatric Association.

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Specific Phobia Treatments

Psychotherapy

Exposure Therapy (gold standard)

- Steps:
  - Education about the phobic response, symptoms, and perpetuating factors
  - Collaborative creation of fear hierarchy
  - Graded exposure to gradually increasingly feared situations, remaining in situation for at least 1 min or long enough for anxiety to noticeably decrease
  - Exposures are repeated for each situation with sufficient regularity for anxiety to decrease
- Response rates 80-90% across phobia types
- Benefit sustained over years, especially when continued further exposures.

Other Therapies:

- *Cognitive Therapy*
- *General Anxiety Management*
- *Interoceptive Exposure*
- *Applied Muscle Tension *for blood-injection phobia*
- *Hypnotherapy*
- *Eye Movement Desensitization and Reprocessing*

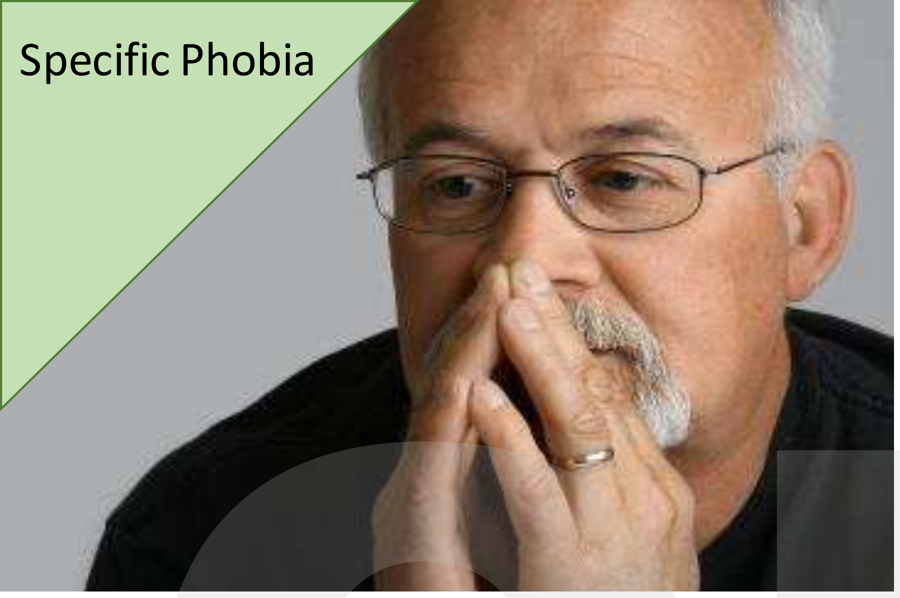
Medications

**There is no evidence for medications leading to remission of specific phobia

Benzodiazepines:

- **may be employed for anxiety reduction during an unavoidable exposures (unavoidanble flying, MRI, dental procedures)**
- Caution in patients with personal or family hx of substance use disorders.
- Lorazepam 0.5-1mg 30 min prior to stimulus, prescribe minimal supply.
- ***BUT, may actually increase anxiety at subsequent exposures.***

Gabbard G. O., (Ed) (2014). Gabbard's Treatment of Psychiatric Disorders (5th Ed). Arlington, VA, USA; American Psychiatric Publishing, Inc..



Fear level	Activity
100	Taking off (VR)
90	Getting on airplane (VR)
80	Going to gate (VR)
70	Going through security (VR)
60	Giving bags to ticket counter (VR)
50	Going online to purchase a plane ticket
40	Going in the airport
30	Driving to the airport
20	Watching an airplane overhead
10	Thinking about an airplane

Philip

- PCP speaks to Philip about the diagnosis and refers him to an psychotherapist who specializes in patients with anxiety.
- Therapist works with Philip to create graded exposure hierarchy (see left), and utilizes Virtual Reality Assisted Therapy to work through exposures from lowest level to highest.
- Philip successfully goes to daughter's wedding and sends photos of himself in Germany to therapist and PCP.
- Philip plans to do a plane trip 1-2 times annually to visit family in order to prevent recurrence of his phobia.

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Social Anxiety Disorder

SOCIAL ANXIETY DISORDER:

More Than Just Shyness

Are you extremely afraid of being judged by others?

Are you very self-conscious in everyday social situations?

Do you avoid meeting new people?

If you have been feeling this way for at least six months and these feelings make it hard for you to do everyday tasks—such as talking to people at work or school—you may have a **social anxiety disorder.**

Sofia

- 29 year old female scientist who is nearing completion of PhD work, and who needs to present her dissertation soon and will be interviewing for post-doc positions around the country.
- She is not in a relationship, has two dogs, and is a marathoner. She is generally healthy.
- She has always been a quiet, introverted person, who prefers to work on projects independently, has difficulty opening up to critique, or offering her novel ideas for fear of judgement. She begins to notice herself cancelling meetings with advisors and dreading her dissertation presentation. Her very supportive main advisor took her aside and strongly encouraged her to work on becoming more comfortable expressing her ideas with others, as they thought it would pose a strong barrier to future opportunities, saying “research is a social activity these days”.
- After cancelling another dissertation meeting, Sofia realizes she needs help, and reaches out to her PCP to ask for resources.

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DSM-5 Diagnostic Criteria for Social Anxiety Disorder:

- marked fear or anxiety about 1 or more **social situations** in which individual is exposed to **possible scrutiny by others**.
- person fears that he/she will show anxiety sx that will be **negatively evaluated**.
- Social situations:
  - almost **always** provokes fear/anx.
  - are **avoided** or **endured with intense fear/anxiety**
- Anxiety/fear/avoidance is:
  - **out of proportion** to actual danger
  - **persists >6mo**
  - **causes significant impairment**

Epidemiology

- Prevalence overall 7% (US and Europe), lower worldwide (2-3% in Europe)
- 2:1 F:M in population samples, but 1:1 or reversed in clinical samples
- Some genetic component – esp behavioral inhibition – 1st deg relatives 2-6x risk
- 75% onset in childhood
- 30-50% remit spontaneously within a few years
- Only half of patients with it seek tx, and usually after 15-20 years of sx.
- Can lead to school, work, productivity, and relationship impairment.

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American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders: DSM-5. Arlington, VA, USA: American Psychiatric Association.

Social Anxiety Disorder Treatments

Psychotherapy

Cognitive-Behavioral Therapies

- Systematic therapy that:
  - Forces reevaluation and supports restructuring of maladaptive thinking patterns (cognition)
  - Forces exposure/confrontation of feared social stimuli (behavior)
- Can be done in individual and group settings
- Typically done over 12-20 weeks of weekly sessions
- Robust effect sizes, maintained for 5+ years.

Other psychotherapies:

- *Mindfulness-Based Cognitive Therapy*
- *Interpersonal Psychotherapy*

Medications

SSRIs and SNRI venlafaxine

- Response in 40-70% of patients
- Wait 8 weeks for results

Benzodiazepines

- Clonazepam (0.5-1mg BID) in monotherapy for short term, as augmentation, or for performance only

Beta-blockers

- Propranolol (10-40mg) for performance, one hour prior to situation

- **Meds for rapid symptom reduction**
- **Therapy for long term gains**

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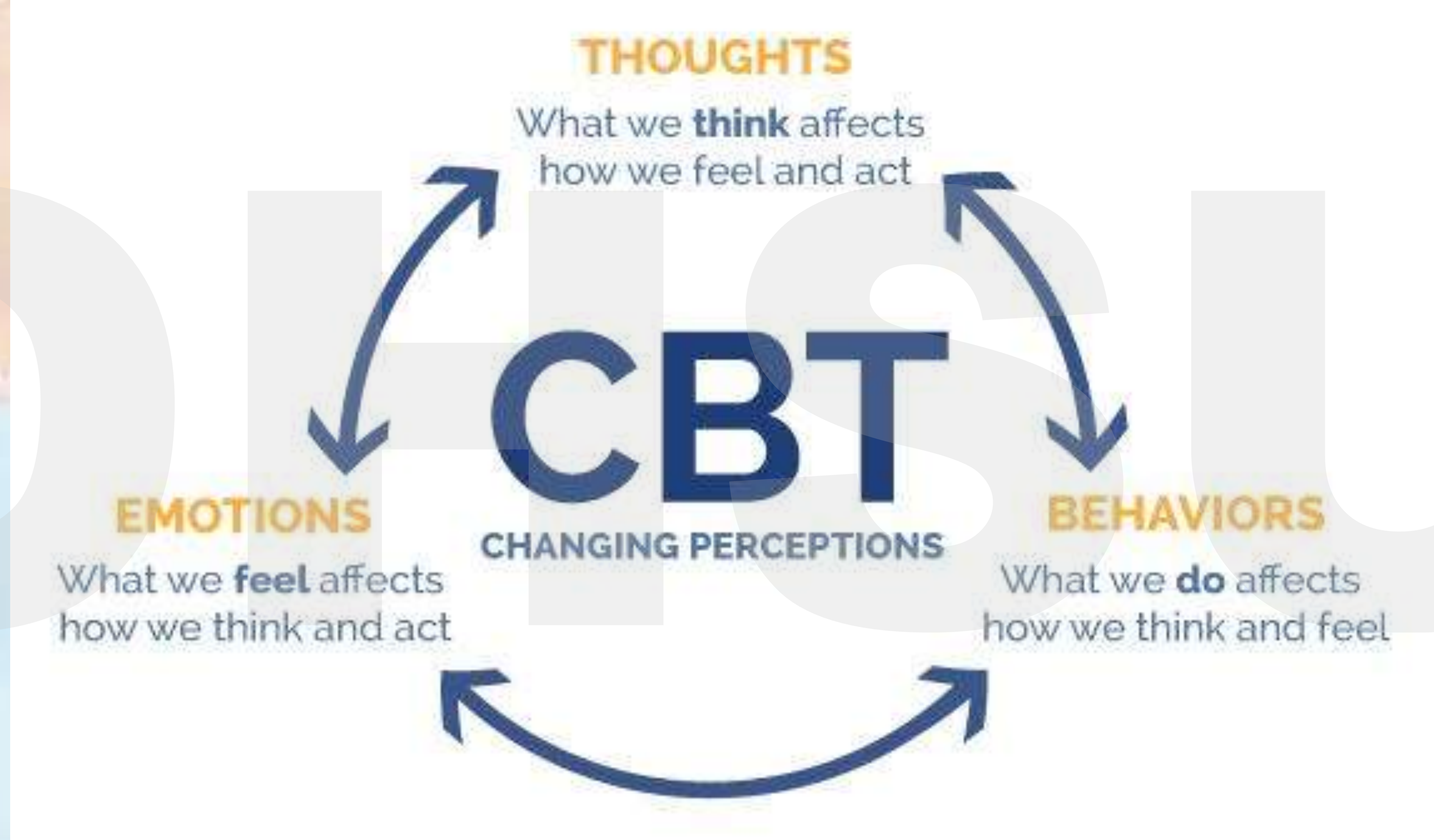
Social Anxiety Disorder



