

## 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

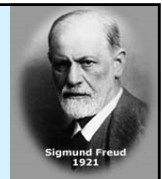
- Overview of anxiety and case example
- Spectrum of anxiety disorders
- Etiology
- Diagnostic evaluation
- Treatment options
  - behavioral
  - psychopharmacology



## Relevance

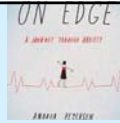
- **Most anxious patients are first seen and treated by primary care physicians. Treatment is generally long-term, and often the results are not what either patient or physician would regard as optimal. Nevertheless, timely and appropriate intervention can markedly improve function--it may make the difference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

## Sigmund Freud



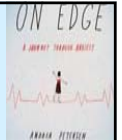
- “There is no question that the problem of anxiety is a nodal point at which the most various and important questions converge, a riddle, whose solution would be bound to throw a flood of light on our whole mental existence.”
- Introductory Lectures of Psychoanalysis-1916-1917

## Case Example



- “I see a doctor. He listens to my story of how I have been transformed from a slightly silly sorority girl to a terrorized shut-in in just a few weeks’ time. He examines me, takes blood, does and EKG and orders an echocardiogram. This doctor is only the first of more than a dozen I will see over the next year. During that time I will have several more EKGs, countless blood tests, another echocardiogram, a CT scan, an MRI and an EEG. I will take multiple trips to the ER, each time leaving WITHOUT a diagnosis. This medical odyssey will cost my parents thousands of dollars.

## Case Example-Continued



- Doctors will suspect MS, a brain tumor, EBV and CFS. I will be told that I am fine. One doctor will fire me. I will drop most of my classes and barely leave my room. I will peer over the banister of a rooftop parking garage and think of jumping. I will go to a psychiatric emergency room and be sent home. I will have six sessions of psychotherapy in which I’m asked whether I’m angry with my father. I’ll largely stop eating.
- And still no one will know what is wrong with me.
- Fast-forward to the next school year. I am sitting in a psychiatrist’s office, telling the doctor that I won’t-I can’t-leave until she does something. She says she can prescribe Prozac or she can refer me to an anxiety disorders program at the U of M hospital.
- Anxiety Disorder...It is the first time anyone has spoken the words.

## 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

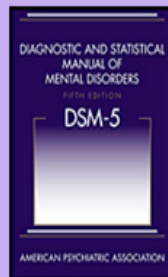
- Tense emotional state
- Often marked by such physical symptoms such as tension, tremor, sweating, palpitation, increased pulse rate
- Comes from the Latin word angere “to choke”

## Conceptual Model of Anxiety Anxiety as Exaggerated Reflexes

- Designed to ward off potential hazards
  - 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 **DSM-5**: now **Trauma and Stressor related d/o**
- OCD-Not In Anxiety Disorders in **DSM-5**: now **OCRD-obsessive compulsive related disorders**

## Spectrum of Anxiety Disorders-**DSM-5**

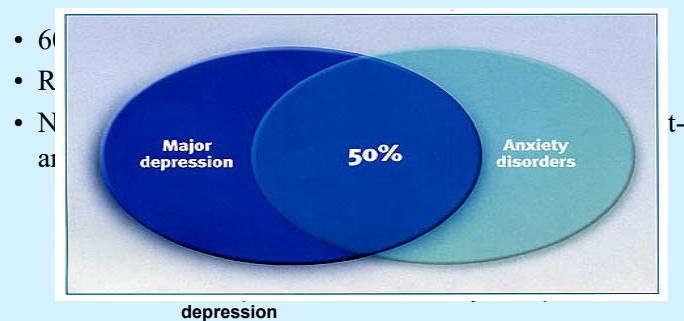
- Separation Anxiety and Selective Mutism-now part of Anxiety D/O in **DSM-5**. Both children and adults may receive these diagnoses.
- Agoraphobia and Panic Disorder have been decoupled and now form two distinct disorders.
- Additionally, a panic attack specifier is now applicable to any diagnostic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

