Who Am I?

- Board Certified Adult and Child Psychiatrist
- Clinical Professor of Psychiatry at DGSOM
- UCLA Extension Instructor
- LMU Instructor
- ∘ Graduate of LAPSI-NCP
- Private Practice in Westwood
- Addiction Psychiatry
- Blogger: http://shirahvollmermd.wordpress.com/



Outline

Overview of anxiety

- Spectrum of anxiety disorders
- Etiology
- Diagnostic evaluation
- Treatment options
- Behavioral
- Psychopharmacology



Relevance

Most anxious patients are first seen and treated by primary care physicians. Treatment is generally long-term, and often the results are not what either patient or physician would regard as optimal. Nevertheless, timely and appropriate intervention can markedly improve function--it may make the difference between a generally satisfying life and one lived in fear and isolation.

Sigmund Freud

- o "There is no question that the problem of anxiety is a nodal point at which the most various and important questions converge, a riddle, whose solution would be bound to throw a flood of light on our whole mental existence."
- Introductory Lectures of Psychoanalysis-1916-1917

Good Anxiety/Bad Anxiety

 GOOD: Mild anxiety mobilizes people to action-eg study for an examination



 BAD: Unpleasant and overriding mental tension-leads to avoidance and impairment



Definitions-Fear

- An agitated foreboding, often of some real or specific peril
- The possibility that something dreaded or unwanted may occur
- ∘ COGNITIVE
- old English word faer-sudden calamity or danger

Definition-Anxiety

- Tense emotional state
- Often marked by such physical symptoms such as tension, tremor, sweating, palpitation, increased pulse rate
- ° Comes from the Latin word angere "to choke"

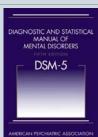
Conceptual Model of Anxiety Anxiety as Exaggerated Reflexes

Designed to ward off potential hazards

- $^{\circ}$ Eye-blinking
- Gagging
- · Coughing
- Bronchospasm
- Vomiting
- Diarrhea

DSM-5 List of Anxiety Disorders

- Specific Phobia
- Panic Disorder
- · Agoraphobia
- Selective Mutism
- Separation Anxiety Disorder
- Generalized Anxiety Disorder
- Unspecified Anxiety Disorder
- Other Specified Anxiety Disorder
- Social Anxiety Disorder (Social Phobia)
- Anxiety Disorder Due To Another Medical Condition
- Substance/Medication-Induced Anxiety Disorder



Spectrum of Anxiety Disorders-DSM 5

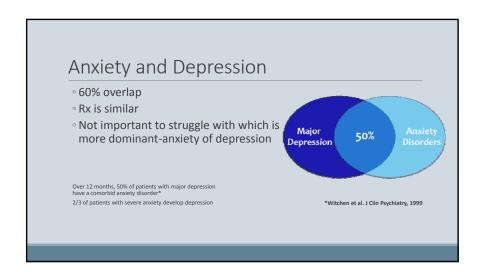
- PTSD-Not in Anxiety Disorders in DSM5-now Trauma and Stressor related d/o
- OCD-Not In Anxiety Disorders in DSM5-now OCRD-obsessive compulsive related disorders

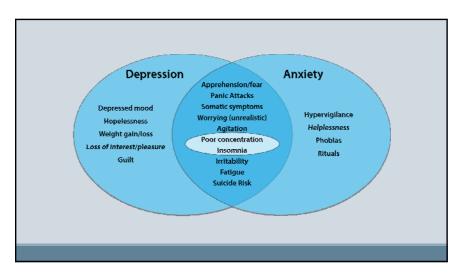
Spectrum of Anxiety Disorders-DSM 5

- Separation Anxiety and Selective Mutism-now part of Anxiety D/O in DSM 5. Both children and adults may receive these diagnoses.
- Agoraphobia and Panic Disorder have been decoupled and now form two distinct disorders.
- Additionally, a panic attack specifier is now applicable to any diagnostic category: e.g., depressive disorder with panic attacks, PTSD with panic attacks.

