Recognition and Treatment of Panic Disorder

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Pre-Lecture Exam Question 1

1. The lifetime prevalence of panic disorder is approximately:

A. 17.1%

B. 0.7%

C. 3.5%

D. 24.9%

E. 13.3%

Question 2

2. Which of the statements regarding panic disorder treatment is true?

A. Alprazolam is more effective for panic disorder in women than men.

B. Women exhibit a higher rate of post-treatment relapse than men.

C. Buspirone works better for panic disorder in women than for men.

D. Women with panic disorder are at greater risk for depression than men.

E. Women with panic disorder experience only unexpected panic attacks.

Question 3

3. Compared with normals, individuals with panic disorder are more likely to exhibit all but which condition?

A. Migraine

B. Psoriasis

C. Hypertension

D. Irritable bowel syndrome

E. Vertigo

Question 4

4. Which one of the following statements about co-morbidity in panic disorder is not true?

A. GAD is the most common coexisting psychiatric disorder.

B. Social phobia is the most common coexisting comorbid psychiatric disorder.

C. Approximately 30% of those seeking attention have concomitant depression.

D. Somatization co-occurs with panic disorder in up to 15%.

E. Avoidant personality disorder is the most prevalent Axis II disorder in these patients.

Question 5

5. Which of the following statements is true regarding the use of buspirone for generalized anxiety disorder?

A. The onset of action is immediate, often as rapid as that of alprazolam.

B. Buspirone may be administered once a day.

C. Patients frequently report drowsiness and sedation.

D. Buspirone carries no risk of dependence or withdrawal symptoms.

E. Optimal response is usually achieved at a dose of 15 mg per day.

Question 6

6. Which of the following is true regarding generalized anxiety disorder in the elderly?

A. The prevalence of generalized anxiety disorder in the elderly is low.

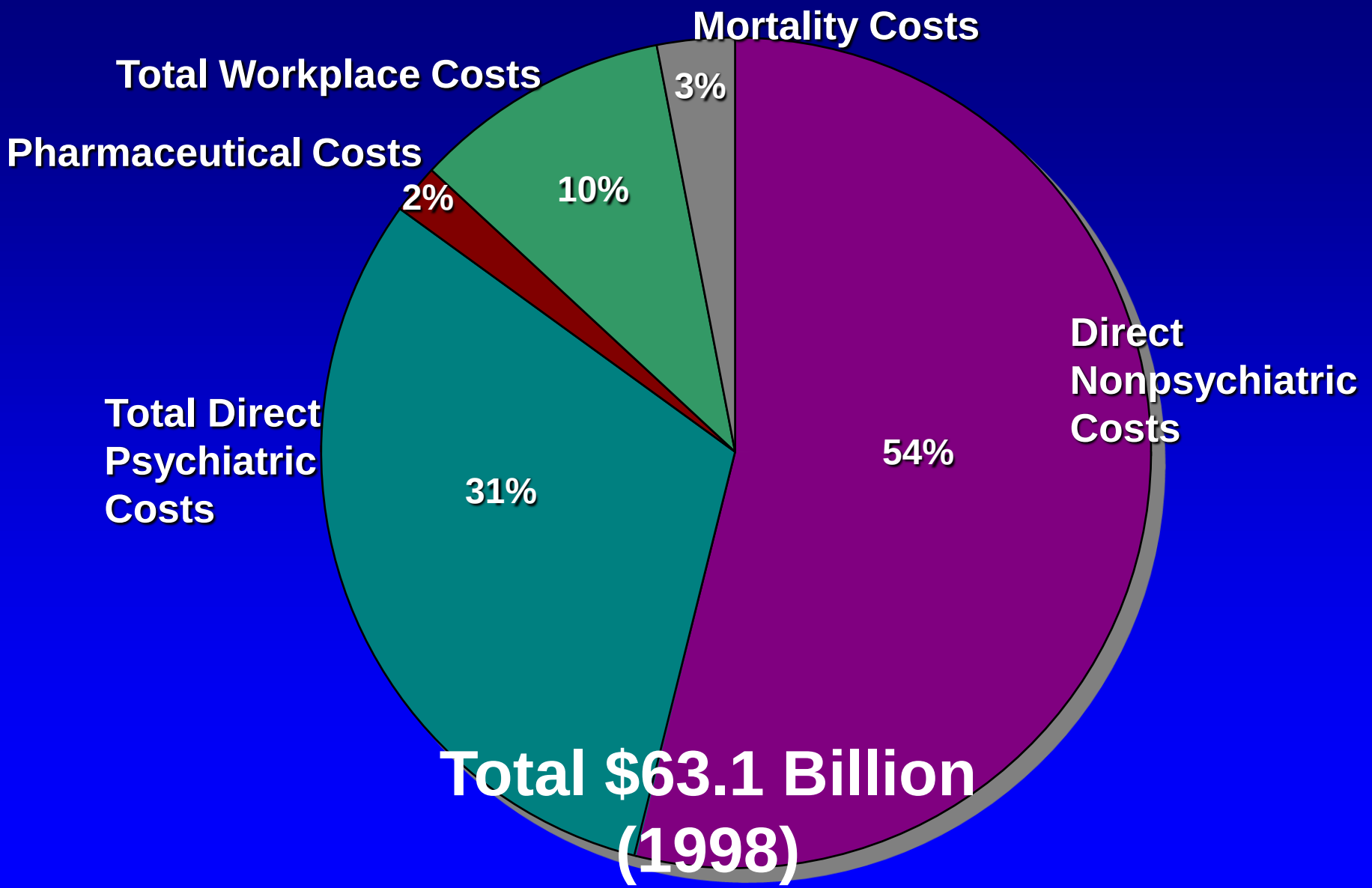
B. The long acting benzodiazepine diazepam is the preferable medication in these patients.

C. Hepatic clearance of anxiolytic medications is decreased in the elderly.

D. The use of TCA's is contraindicated in the elderly.

E. Elderly patients require higher doses of buspirone in order to achieve therapeutic effect.

COSTS OF ANXIETY DISORDERS



Total $63.1 Billion (1998)

Greenberg PE, et al. J Clin Psychiat 1999;60:427-435

COSTS OF ANXIETY

- **Additional Hidden Costs:**
  - **Educational and career limitation**
  - **Accrual of additional psychiatric disorders and related impairment morbidity**
  - **16% less people with anxiety are in the workforce vs... those with no anxiety**

Greenberg PE, et al. J Clin Psychiat 1999;60:427-435

DSM-IV Panic Disorder

- One or more unexpected panic attacks
- At least one month of worry, including change in cognition or behavior
- With or without agoraphobia