## Anxiety and Depression



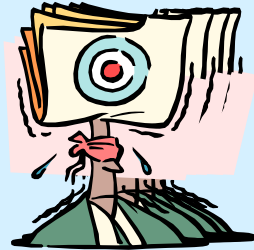
\*Witcher et al. J Clin Psychiatry, 1999

## Economic Burden

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

## Suicide Risk

- High for
  - PTSD
  - GAD
  - Panic Disorder

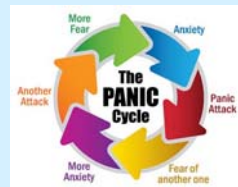


## Specific Phobia

- 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

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



## Panic Disorder

GI

Chest Pain

## Somatic Symptoms

Headache

Dizziness

Fatigue

DSM-5: minor wording changes

## 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

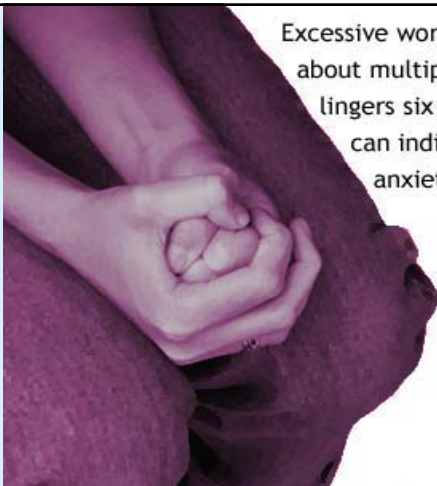
- Excessive distress when separation from attachment figure is anticipated
- Excessive worry about losing or possible harm to figure
- Excessive worry that an event will lead to separation
- Reluctance or refusal to go to school because of
- Excessive fear or reluctance to be alone
- Reluctance or refusal 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
- **DSM-5:**the number of associated physical symptoms has been reduced from six to two; minor wording changes

Excessive worry or anxiety about multiple issues which lingers six months or more can indicate generalized anxiety disorder



ADAM.

## GAD

Agitation	Restlessness
Dysphoria	Irritability
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
- **DSM-5:** 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



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"Well, you turned up, Mr. Timkins, that's one thing at least."

## 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)

## PTSD

Re-experiencing

Avoidance/Numbing

Hyperarousal

Negative changes-mood/cognition

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## 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

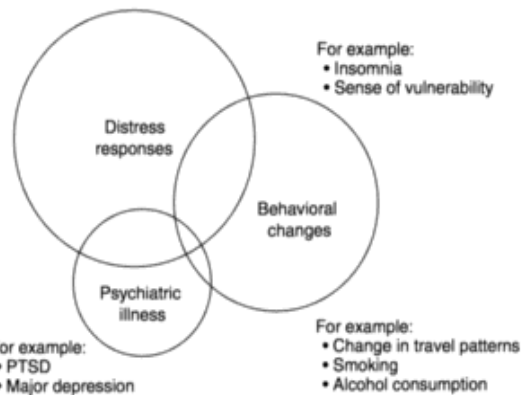


FIGURE 1-2 Psychological consequences of disaster and terrorism. NOTE: Indicative only; not to scale. SOURCE: Ursano (2002)

## Obsessive Compulsive and Related Disorders (OCRD)

- 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



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

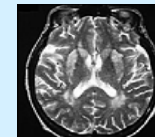
## OCD

Obsessive Cleaning      Checking  
**Symptom Cluster**  
Hoarding      Doubting  
Symmetry