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Sofia

- Sofia's PCP referred her to the Anxiety Center, a specialty anxiety group therapy practice with psychiatrist involved.

- Sofia participated in 12 week group Cognitive-Behavioral Therapy, where she learned about her distorted cognitions about herself and others, and completed and reported on behavioral homework each week.

- She saw a consultant psychiatrist at the Anxiety Center who recommended starting venlafaxine ER, titrated to 150mg daily, and propranolol 10-20mg prior to her dissertation meetings (although he recommended trying it on a weekend day before the meeting to test its effect).

- Sofia grew more able to confront her fears of inadequacy, and grew more confident in her ability to speak her ideas, to realize others' responses were more about themselves than her ideas, and to go with people who believe in her ideas rather than feeling the need to please everyone.

- 12 months later, in a new city where she was beginning a post-doc position, she was referred to a psychiatrist to taper the venlafaxine ER slowly. She had some flu-like symptoms and "brain zaps", but was able to taper off without recurrence of SAD. She continued the propranolol PRN.

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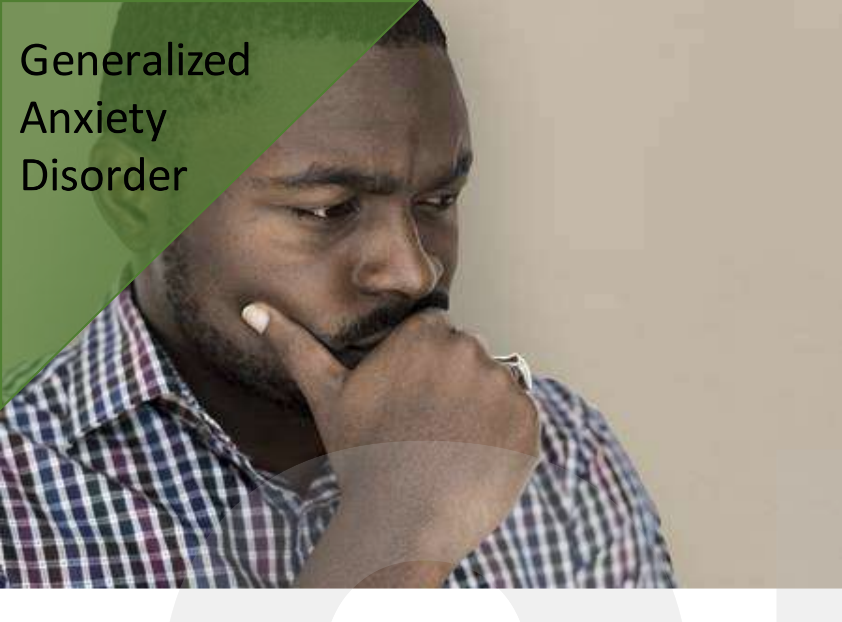
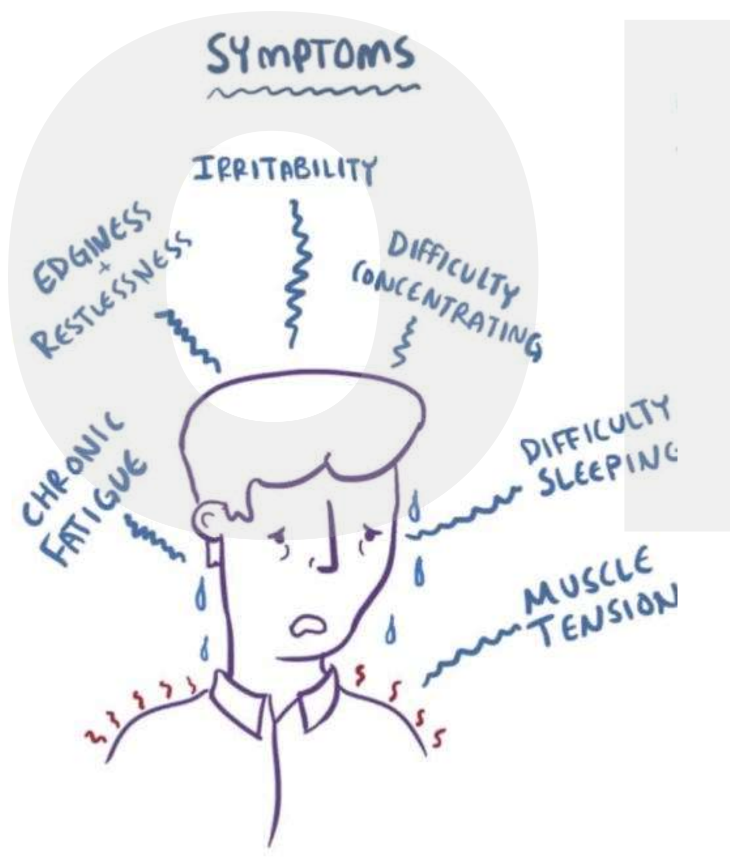
Generalized Anxiety Disorder



Gerald

- 18 yo male in last year at magnet public high school. Has some good friends. Good relationship with parents and older brother. Has been accepted to several colleges, but has not committed, but knows he must decide soon.
- He has been chronically on the anxious side, was "clingy" as a child, was the cautious one of the kids in his family, always asking "what if" questions, but in general has coped with support or family, friends, teachers, and the school counselor who he likes a lot. His mother has had anxiety and takes paroxetine. He has two uncles with alcohol use disorder, one still using actively.
- Over a period of months, he experiences an increase in worried thoughts about himself, his family, not living up to his potential, failing in college – which is accompanied by physical symptoms such as tension, restlessness, insomnia, difficulties concentrating, missed school days, and leads to school performance decline for the first time ever.
- Gerald's school counselor recommends he see his PCP, where he indicates no substance use, no psychosis, no mania, and doesn't quite meet major depressive episode criteria. He expresses a wide array of worries, but no panic attacks.

DSM 5 Criteria
Generalized Anxiety Disorder



- A. Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance).
- B. The person finds it difficult to control the worry.
- C. The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms present for more days than not for the past 6 months).

  Note: Only one item is required in children.

  (1) restlessness or feeling keyed up or on edge
  (2) being easily fatigued
  (3) difficulty concentrating or mind going blank
  (4)irritability
  (5)muscle tension
  (6) sleep disturbance (difficulty falling or staying asleep, or restless unsatisfying sleep)

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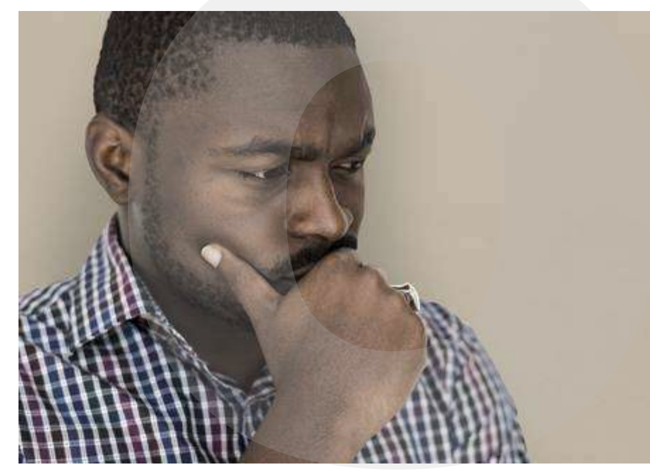
American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders: DSM-5. Arlington, VA: American Psychiatric Association, 2013.