Panic Attack Symptoms

At Least 4 Symptoms, Peak in 10-20 Minutes

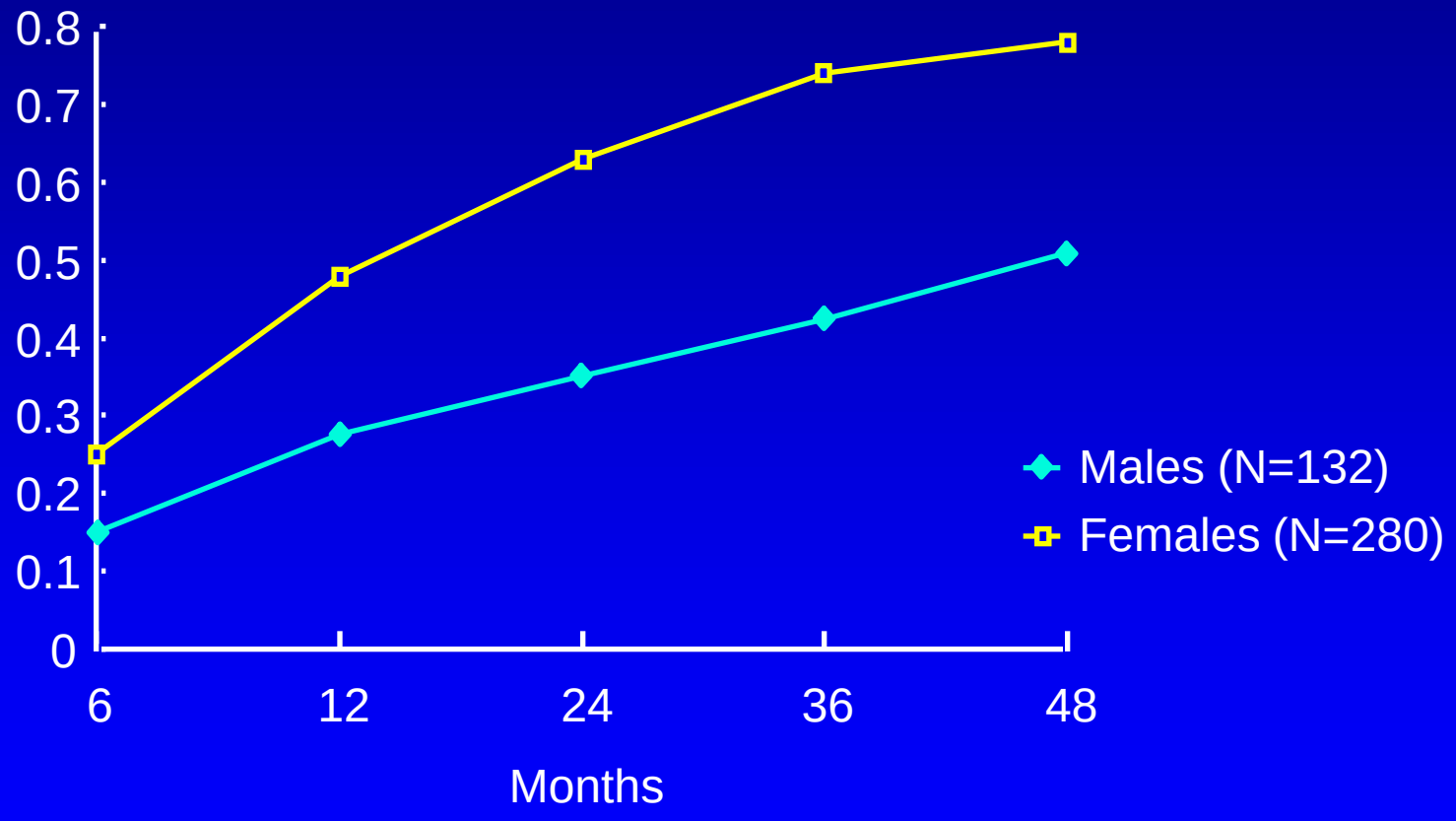
1. Palpitations, pounding heart
2. Chest Pain or discomfort
3. Shortness of breath
4. Feeling of choking
5. Feeling of dizzy, unsteady, lightheaded or faint
6. Paresthesias (numbness or tingling sensations)
7. Chills or hot flushes
8. Trembling or shaking
9. Sweating
10. Nausea or abdominal stress
11. Derealization (feelings of unreality) or depersonalization (being detached)
12. Fear of losing control or going crazy
13. Fear of dying

Panic Disorder Frequency in the U.S.

	Lifetime	12 Month
• Male	2.0%	1.3%
• Female	5.0%	3.2%

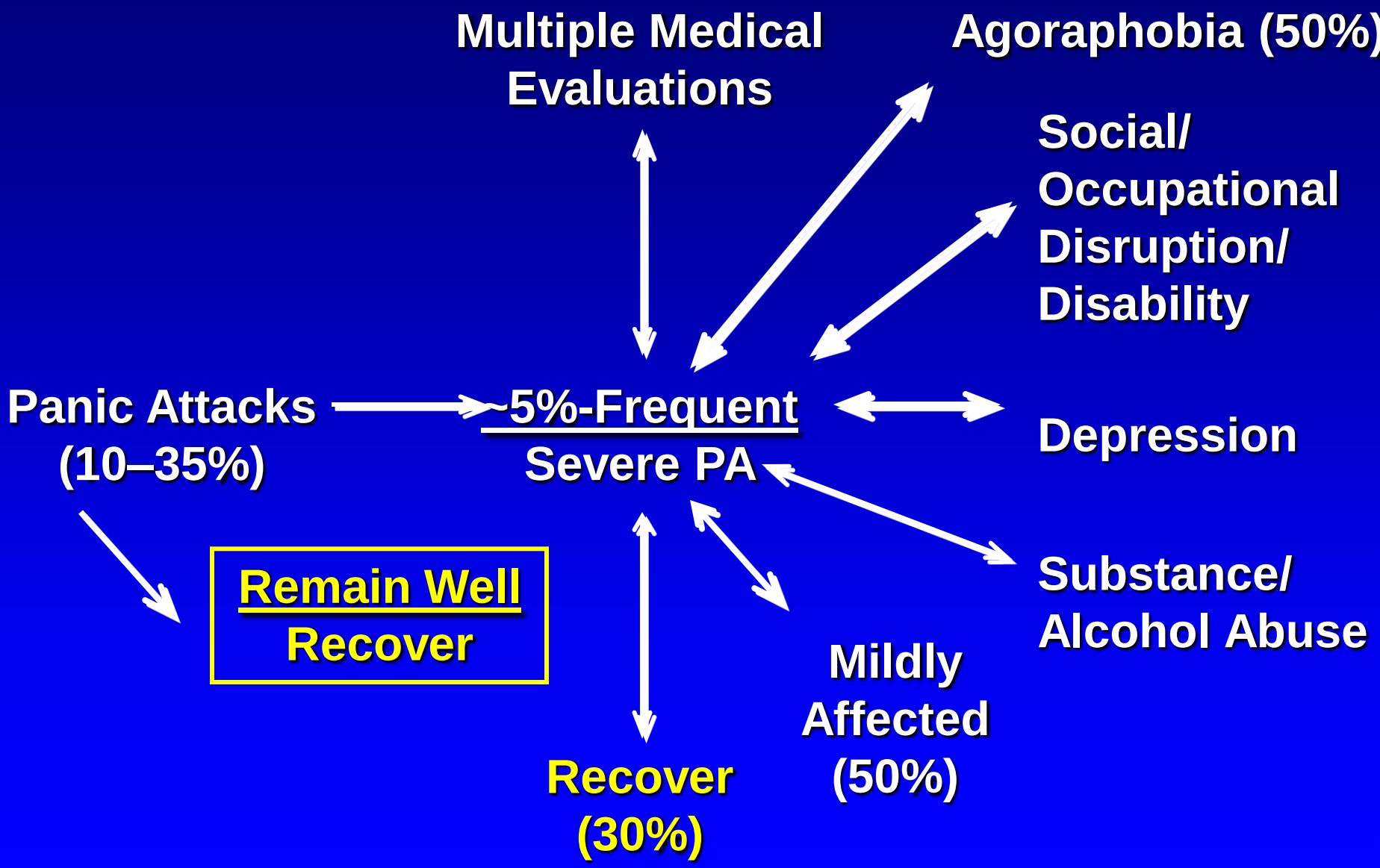
Kessler et al. 1994

Rate Of Panic Relapse In Treated Men And Women



Yonkers et al. In Submission.