Prevalence

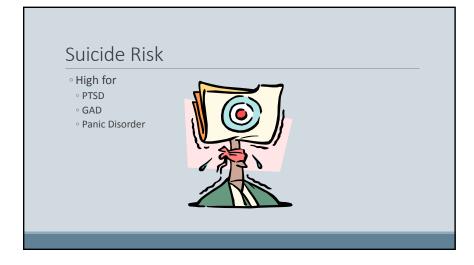
- 16 million people suffer from anxiety disorders in the US
- 12 million have anxiety and at least one other psychiatric disorder
- 25% lifetime prevalence
- 60% overlap with depressive disorders
- Prevalence, Severity, and Comorbidity of 12-Month DSM-IV Disorders in the National Comorbidity Survey Replication Ronald C. Kessler, PhD; Wai Tat Chiu, AM; Olga Demler, MA, MS; Ellen E. Walters, MS
- Arch Gen Psychiatry. 2005;62:617-627.





Economic Burden

- High-utilizers of primary care
- ∘ 1990-\$42.3 billion
- 87% direct costs
- 13% indirect costs-workplace impairment
- $^{\circ}$ 54% costs from nonpsychiatric medical expenditures-from misdiagnosis and mistreatment

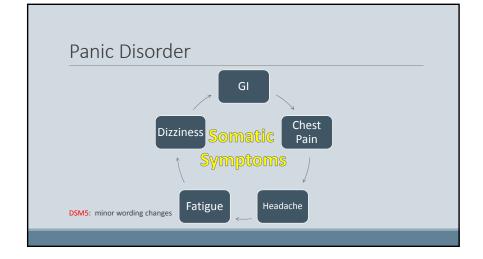


Specific Phobia

The term "phobia" refers to a group of anxiety symptoms brought on by certain objects or situations. A **specific phobia**, formerly called a simple **phobia**, is a lasting and unreasonable fear caused by the presence or thought of a **specific** object or situation that usually poses little or no actual danger.

Panic Disorder

- o Intense, overwhelming terror
- Cognitive symptoms-fear of losing control, fear of dying, fear of going crazy
- Physical symptoms-go to ER



Agoraphobia

A person who has agoraphobia disorder experiences significant and persistent fear when in the presence of, or anticipating the presence of, at least two situations. These situations may include crowds, public places, public transportation, being outside of the home, open spaces, standing in line, being isolated and over-dependence. To meet the DSM-5 criteria, when in these situations, the person must engage in avoidance behaviors to avoid the fear and/or a related panic attack.

Agoraphobia

- Further DSM-5 criteria for agoraphobia include:
- Marked and out of proportion fear of the presence or anticipation of a specific situation
- Exposure to the phobic stimulus provokes an immediate anxiety response, which may take the form of a situationally bound or situationally predisposed panic attack.
- The person recognizes that the fear is out of proportion.
- The phobic situation(s) is avoided or else is endured with intense anxiety or distress.

Agoraphobia

- The avoidance, anxious anticipation or distress in the feared situation(s) interferes significantly with the person's normal routine, occupational (or academic) functioning, or social activities or relationships, or there is marked distress about having the phobia.
- The new DSM-5 criteria states that the symptoms for all ages must have a duration of at least 6 months.

Separation Anxiety Disorder



SAD is defined as separation anxiety disorder that persists in individuals under 18 for at least four weeks and adults for six months or more. An individual with SAD experiences persistent anxiety at a developmentally abnormal level in response to separation or impending separation from an attachment figure as evidenced by three of the following symptoms:

Separation Anxiety Disorder DSM Criteria

3+ Symptoms

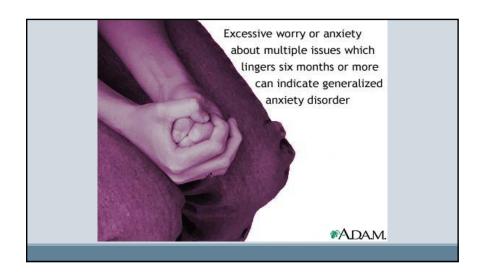
- Excessive distress from attachment figure is anticipated
- Excessive worry about losing or possible harm to figure
- Excessive worry that an event will lead to separation
- Reluctance or refusal to go to school because of