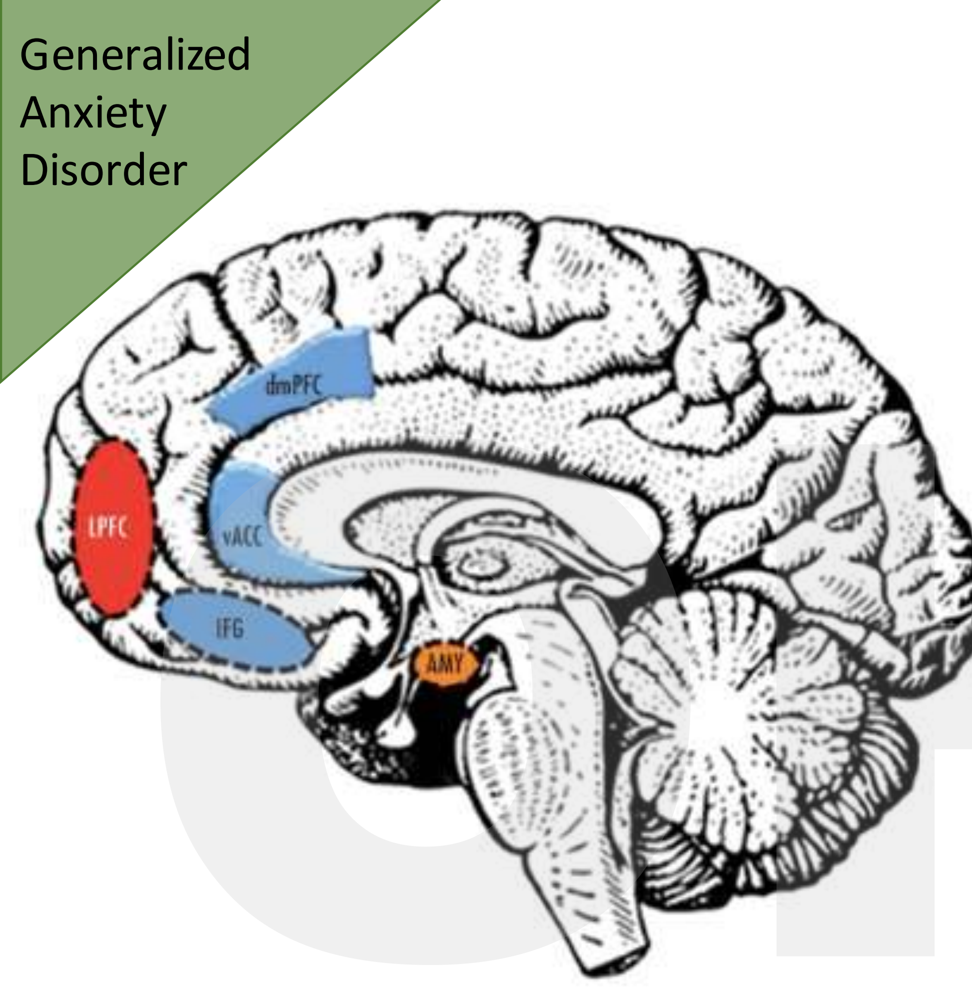
Generalized Anxiety Disorder

Epidemiology/Course

- Lifetime risk of GAD is 9% in US[1]
- Median Age of onset: ~30 years old[1]
  - But many diagnosed individuals report “anxiety for much of life” or “anxious temperament”
- Symptoms wax and wane over lifetime based on stress load, but peak in middle age[1] (45-52% experience recurrence over life[2])
- Most common worries[1]:
  - Children: school and performance
  - Adults: Family and health
- **Rates of complete recovery are low (32%-58%[2])**
- Genetics account for about 30% of cause of GAD[1]

1- American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders: DSM-5. Arlington, VA, USA: American Psychiatric Association.
2- Gabbard G. O., (Ed) (2014). Gabbard’s Treatment of Psychiatric Disorders (5th Ed). Arlington, VA, USA; American Psychiatric Publishing, Inc..

Generalized Anxiety Disorder



Generalized Anxiety Disorder

Neurobiology

Reduced Volume

- Ventral anterior cingulate cortex (assesses salience of emotional information)
- Inferior frontal gyrus (language comprehension and production, inhibition)

Hypofunction

- Dorsomedial Prefrontal cortex (predicting mental states of others)

Hyperactive

- Lateral Prefrontal cortex (moral decision making)

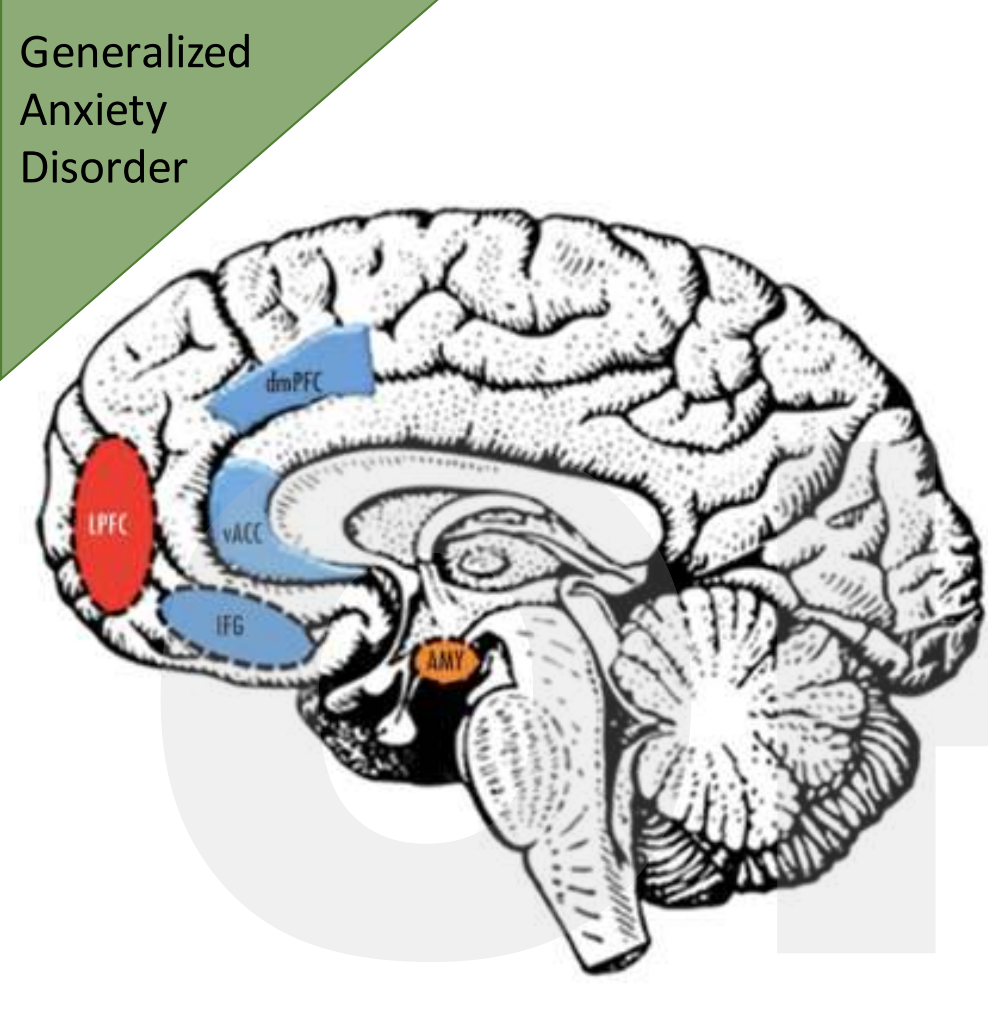
Overactive conscientiousness difficulty predicting others' thoughts/expectations
difficulty accurately assessing emotional information
difficulty putting complex thoughts/words into order

Arciniegas, DB, ed., The American Psychiatric Association Publishing Textbook of Neuropsychiatry and Clinical Neurosciences, 6th Ed, Ch. 26, APPI, Washington DC, 2018

Generalized Anxiety Disorder

Generalized Anxiety Disorder

Neurobiology



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Generalized Anxiety Disorder Treatments

Psychotherapy

Cognitive-Behavioral Therapy

- Accurate self-monitoring of feeling
- Cognitive restructuring of maladaptive thought patterns
- Relaxation Training

Achieves some sx reduction in most treatments

Achieves significant reduction enough to not meet criteria in ~50%

Medications

SSRIs (response rates 50s-80s%)

SNRIs (response rates 50s-80s%)

Buspirone

GABA-modulators (benzodiazepines and pregabalin) (response rates 40s-60s%)

- Neither CBT, nor medications are significantly more effective than the other
- No SSRI/SNRI performed significantly better than others