Panic Disorder/Panic Attacks



“The sorrow that has no vent in tears may make other organs weep.”

Harry Maudsley, MD 1835-1918

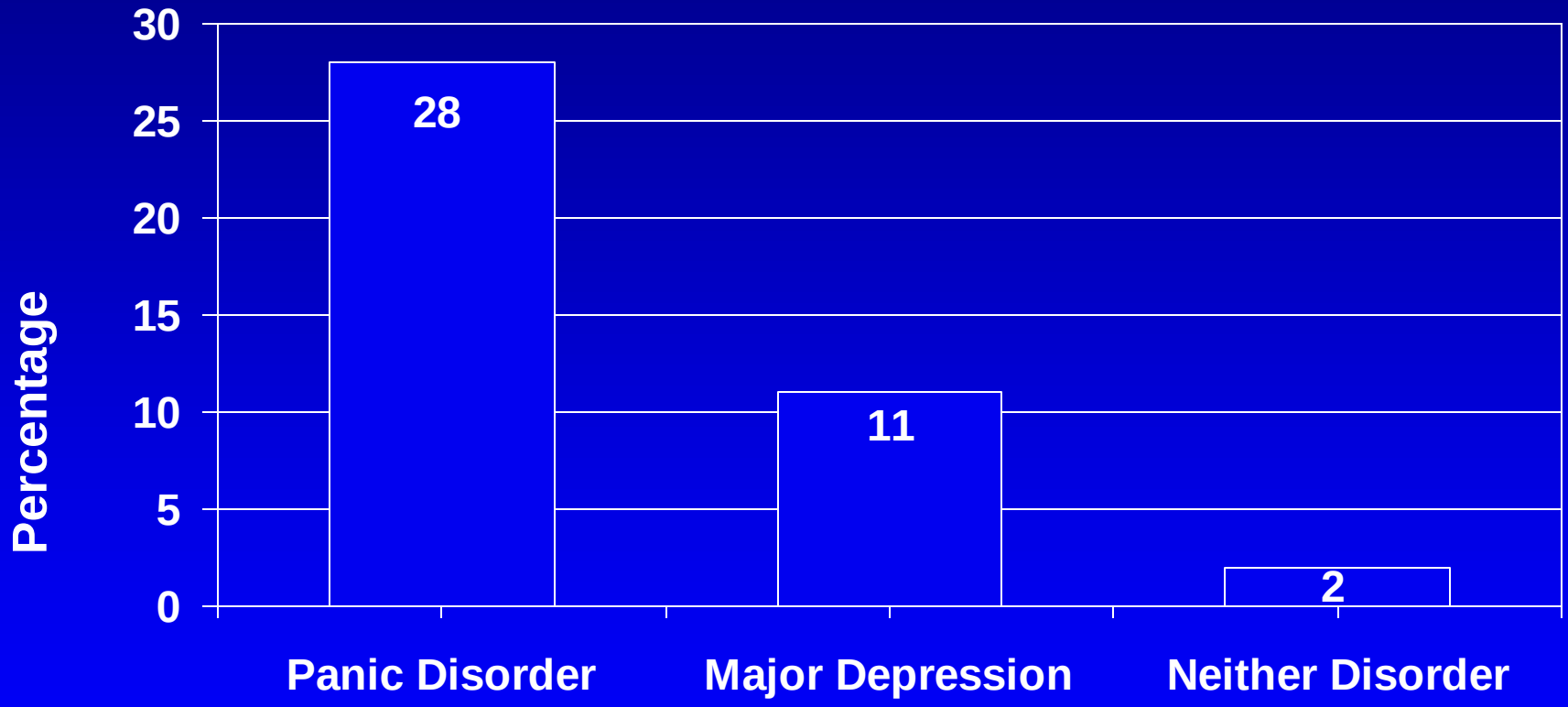
Medical Utilization
Top 10% of Users

Odds ratio 5 MD visits

	Males	Female
• MDE	1.5	3.4
• Panic disorder	8.2	5.2
• Phobic disorder	2.7	1.6

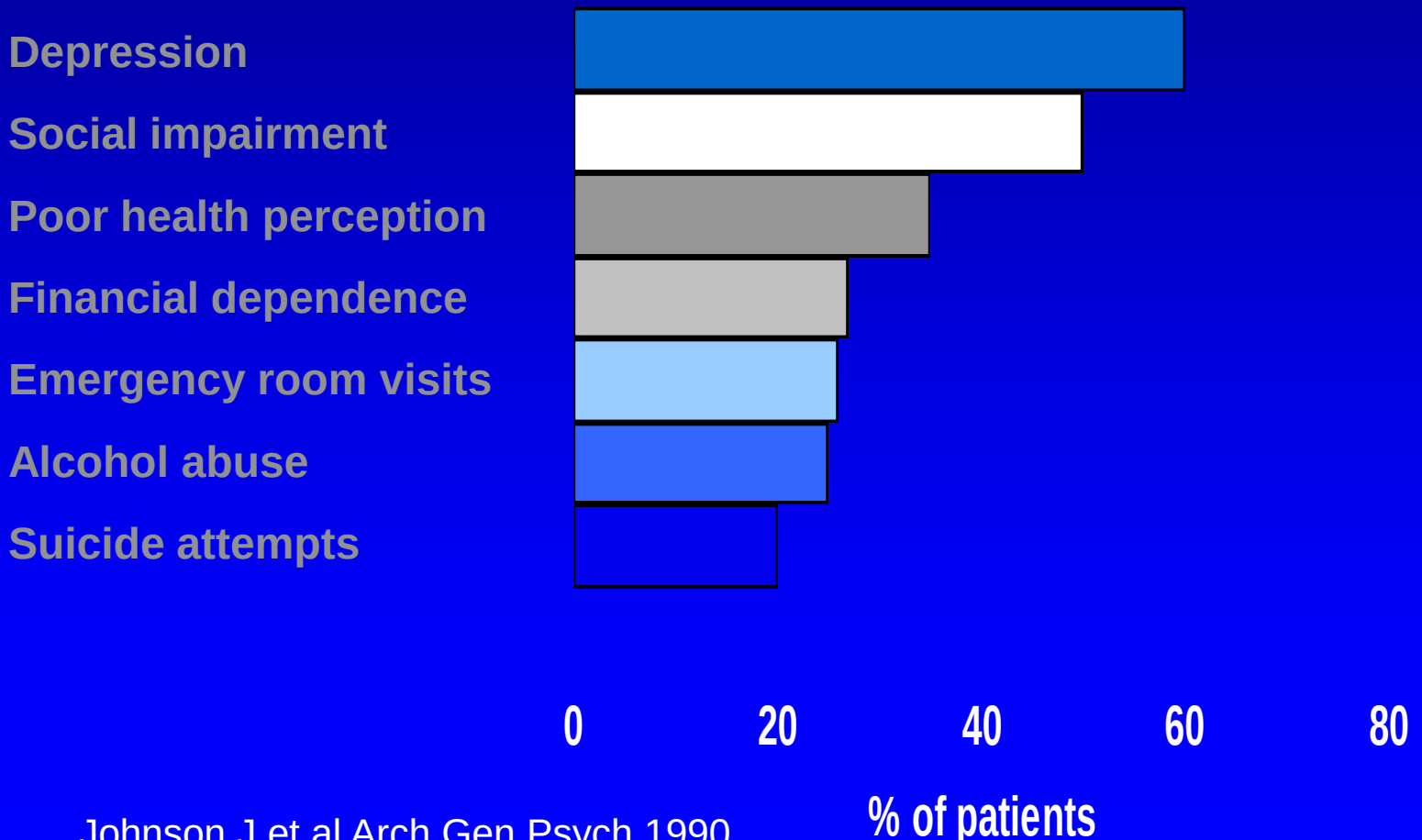
Simon and Von Korff, 1991

Percent Using Emergency Room for Emotional Problems Past Year