- Excessive fear or reluctance to be alone
- Reluctance or refusal to go to sleep without being near attachment figure
- Nightmares involving theme of separation
- Complaints of physical symptoms when separation occurs/is

GAD

- Unrealistic or excessive anxiety and worry
- EXAMPLE: worry about money, but there is no money problem
- Feel shaky, "keyed up" "on edge"
- Poor concentration-similar to depression
- DSM5: the number of associated physical symptoms has been reduced from six to two; minor wording changes





GAD

Agitation

• Restlessness

Dysphoria

Irritability

Бузрпопе

minea

∘ Sleep

Worry

∘ Fatigue

Anxiety

Concentration

∘ Tension



SAD

- Fear of situations where the person can be watched-public speaking
- Fear of embarrassment-eating in public
- Late childhood or early adolescence
- DSM5: Social Anxiety Disorder (Social Phobia) duration criterion changed (from "The duration is at least 6 months" to "The fear, anxiety, or avoidance is persistent, typically lasting 6 or more months")



Social Anxiety Disorder-2 Stuttering Palpitations Butterflies Blushing Sweating Trembling



Selective Mutism



To meet diagnostic criteria, the child or adolescent with selective mutism shows significant impairment in daily functioning, typically in educational or occupational settings, and by refraining from social participation at school and other settings due to a pronounced fear of speaking. Most affected children and adolescents function normally in other ways and learn age appropriate skills; however, some may have other comorbid anxiety disorders, developmental delays such as impaired social skills, and communication disorders.

PTSD

- Trauma-severe and unusual physical or mental trauma
- If trauma was unanticipated-higher severity
- Re-experiencing-nightmares, flashbacks, can cause dissociation
- Generalized anxiety-survivor's guilt, problems concentrating-can look like ADHD



PTSD and DSM 5



- Taken OUT of Anxiety Disorders and put in a NEW chapter in DSM-5 on Trauma- and Stressor-Related Disorders
- DSM-5 pays more attention to the behavioral symptoms that accompany PTSD.
- PTSD will also be more developmentally sensitive for children and adolescents.
- Addition of criteria for Trauma- or Stressor- Related Disorder Not Elsewhere Classified

PTSD and DSM 5

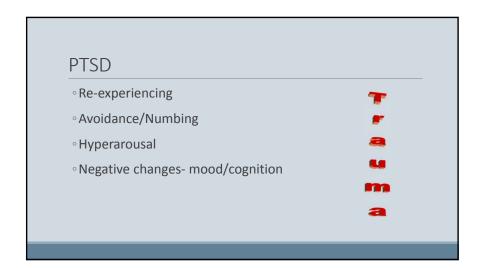


- Elimination of "subjective reaction" to trauma
- Expansion of symptom clusters to include re-experiencing, avoidance, negative cognitions and mood, and hyper-arousal
- Posttraumatic Stress Disorder also has a subtype in the DSM-5, for preschool children (which previously existed as a separate diagnosis) and a dissociative symptoms subtype.

PTSD and DSM 5



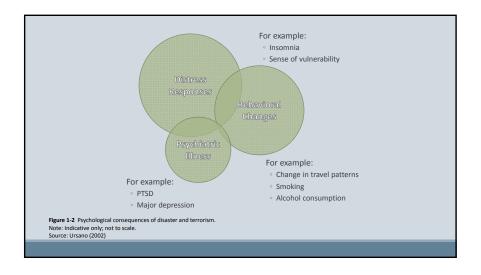
The "acute" vs. "delayed" distinction is dropped; the "delayed" specifier is considered appropriate if clinical symptom onset is no sooner than 6 months after the traumatic event(s)



Role of the Primary Care professional is to:

- Differentiate between normal and abnormal responses to disasters
- Efficiently diagnose abnormal responses
- Treat patients within the scope of your competency and resources
- Identify high risk individuals for immediate referral and treatment





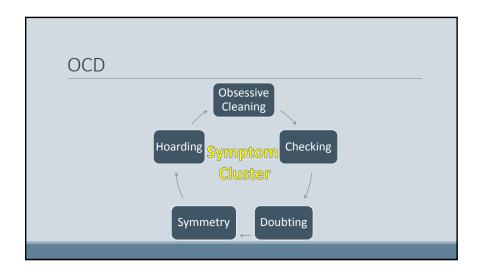
Obsessive Compulsive and Related Disorders (OCRD)