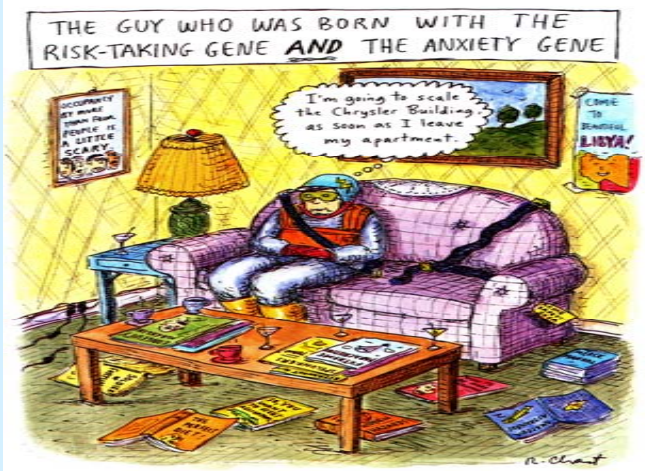
## Etiology

- Psychoanalytic theory-unconscious conflicts
- Learning theory
- Chemical Imbalance
- 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                 | • Hallucinogen   |
| • Neuroleptics             | • MJ             |
| • ETOH                     | • OTC diet pills |
| • Anticholinergic toxicity | • Stimulants     |
| stimulants                 |                  |
| • Bronchodilators          |                  |
| • Decongestants            |                  |
| • Dig toxicity             |                  |



## 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?

GAD-7 - Generalized Anxiety Disorder Scale

Over the last two weeks, how often have you been bothered by the following problems?

	Not at all	Several days	Over half the days	Nearly every day
Feeling nervous, anxious, or on edge	<input type="radio"/> 0	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
Not being able to stop or control worrying	<input type="radio"/> 0	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
Worrying too much about different things	<input type="radio"/> 0	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
Trouble relaxing	<input type="radio"/> 0	<input type="radio"/> 1	<input checked="" type="radio"/> 2	<input type="radio"/> 3
Being so restless that it's hard to sit still	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Becoming easily annoyed or irritable	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
Feeling afraid as if something awful might happen	<input type="radio"/> 0	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3

How difficult have those problems made it for you to do your work, take care of things at home, or get along with other people?

Somewhat difficult

Score: 14  
Difficulty Level: Somewhat difficult  
Severity Level: Moderate Anxiety

Add to Chart

## Scoring GAD-7

Total Score	Interpretation
$\geq 10$	Probable diagnosis of GAD; confirm by further evaluation
5	Mild anxiety
10	Moderate anxiety
15	Severe anxiety

Spitzer, RL, Kroenke K, Williams JBQ, Lowe B. A brief measure for assessing generalized anxiety disorder. Arch Intern Med 2006;166:1092-1097

## 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:

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.

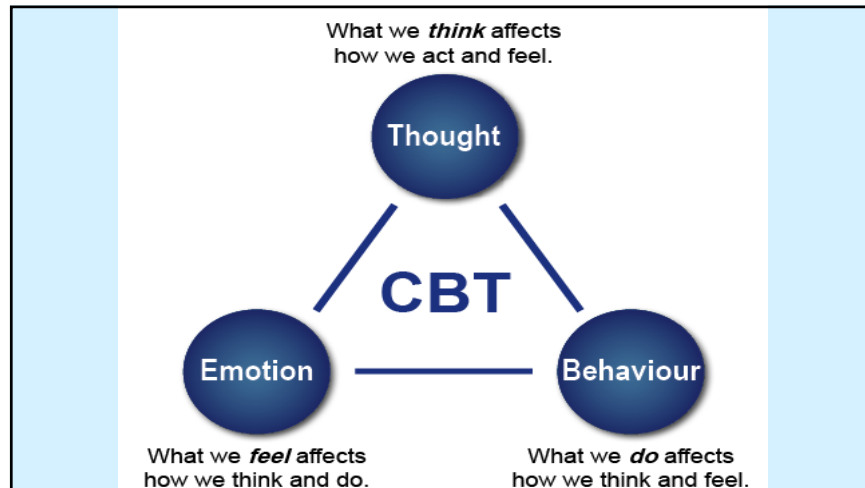
The mind that is always judging is like carrying around a suitcase full of rocks on your head. It's heavy and causes the body to be tight.

Remember: don't judge your judging. We want to cultivate a non-judgmental mind.