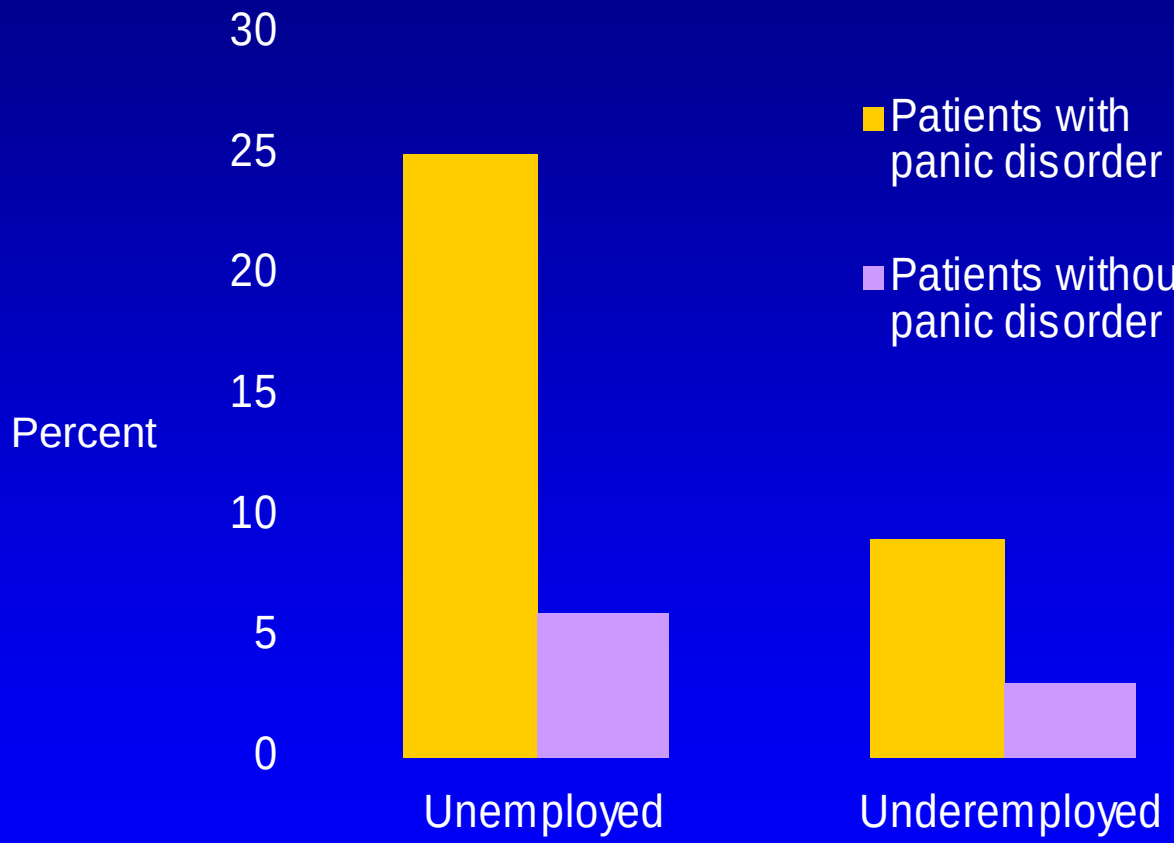
Weissman, 1991

Morbidity of Panic Disorder: Epidemiological Catchment Area Survey



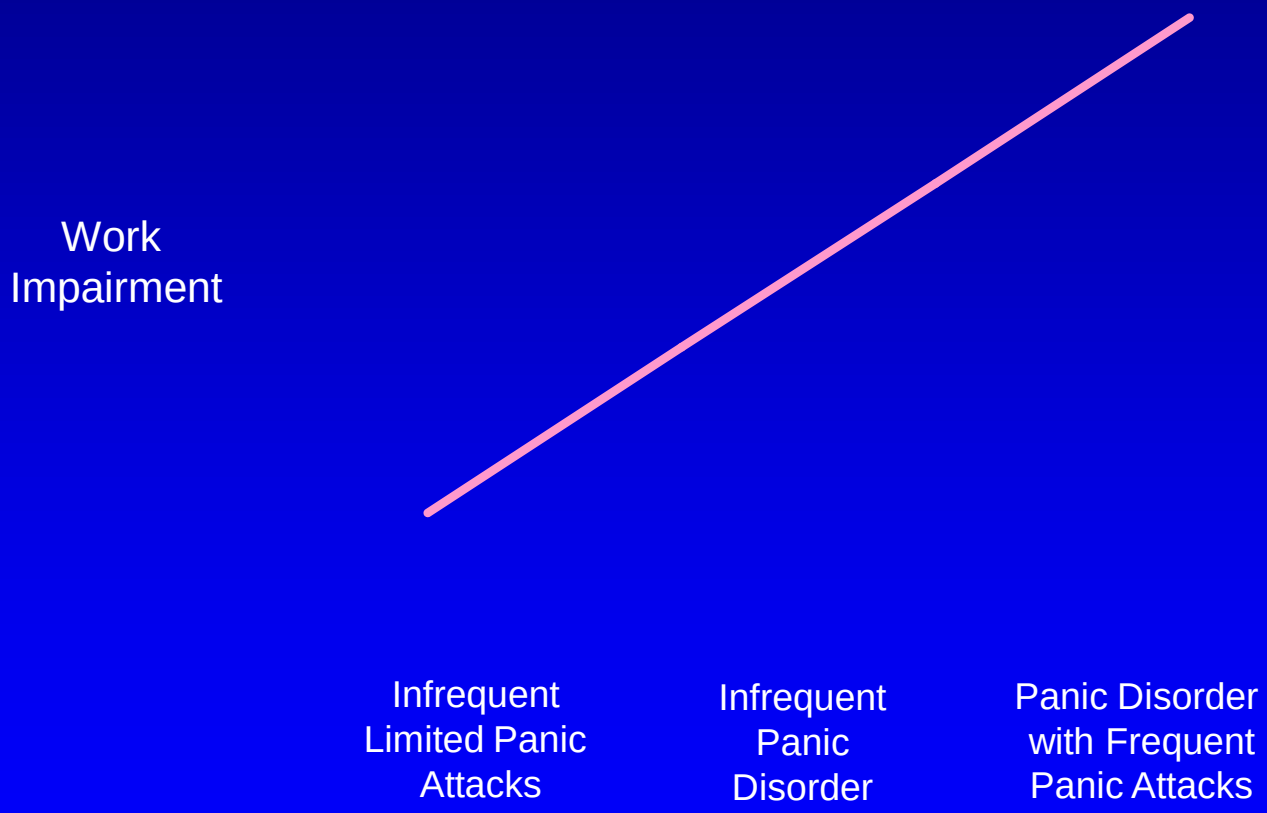
Johnson J et al Arch Gen Psych 1990

Occupational Functioning and Panic Disorder



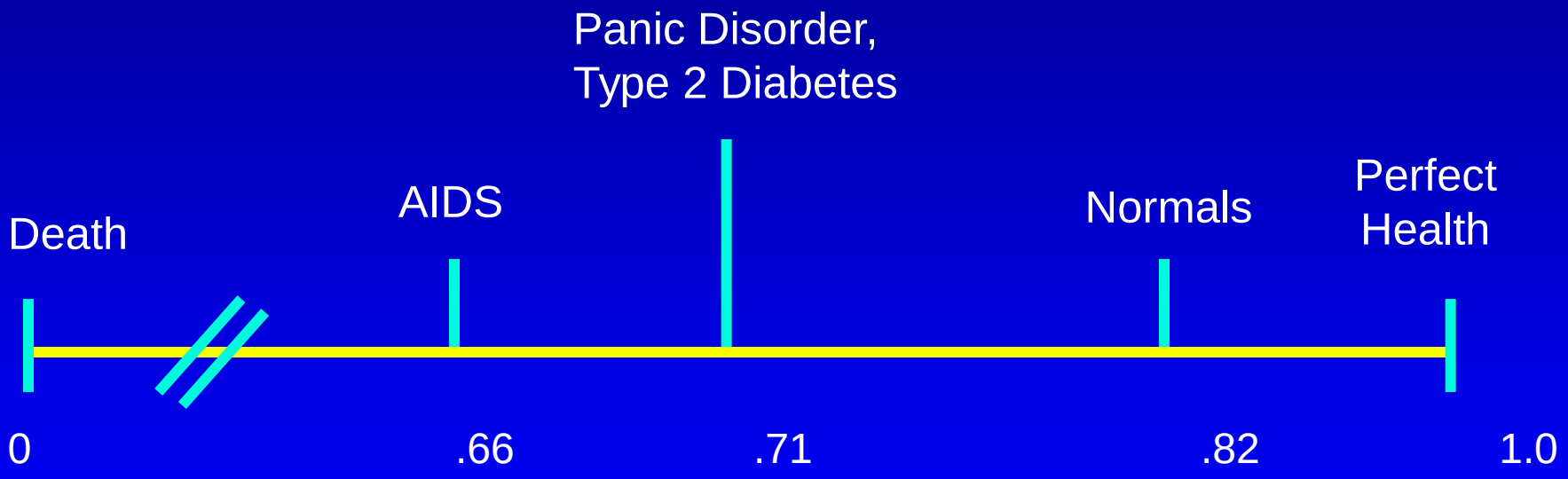
Katerndahl and Realini. *J Clin Psychiatry*. 1997.
Ettigi et al. *Journal of Nerv and Ment Disorder.* 1997.

Spectrum Panic and Dysfunction