- $^{\circ}$ Obsessions-repeated, intrusive thoughts, violent thoughts, fear of hurting others
- Compulsions-rituals
- Adolescent onset
- DSM 5-now separated out from anxiety disorders into its own category- Obsessive Compulsive Disorders

OCD Related Disorders and DSM 5



- Hoarding Disorder- minor wording changes
- Skin Picking Disorder Excoriation Disorder-addition of a new criterion that addresses attempts to resist skin picking
- Hair-Pulling Disorder (Trichotillomania) addition of a new criterion that addresses attempts to resist hair pulling

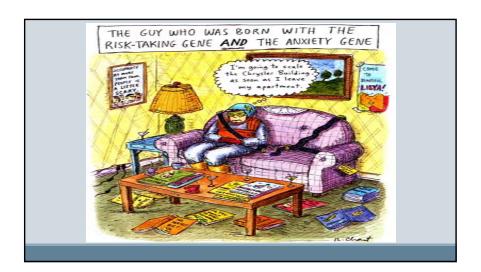


Etiology

- Psychoanalytic theory-unconscious conflicts
- Learning theory
- Chemical Imbalance
- \circ Inherit a biological susceptibility-events in childhood create fears—anxiety disorder

NEW YORK TIMES - JAN 27, 2004

"People with panic disorder, according to scientists at the National Institutes of Health, have drastic reductions of a type of serotonin receptor, called 5-HT1A, in three areas of the brain. The findings, reported last week in The Journal of Neuroscience, lend credence to the suspicion that serotonin dysfunction plays a role in the disorder."



Therapeutic Alliance

- ° Careful attention to the patient's fears and wishes
- Awareness of transference, countertransference
- Provide education
- Work collaboratively

Diagnostic Evaluation

- ° HPI
- Past Psychiatric History
- General Medical History
- Substance Use
- Personal History
- Social/Occupational History



Evaluation of Symptoms

- ° Cardiovascular-palpitations, chest pain, paresthesias
- · Cognitive-fear of losing one's mind
- Amount of anticipatory anxiety
- Phobic avoidance



Functional Impairment

- Avoidance of driving
- Restaurants
- Shopping malls
- Elevators
- Agoraphobia-home bound



Evaluating Children

- H/o separation anxiety
- Hx from parents
- Anxiety is expressed by crying, tantrums, clinging
- Children may not recognize that fear is excessive or unreasonable



Medication Hx

Caffeine

Dig toxicity

Neuroleptics

· Hallucinogen

。 ETOH

- · MJ
- Anticholinergic toxicity
- OTC diet pills
- Bronchodilators
- Decongestants
- Stimulants



Screening Question

Social Phobia

 Some people have strong fears of being watched or evaluated by others. For example, some people don't want to eat, speak, or write in front of people for fear of embarrassing themselves. Is anything like this a problem for you?

Screening Question

Acute Stress and Post-Traumatic Stress Disorder

 Have you ever seen or experienced a traumatic event when you thought that your life was in danger? Have you ever seen someone else in grave danger? What happened?



Screening Question

Obsession

Some people are bothered by intrusive, silly, unpleasant, or horrible thoughts that keep repeating over and over. For example, some people have repeated thoughts of hurting someone they love even though they don't want to. Has anything like this troubled you?

Screening Question

Generalized Anxiety Disorder

- Would you describe yourself as a nervous person?
- Are you a worrier?
- Do you feel nervous or tense?

Panic Disorder

 Have you ever had a sudden attack of rapid heartbeat or rush of intense fear, anxiety, or nervousness?
 Did anything seem to trigger it?



Working with Anxious Patients

- Diagnose
- Demystify and normalize
- Educate re: symptoms and treatment effectiveness
- Discuss non-pharmacologic treatment
- o Discuss Referral
- Prepare to monitor symptoms to measure effect
- Patient should list, rate, and monitor symptoms
- SUDs scale (subjective units of discomfort 1-100)



Practicing Mindfulness

The key to being in control of your mind is learning to be in control of what we pay attention to and how long we pay attention to it. Have there been times you have been unable to stop thinking about things (the past, the future, emotional pain,

physical pain), unable to concentrate on a task, unable to focus on another person?