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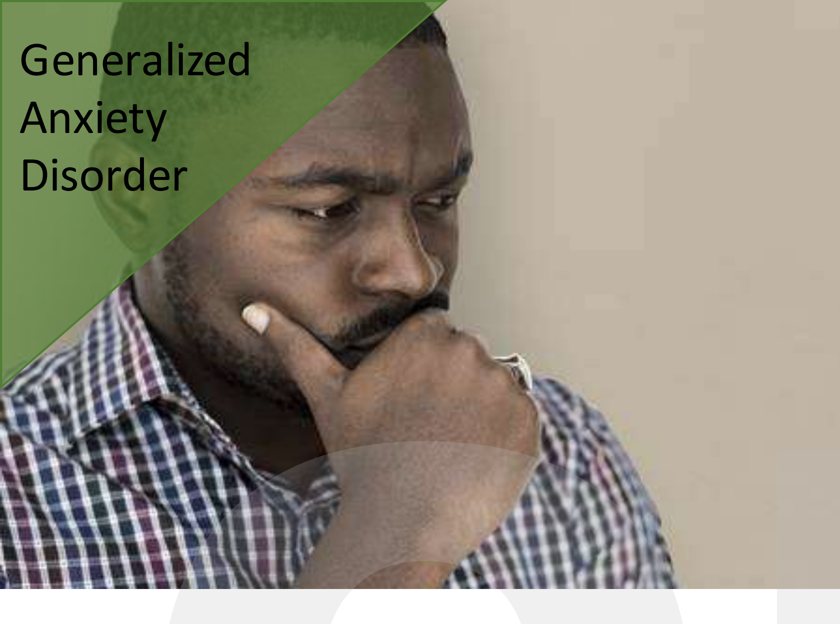

Gerald

- The PCP discusses the diagnosis of Generalized Anxiety Disorder, a common anxiety disorder and discusses possible treatments, including Cognitive Behavioral Therapy.
- PCP offers medications but Gerald declines, and begins seeing a therapist for Cognitive-Behavioral Therapy, and over 16 sessions finds numerous ways to understand his automatic thoughts and challenge them with alternative possibilities. This greatly decreases his worries and anxious tension, but doesn't abolish them completely. It does allow him to complete high school successfully, and to start college.
- Gerald returns to PCP between first and second year of college and requests continuation of paroxetine 40mg which was started at the student health center.
- He denies side effects although he had some weight gain over first couple months, which reduced when he joined a running group, which he noted helped his anxiety further. He is not taking other medications, although he did note he was prescribed a small amount of clonazepam when he first started the paroxetine, but hasn't used it in months.
- He reports he is doing well in school, has made some good friends, and looks forward to going back in the fall.

Panic Disorder

Pandora

- 24 yo female, just started medical school in Portland 3 months ago. She is in stable relationship with partner who is an electrical engineer recently hired at Intel.
- presents to her PCP hoping that the PCP will continuing her clonazepam prescription.
- She describes a history of panic attacks starting in undergraduate, fairly rare now (<1/mo at this time, last one 3 mo ago), but very problematic, characterized by rapid onset of intense fear, accelerated heart rate, sweating, feeling dizzy, numbness/tingling, fear of losing control. They come on unexpectedly, anywhere, and peak within a few minutes and can last from 20 minutes up to an hour.
- She describes that her panic attacks started around the time of her first organic chemistry final, they happened in a number of locales - including in the student library, in the grocery, and while driving. She was so affected by those first panic attacks that for months she was incredibly anxious about having another panic attack, in fact, had to suspend her organic chemistry study for an entire year, and couldn't drive for 6 months for fear of having more attacks.
- At the time, she tried 2 SSRIs and an SNRI, but she found side effects from each even at the lowest doses.
- Now, if a panic attack occurs, she takes 0.5mg of Clonazepam, which stops it fairly quickly. She has even had one come on in the middle of the night, which she describes as "the worst". She likes to keep ~7 tablets of Clonazepam on hand at any time in case they recur. She has only 2 left now, and this causes her some trepidation.

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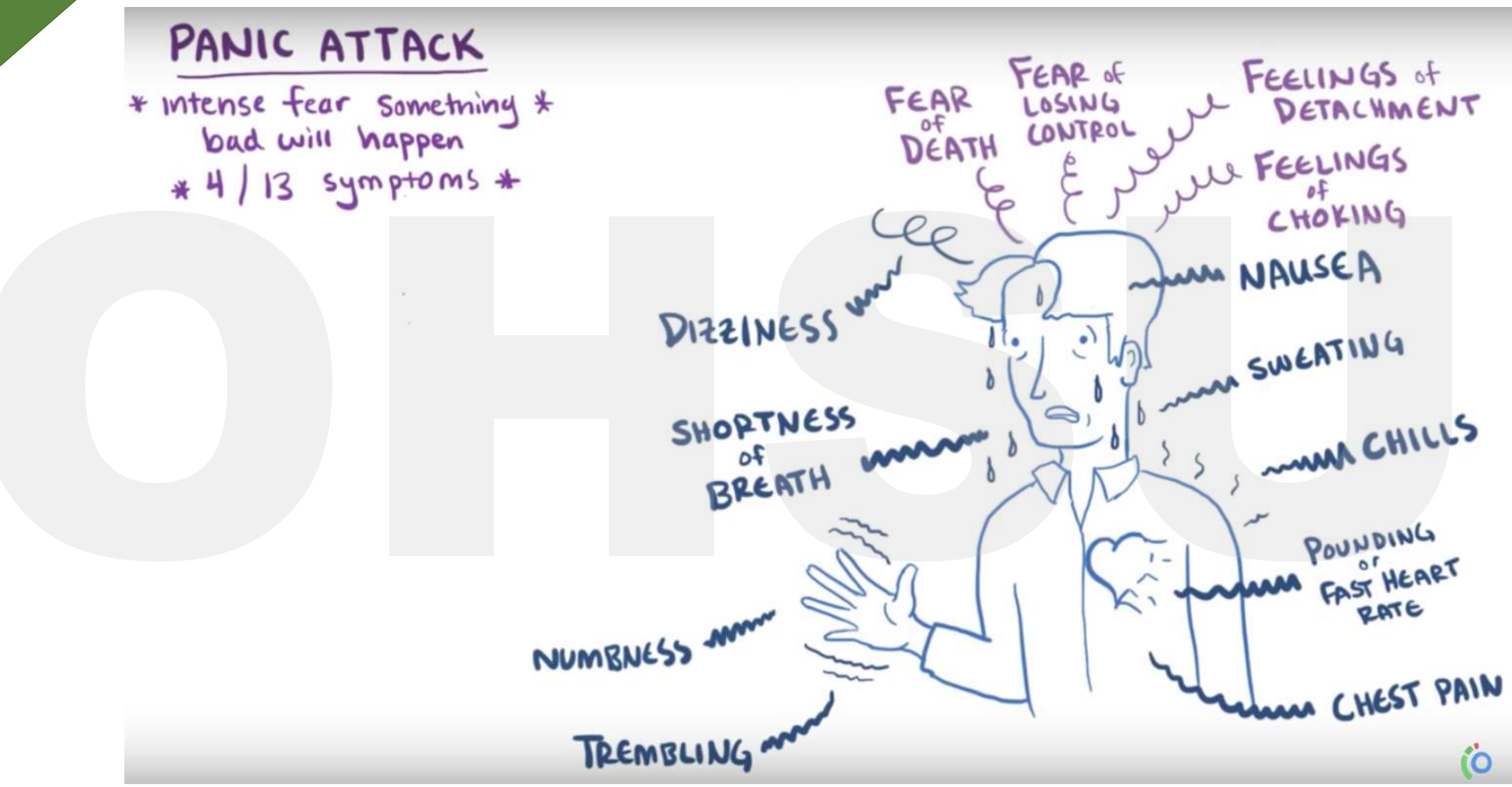
Panic Disorder



From Video "Panic Disorder" – by Osmosis – accessed at https://www.youtube.com/watch?v=YxELZyA2bJs

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Panic attacks ≠ Panic Disorder

Panic attacks can happen in many disorders.

The unique feature of <u>Panic Disorder</u> is >1 mo worry specifically about having another panic attack OR a change in behavior to avoid future panic attacks.