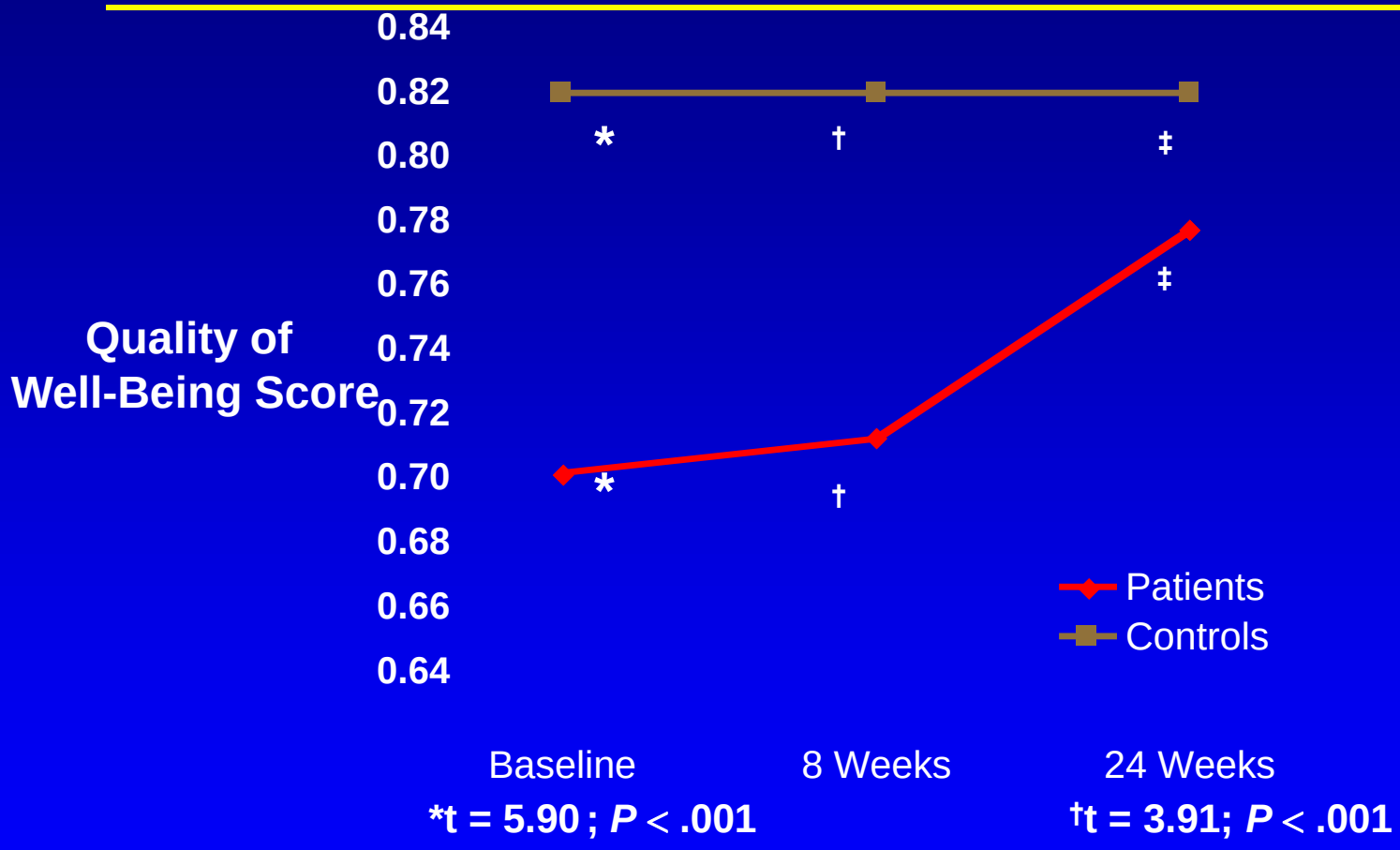


Katerndahl DA, Realini JP. *Depress Anxiety.* 1998;8:33-38.

Comparing Disease States with the Quality of Well-Being



Quality of Well-Being Scores Normalize with Panic Treatment



*t = 5.90 ; *P* < .001

†t = 3.91; *P* < .001

‡ns

Rubin et al. *APA*. Miami. 1995.

Psychiatric Comorbidity

- The presence of more than one psychiatric disorder at the same time

Comorbidity:What do you see?