**Exercise: Soft Belly Breathing**

## Treatment-Behavioral

- Breathing retraining-abdominal breathing
- Cognitive restructuring-catastrophic thinking, overestimation of the probability of the event
- Exposure to fear



**Fact Or Opinion**

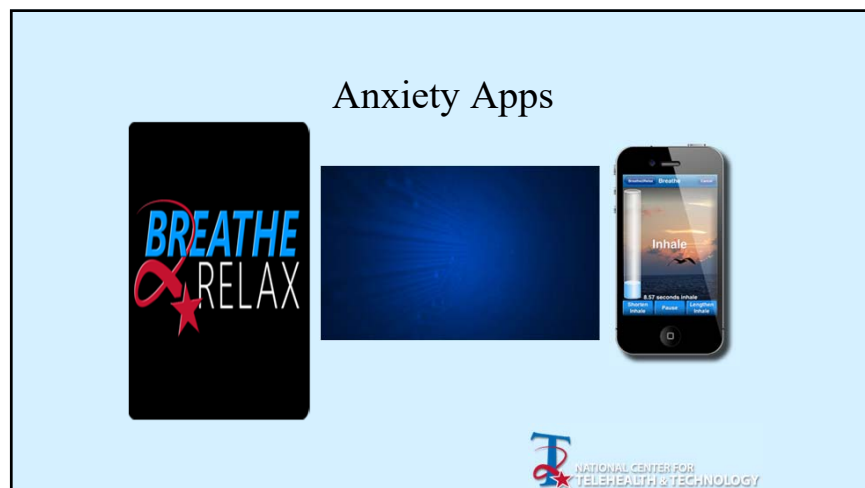
*CBT Lesson #1: Thoughts are not facts*

It is common to assume that thoughts are equivalent to facts. This is not always the case, however. It often takes a bit of practice to work out whether one of our thoughts is a fact or is an opinion. For the statements below, practice deciding whether it is a fact or an opinion.

	Fact	Opinion
1. "I'm a bad person"	<input type="checkbox"/>	<input type="checkbox"/>
2. "Sam told me that she didn't like what I said about her"	<input type="checkbox"/>	<input type="checkbox"/>
3. "Nothing ever goes right"	<input type="checkbox"/>	<input type="checkbox"/>
4. "This will be a disaster"	<input type="checkbox"/>	<input type="checkbox"/>
5. "I'm not as attractive as they are"	<input type="checkbox"/>	<input type="checkbox"/>
6. "I failed the test"	<input type="checkbox"/>	<input type="checkbox"/>
7. "I am overweight"	<input type="checkbox"/>	<input type="checkbox"/>
8. "He shouted at me"	<input type="checkbox"/>	<input type="checkbox"/>
9. "I'm selfish"	<input type="checkbox"/>	<input type="checkbox"/>
10. "There's something wrong with me"	<input type="checkbox"/>	<input type="checkbox"/>
11. "I'm lazy"	<input type="checkbox"/>	<input type="checkbox"/>
12. "I didn't lend my friend money when they asked"	<input type="checkbox"/>	<input type="checkbox"/>
14. "My feet are too big"	<input type="checkbox"/>	<input type="checkbox"/>
15. "I'm ugly"	<input type="checkbox"/>	<input type="checkbox"/>
16. "No-one will ever love me"	<input type="checkbox"/>	<input type="checkbox"/>

Answers: Facts (2, 6, 7, 8, 11, 12), Opinions (1, 3, 4, 5, 9, 10, 13, 14, 15, 16)

PSYCHOLOGYTOOLS.COM



Benzodiazepines		
SSRI antidepressants Atypical antidepressants Tricyclic antidepressants MAOI antidepressants Older mood stabilizers Newer mood stabilizers Older antipsychotics Newer antipsychotics Anticholinergics <b>Benzodiazepines</b> Other anxiolytic/hypnotics Stimulants Meds for dementia Meds for substance abuse Psychiatric uses of antihypertensives	1957	Librium (chlordiazepoxide)
	1970's	Valium (diazepam) top selling drug in US
	1986	Xanax (alprazolam) top selling drug in US
	1990's	SSRI's replace some chronic benzodiazepine use for anxiety



## Benzodiazepines & 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
- 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
- needing to increase the dose (tolerance) not generally an issue at therapeutic 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 predate

## 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

- SSRIs- Starting Doses
- Fluoxetine (Prozac) 5 mg
- Sertraline (Zoloft) 12.5 mg      Titrate UP
- Paroxetine (Paxil) 5 mg
- Fluvoxamine (Luvox) 25 mg      Rx for ONE YEAR
- Citalopram (Celexa) 5.0 mg      NO ONE DOSE
- Escitalopram (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