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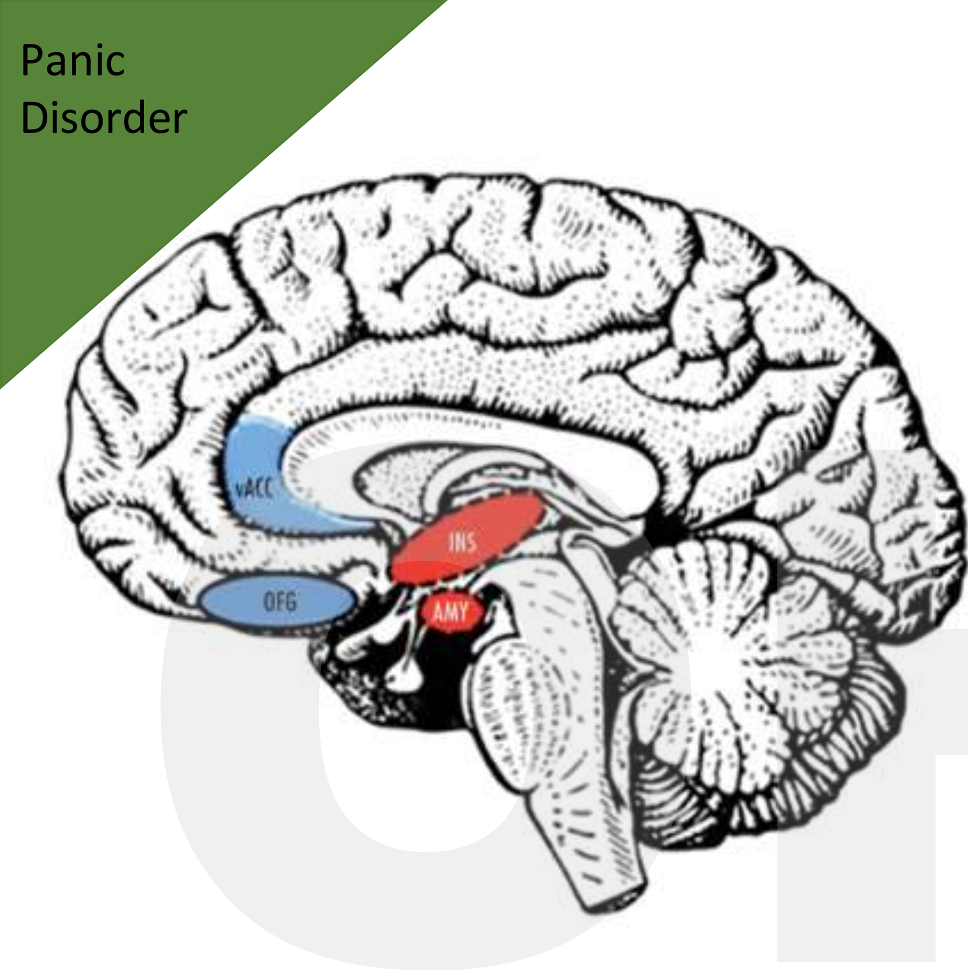

Panic Disorder
Neurobiology

Reduced Volume:
- Orbitofrontal Gyrus (corrects no longer appropriate responses)

Hypofunction
- Ventral Anterior Cingulate Cortex (assesses salience of emotional information)

Hyperactive
- Amygdala (detecting fear)
- Insular Cortex (interoceptive awareness and selecting emotionally relevant context for sensory stimuli)

Overactive fear detection
Overactive awareness of internal physical sx
Overactive selection of emotions to match physical sx

+

Underactive assessment of emotional information
Difficulty stopping inappropriate responses

Arciniegas, DB, ed., The American Psychiatric Association Publishing Textbook of Neuropsychiatry and Clinical Neurosciences, 6th Ed, Ch. 26, APPI, Washington DC, 2018

Panic Disorder

Overactive fear detection
Overactive awareness of internal physical sx
Overactive selection of emotions to match physical sx

+

Underactive assessment of emotional information
Difficulty stopping inappropriate responses

Arciniegas, DB, ed., The American Psychiatric Association Publishing Textbook of Neuropsychiatry and Clinical Neurosciences, 6th Ed, Ch. 26, APPI, Washington DC, 2018

Panic Disorder
Epidemiology/Course

- Median Age of onset: ~20-24 years old
  - But many diagnosed individuals report history of childhood "fearful spells" and childhood belief that symptoms of anxiety are harmful.
- Symptoms wax and wane over lifetime based on stress load, and periods of panic can be separated by years.
- Severity of panic attacks wane in late age due to dampening of autonomic arousal.
- Has overlap with several culture bound syndromes
  - Trung Gio – "hit by the wind" – assoc w Vietnamese culture
  - Khyal – "wind attacks" – assoc w Cambodian culture
  - Ataque de Nervios – "attack of nerves" – Latin American

1- American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders: DSM-5. Arlington, VA, USA: American Psychiatric Association.
2- Gabbard G. O., (Ed) (2014). Gabbard's Treatment of Psychiatric Disorders (5th Ed). Arlington, VA, USA; American Psychiatric Publishing, Inc..

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Panic Disorder Treatments

Cognitive Behavioral Therapy

- Psychoeducation
- Cognitive Restructuring
- Exposure
    - Interoceptive Exposure
    - Situational Exposure
- Relapse Prevention

Medications

SSRIs
SNRIs
Benzodiazepines

- Neither CBT, nor medications are significantly more effective than the other
- No SSRI/SNRI/TCA performed better than others
- **As persons with Panic Disorder are more sensitive to sx, start very low with medication doses**
- Combination CBT+SSRI offer only very marginal increases in long term response
- Combinations of CBT+benzodiazepine may do slightly worse than CBT alone

Gabbard G. O., (Ed) (2014). Gabbard's Treatment of Psychiatric Disorders (5th Ed). Arlington, VA, USA; American Psychiatric Publishing, Inc..

Panic Disorder

Pandora

- PCP offers 7 tabs of Clonazepam 0.5mg, and offers referral to CBT. Pandora politely declines the CBT for now due to difficulty carving out time (while she doesn’t mention it, she fears that anxiety that might be caused by therapy).
- 14 months later, Pandora requests a refill of another 7 tabs of Clonazepam 0.5mg, as she anticipates possible increase in anxiety, potentially panic attacks, as she enters her clinical rotations. She is still not interested in CBT, again stating her time doesn’t allow it.

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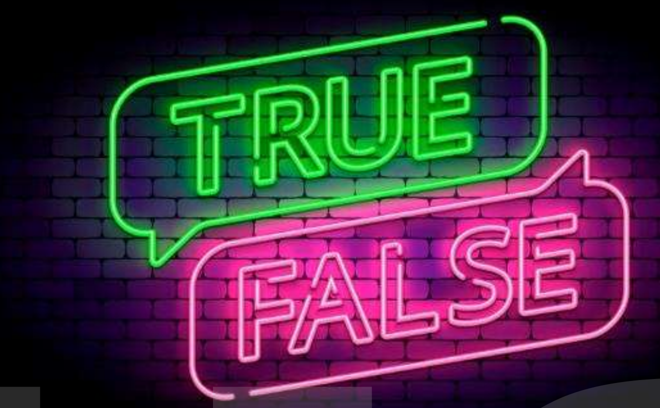
The Anxiety Disorders

Anxiety Disorders	Case	Fear v Anxiety	Specific v Generalized	Psychotherapy	Meds	Therapy v Meds Long-term efficacy
Specific Phobia	Philip	Fear, then Anxiety	Specific	Exposure Therapy	None (* benzos, or maybe propranolol, for unavoidable situations)	Therapy >>>>>> Meds
Social Anxiety Disorder	Sofia	Fear = Anxiety	Specific	CBT	SSRI SNRI Benzodiazepines PRN Propranolol PRN	Therapy >> Meds
Generalized Anxiety Disorder	Gerald	Anxiety >> Fear	Generalized (multiple)	CBT	SSRIs SNRIs Buspirone Benzodiazepine/Pregab	Therapy = Meds
Panic Disorder	Pandora	Fear, then Anxiety	Specific (then can generalize)	CBT	SSRIs SNRIs Benzodiazepines PRN	Therapy = Meds



- Medications have no role in the treatment of Specific Phobia
- Sustained outcomes for Social Anxiety Disorder come from a combination of long-term treatment with psychotherapy and medications.
- Rates of full recovery in Generalized Anxiety Disorder are high.
- Panic attacks are the unique feature of Panic Disorder

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The Anxiety Disorders

M. Sean Stanley, MD
Assistant Professor
OHSU Psychiatry

stanleym@ohsu.edu

“A Sunday Afternoon on the Island of La Grande Jatte” Georges Seurat, 1886

Substance/Medication-Induced Anxiety Disorder

Category	Prescribed	Non-prescribed
Uppers (direct and indirect)	Stimulants, Corticosteroids, SNRIs, bupropion (DNRI), Levodopa, amantadine, pseudoephedrine, levothyroxine, quinolones (GABA blocker), isoniazid (MAOI block)	Caffeine, methamphetamine, cocaine
Elaters	SSRIs	Ecstasy, marijuana
Confusers	Anticholinergics, antihistamines	
In Withdrawal	benzodiazepines, opioids	Alcohol

Anxiety Disorder Due to Another Medical Condition

- **Endocrine:** Cushing's, Hyper/hypothyroidism, hypoglycemia, hyponatremia, hyperkalemia, pheochromocytoma, perimenopause
- **Cardiovascular:** angina, arrhythmias, CHF, hypertension, ischemia
- **Pulmonary:** asthma, COPD, PE
- **Neurologic:** migraine, seizure, stroke, neoplasm
- **Other:** anemia, vestibular dysfunction, SLE, infection

1. History and Physical Exam
2. If no likely medical cause from hx/exam, quick studies:
   - CBC
   - CMP
   - TSH
   - UDS
   - EKG