A face... Or the word **Liar?**

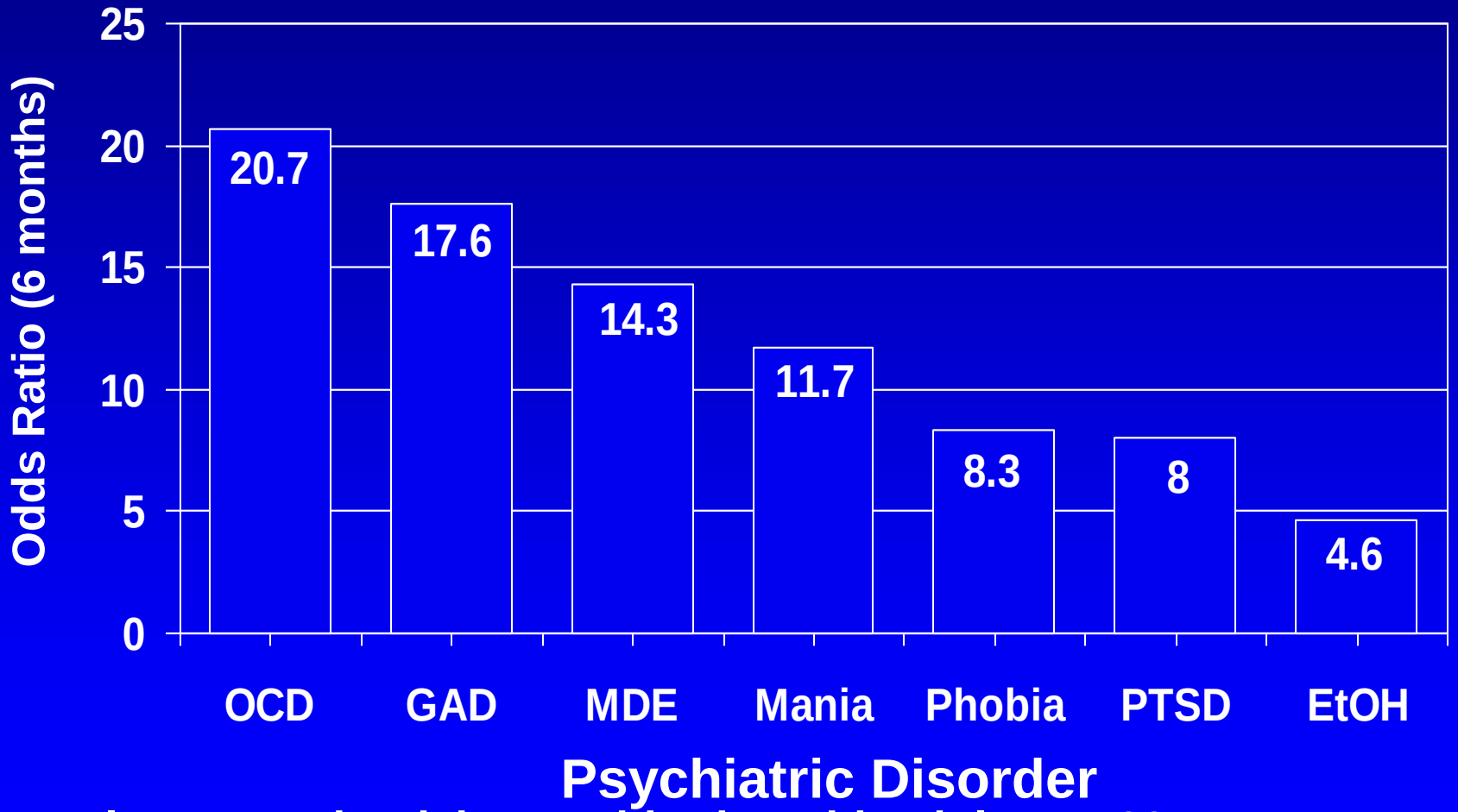
Comorbidity In Panic Disorder

Comorbid Conditions Provide Important Clues

- Clinical characteristics and severity
- Course and outcome
- Treatment response

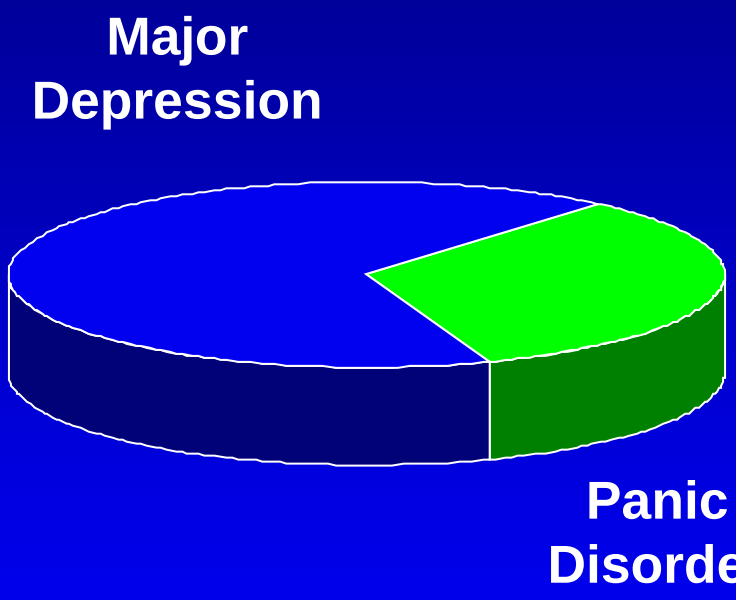
Panic Disorder

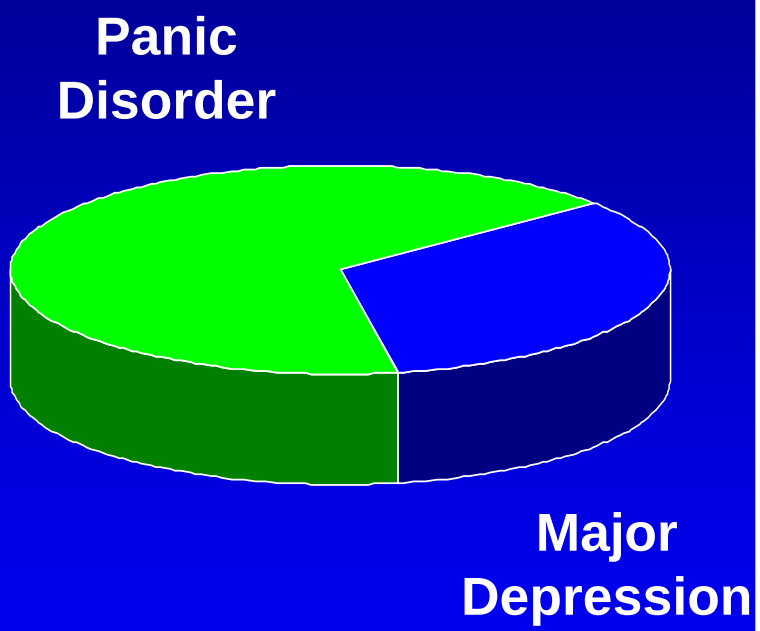
Increased Risk for Additional Psychiatric Disorders