Judging

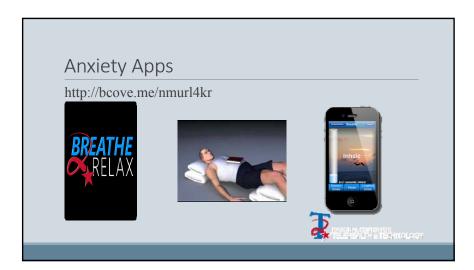
- Most thoughts come under one of three categories:
- o I like it; I don't like it; I'm neutral about it.
- This week, try practicing the mental noting of this flow of attraction, aversion, and indifference.
- Observe your judging, how often you are thinking this is good, that is bad.
- The mind that is always judging is like carrying around a suitcase full of rocks on your head. It's heavy and causes the body to be tight.
- $^{\circ}$ Remember: don't judge your judging. We want to cultivate a non-judgmental mind.
- · Exercise: Soft Belly Breathing

Mindfulness at the Hammer

- 12:30pm, Thursdays
- Hammer Lectures
- Mindful Awareness
- Mindful Awareness is the moment-by-moment process of actively and openly observing one's physical, mental and emotional experiences. Mindfulness has scientific support as a means to reduce stress, improve attention, boost the immune system, reduce emotional reactivity, and promote a general sense of health and well-being.

Treatment-Behavioral

- Breathing retraining-abdominal breathing
- $^{\circ}$ Cognitive restructuring-catastrophic thinking, overestimation of the probability of the event
- Exposure to fear



Benzodiazepines SSRI antidepressants Atypical antidepressants Librium (chlordiazepoxide) Tricyclic antidepressants MAOI antidepressants Older mood stabilizers 1970's Valium (diazepam) top selling drug in US Older antipsychotics Newer antipsychotics Anticholinergics Xanax (alprazolam) top selling drug in US Other anxiolytic/hypnotics Stimulants Meds for dementia 1990's SSRI's replace some chronic benzodiazepine use for anxiety Meds for substance abuse Psychiatric uses of antihypertensives

Benzodiazepines and Barbituates

Mechanism of Action

- Potentiates the effects of GABA
- ° Causes synaptic inhibition by membrane hyperpolarization

Benzodiazepines (BZ)

Abuse and dependence

- Risk of abuse is small in individuals who are not abusing other substances
- Withdrawal symptoms and physical dependence are not in themselves problematic if reductions are done gradually to minimize symptoms
- $^\circ$ use of longer acting agents to minimize between-dose breakthrough and avoiding "PRN" dosing are helpful
- symptoms of "withdrawal" may represent breakthrough of the underlying anxiety disorder
- $^{\circ}$ needing to increase the dose (tolerance) not generally an issue at the rapeutic doses

Benzodiazepines

alprazolam (Xanax)	short-mid
chlordiazepoxide (Librium)	long
clonazepam (Klonopin)	mid-long serotonergic?
clorazepate (Tranxene)	long
diazepam (Valium)	long
estazolam (ProSom)	mid
flurazepam (Dalmane)	long
lorazepam (Ativan)	short-mid / min DDI
oxazepam (Serax)	short-mid / min DDI
temazepam (Restoril)	mid / min DDI
triazolam (Halcion)	short common procedure presedate

Benzodiazepine-side effects

- Drowsiness
- ∘ Ataxia
- Confusion
- ∘ Vertigo
- Impaired judgment

Benzodiazepine Withdrawal

- ∘ Insomnia
- Anxiety
- ∘ Tremor
- Perspiration
- Loss of appetite
- Seizures
- ∘ This is a drug of abuse!!!