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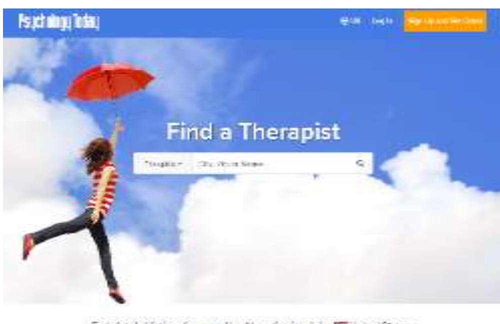
Pearls - Psychotherapy



1. Psychologytoday.com Therapist Finder is a good resource to find therapists in your area who do CBT.

2. The two main factors that determine whether you benefit from psychotherapy are:
   - Whether you feel comfortable talking with your therapist
   - Whether you complete a full course or more with the therapist

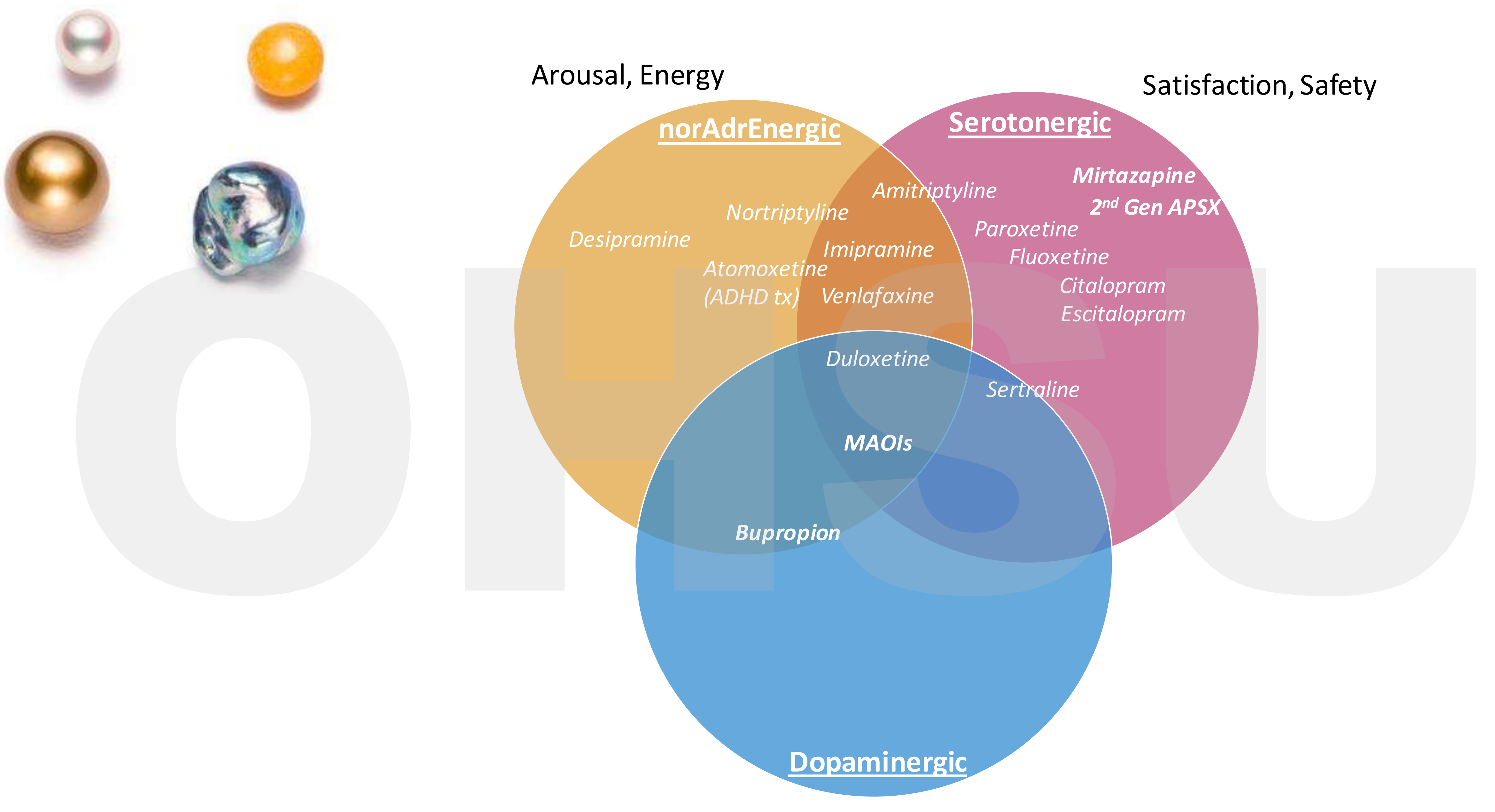
3. If you've seen one therapist, you've seen one therapist. If the fit is not good, look for another.

4. A good Cognitive-Behavioral Therapist will:
   - Tell you how many sessions they'd like to have with you (generally 8-16, or so)
   - Help you set goals and create helpful homework to practice skills between sessions
   - Keep you on track and stay focused on your goals
   - Be open to feedback and realigning goals if things have changed during the course of therapy
   - Assess how therapy is going after about 8 sessions, and determine whether it is going to be worthwhile continuing
   - Tell you if they think your symptoms are so severe that you might need to consider medications prior to going further with psychotherapy.

5. Remember, that while the time investment is a bit higher than taking medications, the benefit will remain after you stop your medications. The benefits of medications only last as long as you take them.

Pearls - Medications

- The more specific the anxiety, the more the benefit from psychotherapy relative to meds
- Genetics make a difference in medications – ask what a family member with anxiety has benefitted from.
- If you've tried 1 medication for anxiety, you've tried 1 medication, as some patients tolerate medications in the same class very differently.
- Anxiety Disorders may require **higher doses** of SSRIs/SNRI and a **longer time** to achieve efficacy (8-12 weeks) as compared to use for depression (4-6 weeks).
- With any patient with and Anxiety Disorder with prominent **somatic overfocus** (panic disorder, for instance), 2 options:
  1) Start SSRI/SNRI at very low doses and work up slowly (ex: escitalopram 2.5mg, increase by 2.5mg every 2 weeks)
  2) Start SSRI/SNRI at regular doses, rapidly titrating up on medication (escitalopram 5mg, increase by 5mg every 5 days), while pt takes low-dose benzodiazepine (clonazepam 0.5mg BID) to reduce somatic hypervigilance while more, then taper benzo.


Arousal, Energy
Satisfaction, Safety
norAdrEnergic
Serotonergic
Nortriptyline
Amitriptyline
Mirtazapine
2nd Gen APSX
Desipramine
Paroxetine
Imipramine
Fluoxetine
Atomoxetine
(ADHD tx)
Venlafaxine
Citalopram
Escitalopram
Duloxetine
Sertraline
MAOIs
Bupropion
Dopaminergic
Drive, Dionysian Desires

Pearls - Medications

Good Starts in PCP office:

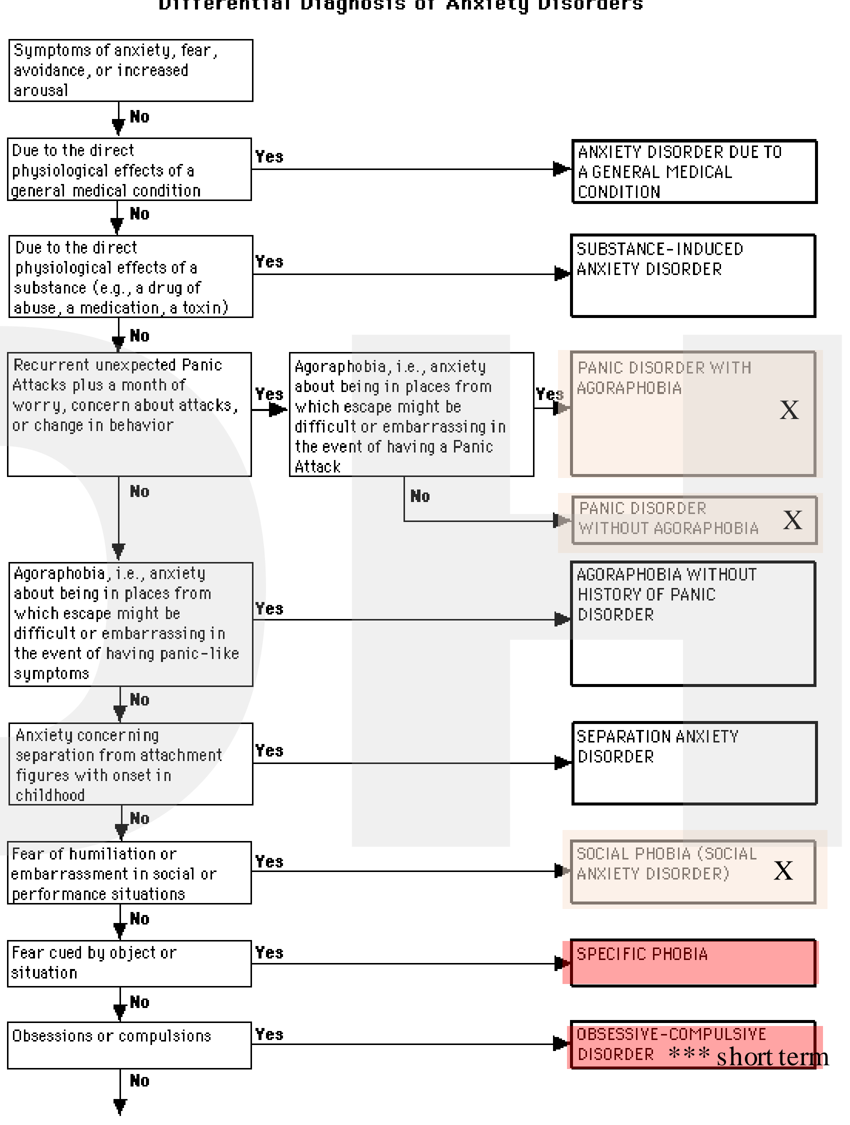
- If a less specific anxiety of moderate or greater severity, and patient open to medications, consider the following first line treatments…