Kessler, R. Textbook in Psychiatric Epidemiology, 1995

Comorbidity of Depression and Panic Disorder



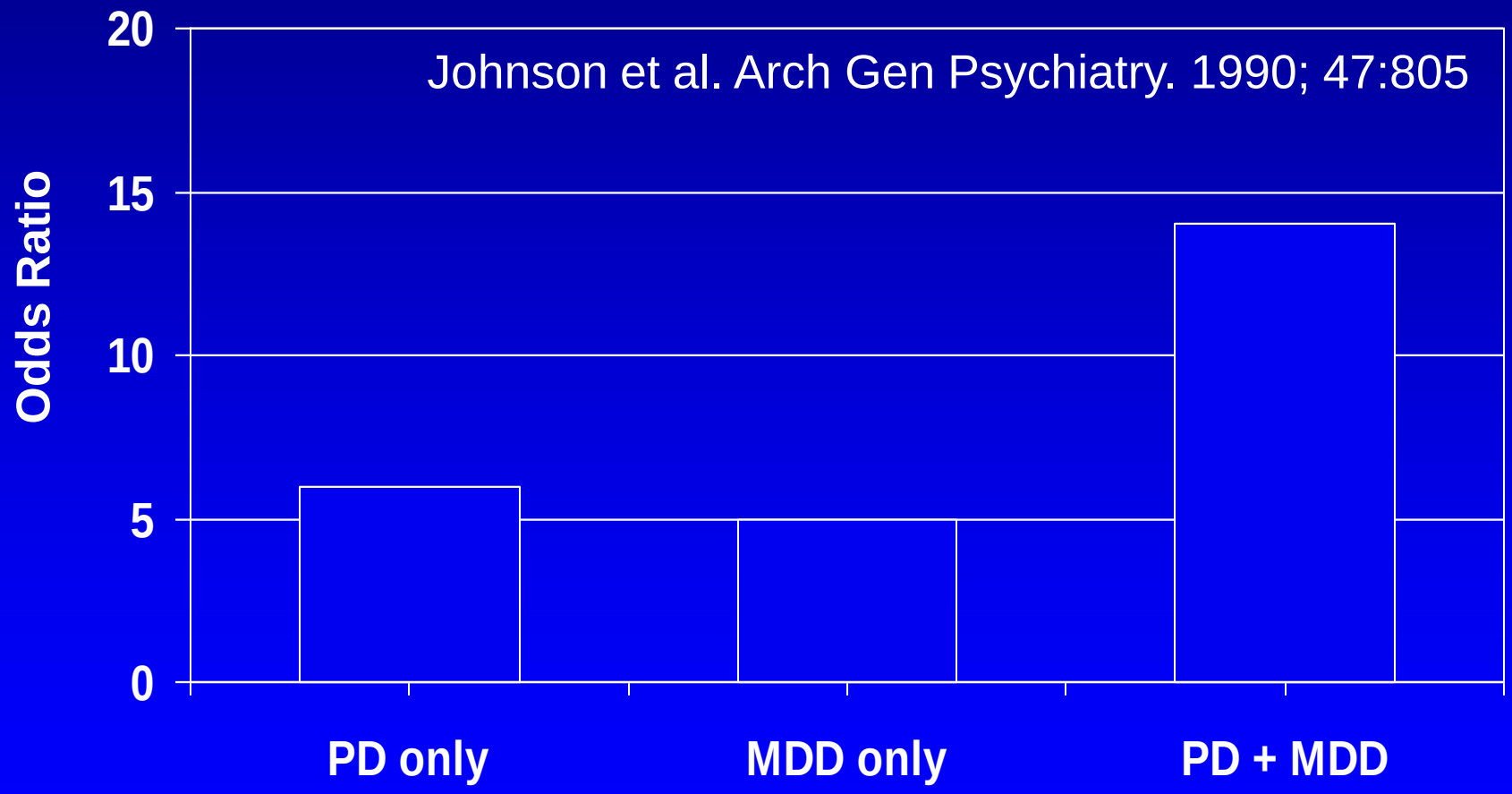


Most recent data:1/3 of patients with panic disorder have current major depression and 2/3 have lifetime major depression

Panic Disorder and Major Depression Clinical Characteristics

- Over 50% have melancholia
- More anxiety
- More depression
- More phobia
- Longer course of illness

Suicide Attempts
ECA Study: PD + MDD

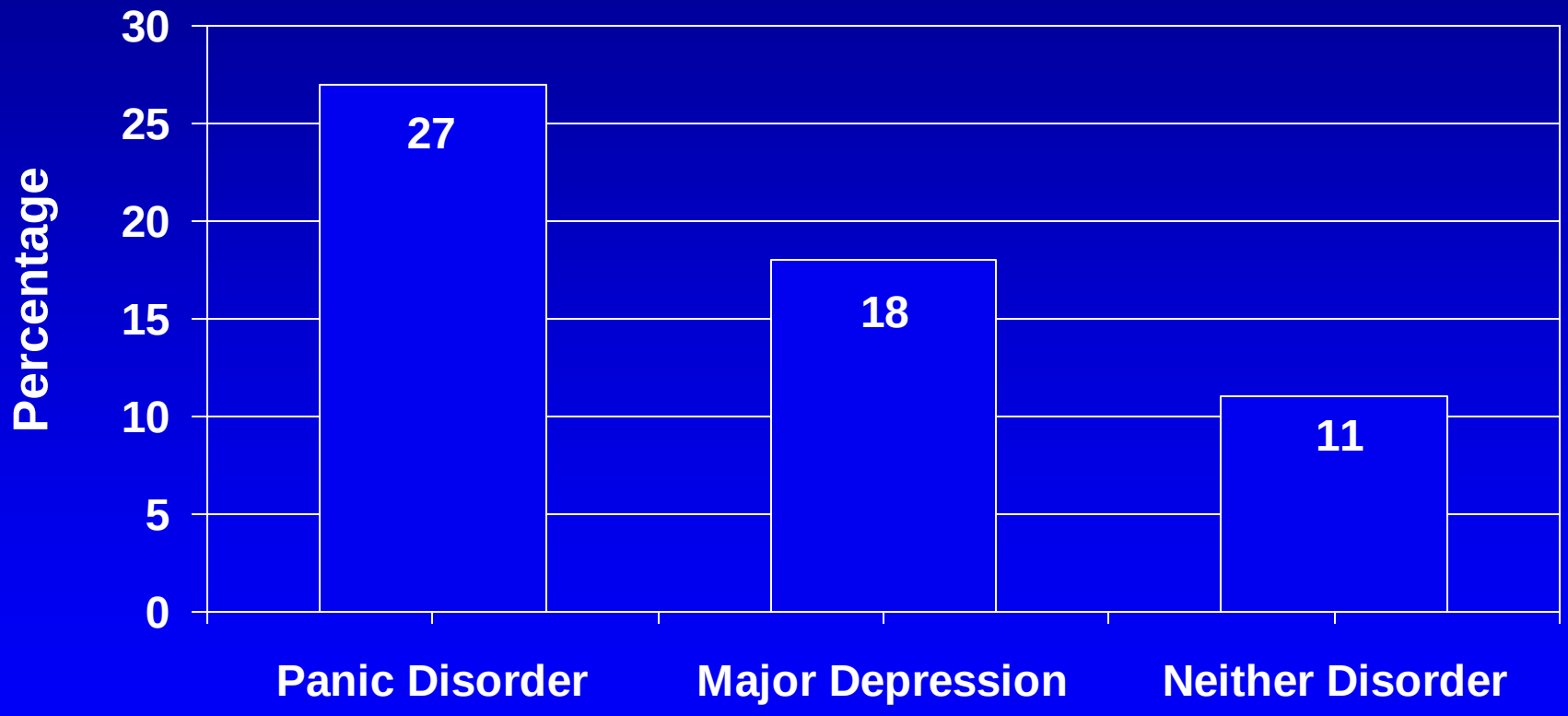


Panic Disorder and Major Depression Long- Term Follow-Up

- More psychosocial impairment
  - Financial assistance
  - Disability
- More hospitalizations
- Poorer overall outcome

Von Valkenberg et al. J Affect Disord 1984; 6:627

Frequency of Alcohol Abuse by Diagnosis



Weissman, 1991

Psychiatric Approach to the Panic Disorder Patient

Definitive diagnosis important

Symptom Presentation-->Diagnosis

History of PA in past?