## Cymbalta-duloxetine

- 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

## SSRIs - Adverse Events

headache	Diarrhea
Insomnia	?GI bleeding
Nausea	Sexual
Nervousness	SIADH
Agitation	flip to mania
wt gain-Paxil	tremor

## SSRI/SNRI Discontinuation Symptoms in Adults<sup>1</sup>

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

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

**Table 3. Older Antidepressants for Anxiety Disorders**

Agent	Indication	Dosage
<b>Tricyclic Antidepressants (TCAs)</b>		
Amitriptyline	Panic disorder, <sup>a</sup> SAD <sup>a</sup>	75-200 mg po daily <sup>b</sup>
Desipramine	Panic disorder, <sup>a</sup> SAD <sup>a</sup>	100-200 mg po daily <sup>b</sup>
Doxepin	Anxiety	75-150 mg po daily
Imipramine	Panic disorder, <sup>a</sup> SAD <sup>a</sup>	100-200 mg po daily <sup>b</sup>
Nortriptyline	Panic disorder, <sup>a</sup> SAD <sup>a</sup>	25-75 mg po daily <sup>c</sup>
Trazodone	GAD <sup>a</sup>	150 mg po daily in divided doses <sup>d</sup>
<b>Monoamine Oxidase Inhibitors (MAOIs)</b>		
Isocarboxazid	Panic disorder, <sup>a</sup> SAD <sup>a</sup>	10-60 mg po daily
Phenelzine	Panic disorder, <sup>a</sup> SAD <sup>a</sup>	15-60 mg po daily
Tranylcypromine	Panic disorder, <sup>a</sup> SAD <sup>a</sup>	30-60 mg po daily

<sup>a</sup> Off-label indication; <sup>b</sup> Max dose 300 mg/day; <sup>c</sup> Max dose 75 mg/day; <sup>d</sup> Max dose 400 mg/day for outpatients or 600 mg/day for inpatients.  
GAD: generalized anxiety disorder; max: maximum; SAD: social anxiety disorder.  
Source: Reference 10.



## Second generation anxiolytics

- ◆ **Buspirone (BuSpar):** A weak agonist of 5-HT<sub>1A</sub> receptors, so no crossing or synergy with other CNS depressants
  - ◆ Buspirone is also antidepressant
  - ◆ No sedation, little amnesia or confusion
  - ◆ Very slow development of main effect: several weeks tid.
  - ◆ Useful for GAD and anxiety in older people.
  - ◆ Postsynaptic inhibition of adenylyl cyclase
  - ◆ Presynaptic inhibition of 5-HT synthesis

## Beta Blockers

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

## Other Pharmacological Options



- Mood Stabilizers (eg gabapentin 100-2000 mg/day)
- Atypical Antipsychotics
- Antihistamines
- Riluzole (Rilutek) ant glutamatergic drug approved for ALS\* (doses of 100 mg bid)
- Vilazodone (Viibryd)-off label
- Vortioxetine (Trintellix)-off label
- Levomilnacipran (Fetzima)-off label

\*Pitinger C et al. Riluzole augmentation in refractory OCD: a series of 13 cases. J Clin Psychopharm 2008; 28:363-367

## 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

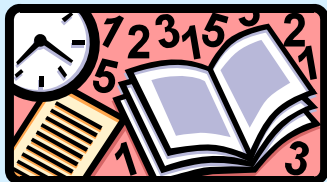
- The physician is uncertain of the primary diagnosis..
- Treatment does not lead to amelioration of symptoms within a reasonable period.
- Substance abuse is suspected.
- The patient expresses suicidal ideation.

## Working with the patient who is reluctant to be referred out

- **Use neurobiological explanations**
- **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

## Internet Resources

[www.adaa.org](http://www.adaa.org)

[www.nami.org](http://www.nami.org)

[www.nimh.nih.gov](http://www.nimh.nih.gov)

## Summary

- Anxiety Disorders are common
- 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