Medication	Starting Dose*	Increases (if needed)	Max Dose	Especially good for…	Prominent Probs
Escitalopram	10mg once daily	Increase by 10mg q mo	20 mg once daily (rarely above)	Older pts, pts on many other meds	GI Upset, Mild wt gain, sexual SEs
Sertraline	50mg once daily^	Get to 100mg in 2w, then increase by 50mg q mo	200mg once daily	Breastfeeding pts	GI Upset, less wt gain, less sexual SEs
Venlafaxine ER	75mg once daily^	Get to 150mg in 2w, then increase by 75mg q mo	300mg once daily (rarely above)	Chronic Pain pts	GI Upset, **Mild BP increases,** sexual SEs, **withdrawal sx**

* if prominent somatic anxiety (often in panic disorder), start lower, go slower.
^ these are not adequate doses for anxiety, must increase from starting dose.

Benzos - FDA Approved Indications:

Medication	FDA Approved Indications
Lorazepam	"Anxiety Disorders" (<4months) Anxiety associated with Depressive Symptoms (<4 months)
Clonazepam	Seizure Disorders, Panic Disorder (<9 weeks)
Diazepam	"Anxiety Disorders" (<4months) Skeletal Muscle Spasm d/t reflex spasm of local pathology, Spasticity d/t upper motor neuron disease, Alcohol Withdrawal, Adjunctive tx of convulsive disorders,
Oxazepam	"Anxiety Disorders" (<4 mo) Alcohol Withdrawal
Alprazolam	Panic Disorder (<9 weeks), Anxiety Disorder (DSMIII – like GAD) (<9 weeks)
Temazepam	Short-term tx of Insomnia (<11 days)
Triazolam	Short-term tx of Insomnia (<11 days)

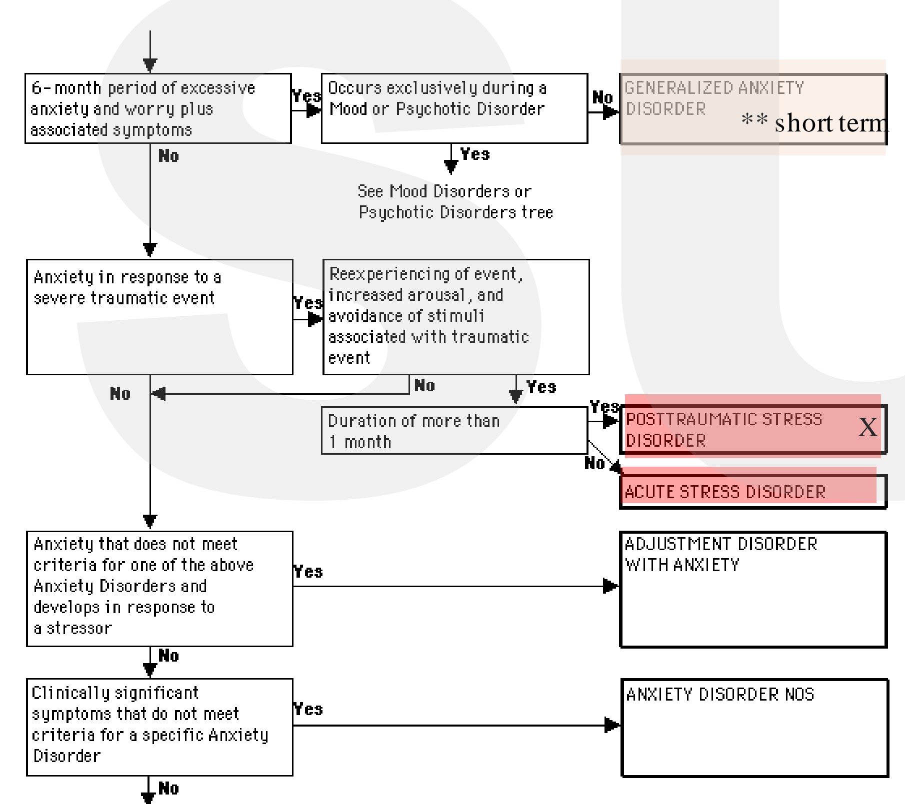


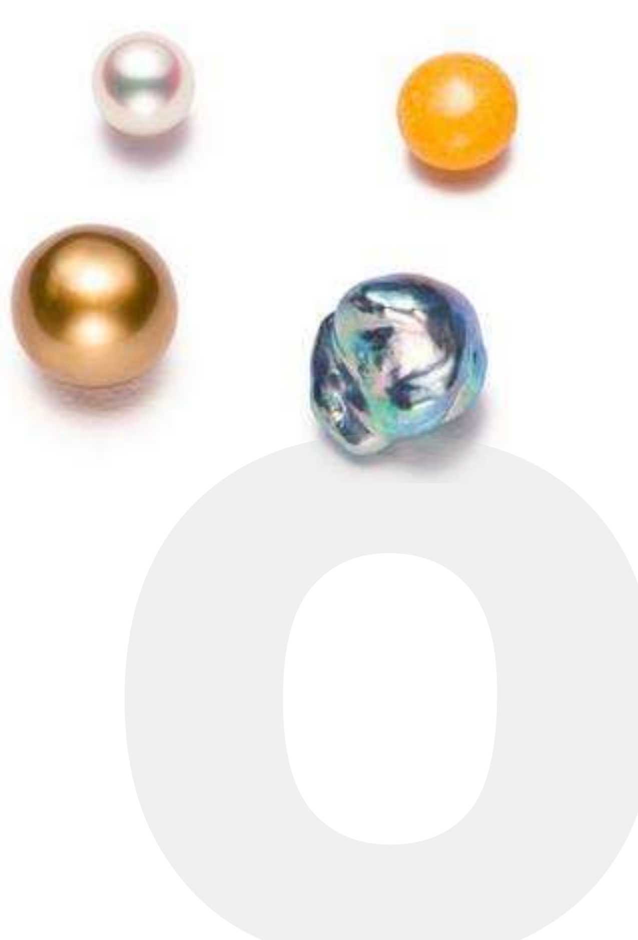
CANMAT

- First Line
- Second Line
- Third Line
- Not Recommended

NICE

- * Step 1
- ** Step 2
- *** Step 3
- **** Step 4-5
- X Not recommended





Benzos - Know the risks/risk groups

Contraindication Level	Specific Concern
Absolute	1. active use of alcohol with unreliable reports about use and increasing requests for meds
Relative	1. patients 65 years and older 2. current substance use disorder 3. history of substance use disorder 4. borderline Personality Disorder 5. co-prescription of opiate pain medications (especially methadone and suboxone) 6. clients with recent suicidal ideation and/or poor impulse control
Articulated Concern	1. physiological dependence 2. heightened anxiety symptoms 3. falls (populations at risk include those 65 years and older, patients with diabetes, co-prescription of antihypertensive medication and other medications that also can cause orthostasis) 4. driving impairments 5. memory interference 6. misuse and diversion 7. teratogenic effects 8. immediate post-partum effects on neonate

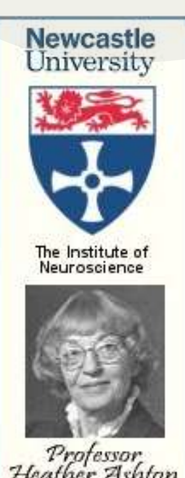
2017 – SAMHSA-HRSA Center for Integrated Health Solutions: “Safe & Effective Use of Benzodiazepines in Clinical Practice”

Benzos – Getting patients off

- Let patients know the risks to watch out for
- Watch for moments of motivation
- Long, slow tapers - see Ashton Manual below
- Let patient know to inform you of emergent sx that come up
  - RLS, night terrors, tremor, alcohol use

https://www.benzo.org.uk/manual/index.htm

benzo.org.uk



ASHTON MANUAL INDEX PAGE

BENZODIAZEPINES: HOW THEY WORK AND HOW TO WITHDRAW

(aka The Ashton Manual)

- PROTOCOL FOR THE TREATMENT OF BENZODIAZEPINE WITHDRAWAL
- Medical research information from a benzodiazepine withdrawal clinic