Pharmacology-Better Living Through Chemistry

- ∘ SSRI's-, Starting Doses
- ∘ Prozac 5 mg
- ∘ Zoloft 12.5 mg Titrate UP
- ∘ Paxil 5 mg
- ∘ Luvox 25 mg Rx for ONE YEAR
- ° Celexa----5.0 mg NO ONE DOSE
- ∘ Lexapro---2.5-5.0 mg



Venlafaxine-Effexor

- Dual Action Reuptake Inhibitor-Duloxetine
- ∘ 5% get HTN on doses above 225mg
- Discontinuation syndrome is a problem
- FDA approved for GAD
- Starting dose 37.5 mg XR
- Used for hot flashes in perimenopausal women

Duloxetine - Cymbalta

- FDA approval August 2004, Approved for GAD
- Based on preclinical data, Cymbalta is a selective, balanced and potent dual reuptake inhibitor of both serotonin (5-HT) and norepinephrine (NE). Balanced as used here means that Cymbalta has an approximately equal affinity for 5-HT and NE reuptake transporters

SSRI's-Adverse Events

Headache

Diarrhea

Insomnia

?GI bleeding

Nausea

Sexual

Nervousness

SIADH

Agitation

Flip to mania

?Wt gain-?Paxil

Tremor

SSRI/SNRI Discontinuation Symptoms in Adults¹

- o Dysequilibrium: dizziness, vertigo, ataxia
- ∘ GI: nausea, vomiting
- Sensory disturbance: paresthesia, electric shock sensation
- Sleep disturbance: insomnia, vivid disturbing dreams
- Neuropsychiatric symptoms

¹Schatzberg AF, et al. Serotonin reuptake inhibitor discontinuation syndrome: A hypothetical definition J Clin Psychiatry 1997; 58 [suppl 7] 5-10.

Second generation anxiolytics

Buspirone (BuSpar): A weak agonist of 5-HT 1A receptors, so no crossing or synergy with other CNS depressants

- Buspirone is also antidepressant
- ° No sedations, little amnesia or confusion
- Very slow development of main effect: several weeks tid
- Useful for GAD and anxiety in older people
- Postsynaptic inhibition of adenylcyclase
- Presynaptic inhibition of 5-HT synthesis

Beta Blockers

- Deals with bodily sensation of anxiety
- Slows heartbeat
- Contains the tremor
- Reduces sweating
- ∘ Inderal 10 mg 10 minutes before a performance
- ∘ ½ string musicians use this



Other Pharmacological Options

- Mood Stabilizers (eg Neurontin 100-2000 mg/day)
- Atypical Antipsychotics
- Antihistamines
- Riluzole (Rilutek) antiglutamatergic drug approved for ALS* (doses of 100 mg bid)
- Viibryd (vilazodone)-off label
- ∘ Trintellix (vortioxetine)-off label
- Fetzima (Levomilnacipran)-off label



*Pittinger C et al. Riluzole augmentation in refractory OCD: a series of 13 cases. J Clin Pyschopharm 2008; 28:363-36

Close Follow-Up



How Treatment Helps

- Decreases anxiety/tension
- Improves social and occupational functioning
- Decreases chances patient will become depressed
- Helps the family of the patient-better quality of life
- Decreases utilization of health care



Psychiatric Referral

- The physician is uncertain of the primary diagnosis..
- $^{\circ}$ Treatment does not lead to amelioration of symptoms within a reasonable period.
- Substance abuse is suspected.
- The patient expresses suicidal ideation.

Working with the patient who is reluctant to be referred out

- Use neurobiological explanations
- $^{\circ}$ Encourage the patient to work—do the exercises, practice the relaxation, take the medication
- Be active and directive, arrange freq. follow-up
- Reinforce the good work avoid criticizing

Bibliography

Sheehan D. The Anxiety Disease and How to Overcome it. New York: Bantam, 1990



Other Resources

Anxiety Disorders of America 11900 Parklawn Drive Suite 200 Rockville, MD 20852 301-231-9350



Summary

- Anxiety Disorders are common
- ^o Diagnosis can be difficult-present with somatic complaints
- Treatment is education, mindfulness, deep breathing, psychotherapy, psychotropic medication-benzos, maybe +SSRI or Dual Uptake Drug and/or consider beta blocker.
- ° Close follow-up is important
- Treatment improves quality of life for patient and his/her family