Professor C Heather Ashton DM, FRCP
Revised August 2002

- Ashton Manual Index Page
- Contents Page
- Introduction
- Chapter I: The benzodiazepines: what they do in the body
- Chapter II: How to withdraw from benzodiazepines after long-term use
- Chapter II: Slow withdrawal schedules
- Chapter III: Benzodiazepine withdrawal symptoms, acute & protracted

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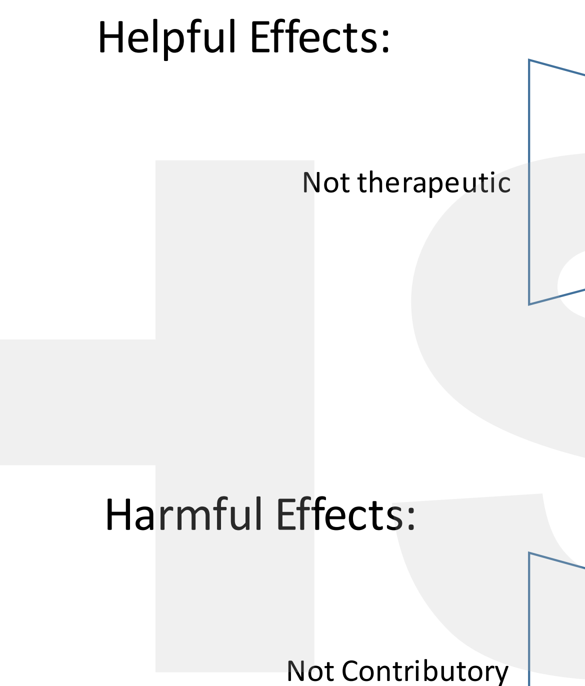
Cannabis and Anxiety



National Academies of Sciences, Engineering, and Medicine. 2017. The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research. Washington, DC: The National Academies Press.

Limited evidence: Public speaking in persons with social anxiety disorder (single dose)

Helpful Effects:

Not therapeutic

therapeutic

Harmful Effects:

Not Contributory

Contributory

Moderate evidence: Increased incidence of social anxiety disorder (chronic use)

Limited evidence: Development of other anxiety disorders, and increased anxiety symptoms (chronic use)

Somatic Symptom Disorders

	Somatic Symptoms	Excessive Worry About Sx	Comorbid Anxiety Disorders
Illness Anxiety Disorder	None (or very minimal)	**Yes**	GAD 71%, Phobias 43%, Panic Disorder 17%
Somatic Symptom Disorder	**1 or more physical**	**Yes**	30-60% have Anx or Dep DO
Functional Neurologic Disorder	**Neurologic**	No	

Primary Care Centered Approach (for **Illness Anxiety and Somatic Symptom Disorder**)

- Schedule regular visits q1-2 mo, not contingent upon active health concerns
- Establish collaborative therapeutic alliance, make functional improvement explicit goal
- If **Illness Anx**: Acknowledge health fears, educate patients about coping with anxiety.
- If **Somatic Sx DO**: Acknowledge the sx as real, educate patients re: mind-body connection
- Evaluate for and treat objectively diagnosable conditions
- Limit diagnostic tests and referrals, but coordinate with other clinicians
- Reassure patient that serious medical conditions have been ruled out
- Taper and discontinue unnecessary meds (after establishing strong relationship)
- Assess for and treat comorbid psychiatric disorders
  - 1st: CBT; 2nd: another therapy (Mindfulness-Based CT, etc); 3rd SSRI

Refer ONLY to Psychiatry for 1 time consultation to confirm diagnosis

Specific Phobia

Treatments

REVIEW — Open Access

Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders

Martin A Katzman[1*], Pierre Bleau[2], Pierre Blier[3], Pratap Chokka[4], Kevin Kjernisted[5], Michael Van Ameringen[6], the Canadian Anxiety Guidelines Initiative Group on behalf of the Anxiety Disorders Association of Canada/Association Canadienne des troubles anxieux and McGill University

Table 18 Psychological treatments with demonstrated efficacy in specific phobias

Psychological treatment	Phobia
Exposure-based treatments	All specific phobias [57,311,312]
Virtual reality exposure	Heights [327-329], flying [319,321-324], spiders [331,332], claustrophobia [330]
Computer-based self-help programs	Spiders [334,335], flying [323], small animals [336,337]
Applied muscle tension (exposure combined with muscle tension exercises)	Blood-injection-injury type [311,315,316]
Cognitive therapy and exposure	Dental [318], flying [319,320]

“Benzodiazepines have usually been assessed as adjuncts to exposure therapy, and these studies have found no additional benefit with medication. Benzodiazepines are often used in clinical practice to provide acute symptom relief when it is necessary for apatient with a specific phobia to face a feared situation (e.g., dental procedure, magnetic resonance imaging [MRI], unexpected flight).”

Social Anxiety Disorder (Social Phobia)

Treatments

REVIEW Open Access

Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders

Martin A Katzman[1*], Pierre Bleau[2], Pierre Blier[3], Pratap Chokka[4], Kevin Kjernisted[5], Michael Van Ameringen[6], the Canadian Anxiety Guidelines Initiative Group on behalf of the Anxiety Disorders Association of Canada/ Association Canadienne des troubles anxieux and McGill University

Table 21 Recommendations for pharmacotherapy for SAD

First-line	Escitalopram, fluvoxamine, fluvoxamine CR, paroxetine, paroxetine CR, pregabalin, sertraline, venlafaxine XR
Second-line	Alprazolam, bromazepam, citalopram, clonazepam, gabapentin, phenelzine
Third-line	Atomoxetine, bupropion SR, clomipramine, divalproex, duloxetine, fluoxetine, mirtazapine, moclobemide, olanzapine, selegiline, tiagabine, topiramate
Adjunctive therapy	**Third-line:** aripiprazole, buspirone, paroxetine, risperidone **Not recommended:** clonazepam, pindolol
Not recommended	Atenolol*, buspirone, imipramine, levetiracetam, propranolol*, quetiapine

CR = controlled release; SR = sustained release; XR = extended release.

*Beta-blockers have been successfully used in clinical practice for performance situations such as public speaking.

Note: although there is limited evidence for citalopram in SAD, it is likely as effective as the other SSRIs, in contrast there are negative trials of fluoxetine in SAD suggesting it may be less effective than other SSRIs [382,449].

FDA Approved

Generalized Anxiety Disorder

Treatments

REVIEW Open Access

Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders

Martin A Katzman[1*], Pierre Bleau[2], Pierre Blier[3], Pratap Chokka[4], Kevin Kjernisted[5], Michael Van Ameringen[6], the Canadian Anxiety Guidelines Initiative Group on behalf of the Anxiety Disorders Association of Canada/Association Canadienne des troubles anxieux and McGill University

Table 24 Recommendations for pharmacotherapy for GAD

First-line	Agomelatine, duloxetine, escitalopram, paroxetine, paroxetine CR, pregabalin, sertraline, venlafaxine XR
Second-line	Alprazolam*, bromazepam*, bupropion XL*, buspirone, diazepam*, hydroxyzine, imipramine, lorazepam*, quetiapine XR*, vortioxetine
Third-line	Citalopram, divalproex chrono, fluoxetine, mirtazapine, trazodone
Adjunctive therapy	**Second-line:** pregabalin **Third-line:** aripiprazole, olanzapine, quetiapine, quetiapine XR, risperidone **Not recommended:** ziprasidone
Not recommended	Beta blockers (propranolol), pexacerfont, tiagabine

CR = controlled release; XL = extended release; XR=extended release.

*Note: These have distinct mechanisms, efficacy and safety profiles. Within these second-line agents, benzodiazepines would be considered first in most cases, except where there is a risk of substance abuse, while bupropion XL would likely be reserved for later. Quetiapine XR remains a good choice in terms of efficacy, but given the metabolic concerns associated with atypical antipsychotic, it should be reserved for patients who cannot be provided antidepressants or benzodiazepines. Please refer to text for further rationale for the recommendations.

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Panic Disorder Treatments

REVIEW Open Access

Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders

Martin A Katzman[1*], Pierre Bleau[2], Pierre Blier[3], Pratap Chokka[4], Kevin Kjernisted[5], Michael Van Ameringen[6], the Canadian Anxiety Guidelines Initiative Group on behalf of the Anxiety Disorders Association of Canada/Association Canadienne des troubles anxieux and McGill University

Table 15 Recommendations for pharmacotherapy for panic disorder

First-line	Citalopram, escitalopram, fluoxetine, fluvoxamine, paroxetine, paroxetine CR, sertraline, venlafaxine XR
Second-line	Alprazolam, clomipramine, clonazepam, diazepam, imipramine, lorazepam, mirtazapine, reboxetine
Third-line	Bupropion SR, divalproex, duloxetine, gabapentin, levetiracetam, milnacipran, moclobemide, olanzapine, phenelzine, quetiapine, risperidone, tranylcypromine
Adjunctive therapy	**Second-line**: alprazolam ODT, clonazepam **Third-line**: aripiprazole, divalproex, olanzapine, pindolol, risperidone
Not recommended	Buspirone, propranolol, tiagabine, trazodone

CR = controlled release; ODT = orally disintegrating tablets; SR = sustained release; XR = extended release.

FDA Approved