Personal and Family History

Psychosocial and Medical History

Treatment Decisions should be made in collaborative fashion

Panic Assessment: Clinical Approach

- Elicit Symptoms -->Make Diagnosis
- Family History
- Psychosocial (stress) , Medical History
- Definitive diagnosis important
- Treatment decisions should be made in collaborative fashion

Panic Attacks: Differential Diagnosis

- Different anxiety disorder
  - PTSD,Social phobia, OCD, GAD
- Substance abuse
  - CNS stimulants,sedative-hypnotic withdrawal, cannabis
- Medical Condition
  - COPD, CAD Medication-OTC, herbals, etc
- Other

Symptom Presentation: Panic Attacks

- Assess panic attacks
  - What are Sx?
  - Unexpected vs.. “cued” /stimulus bound
  - How frequent are they?
- Cognitive change present?
  - Fear of consequences or implications?
  - Are there lifestyle/behavioral changes?
- Avoidance due to fear?

Other Relevant History

- Reproductive status/sexual functioning
  - pregnancy
  - planning pregnancy
- Important Relationships
  - Can enhance compliance with treatment
  - "Safe person"
- Assess for occupational, social, family role impairment

Family History

- Panic and other anxiety disorders
- Depression
- Alcoholism
- Treatment and outcome results

Medical Conditions That Overlap with Panic Disorder (Conditions with increased frequency of PD)

- Mitral valve prolapse
- Migraine
- Irritable bowel syndrome
- Chronic fatigue syndrome
- Vertigo
- Hyperventilation syndrome
- Premenstrual syndrome

Routine Medical Evaluation for Panic Disorder

History

- Complete description of physical symptoms
- Medical history
- Family history
- Drug and medication history

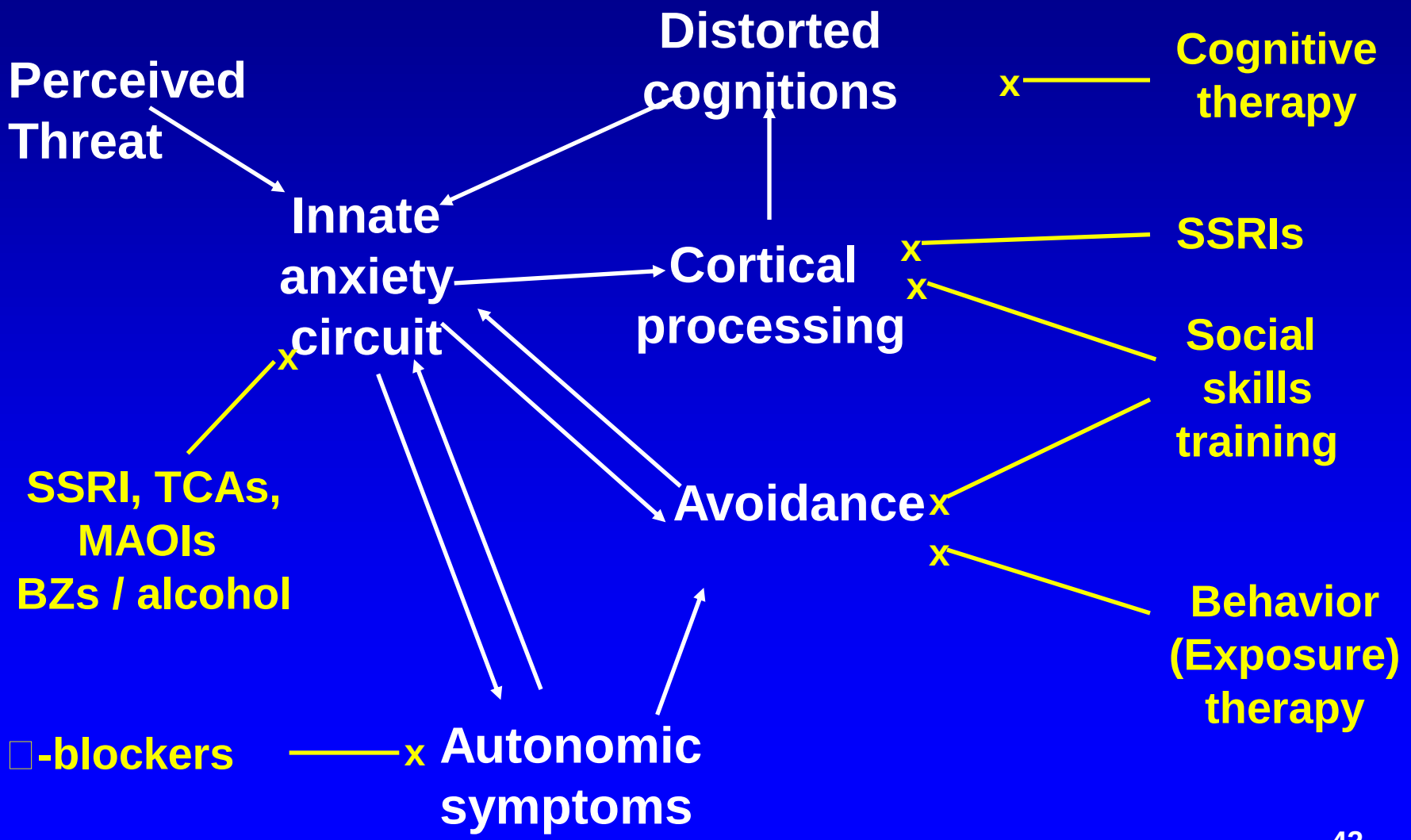
Routine Medical Evaluation for Panic Disorder

- Physical examination
- EKG
- Laboratory
  - CBC
  - Electrolytes, BUN, creatinine, glucose
  - Urinalysis
  - T_4, and TSH

Indicators for Further Medical Evaluation

- **Panic attacks clearly and consistently related in time to meals**
- **Loss of consciousness**
- **Seizures, amnestic episodes**
- **Symptoms similar to panic attacks but without the intense fear or sense of impending doom (non-fear panic attacks)**
- **Unresponsiveness to treatment**
- **Real vertigo**

Possible Sites of Action of Treatments



Panic Disorder Treatment: General Principles

- Collaborative-Consultant Approach
- Education
  - Diabetes as Model for education
  - Patient and Family/Significant Other
  - "Normal response to panic attacks"
  - Not the patients fault--familial/genetic

Panic Disorder Treatment: General Principles

- Pharmacotherapy
- Cognitive-Behavior Therapy (CBT)
  - Manual-driven CBT treatment to normalize “catastrophic thinking”
  - Exposure to panic Sx, other feared situations

Panic Disorder Treatment: General Principles

- **Medication Rx: Antidepressant**
- **SSRIs First Line**
  - **Other ADs work**
  - **Venlafaxine (Effexor)**
  - **Nefazodone(Serzone)**
  - **Benzodiazepines and Beta-blockers useful adjunctive Rx**

Panic Disorder Outcome Assessment

- Phobic avoidance
- Cognitive distortion
- Depression
- Substance or alcohol
- Somatic symptoms
- Panic attacks least useful measure
- *Functional status is key issue !!*

Panic Disorder: Patient Orientation

- Outline plan and expected response
  - Order of symptom relief (PA-->Phobia)
  - Time frame
  - Map out "next steps"
- Address drug treatment duration
  - Eyeglasses as model
- MD as collaborator-consultant

Panic Disorder: Initial Treatment Considerations

- Anticipate drug side effects
  - Mental Judo:(“jitteriness= correct Dx) during initiation of meds
- Office/phone contact often initially to enhance compliance later

Clinical Response in Panic Order and Timing

- Unexpected Panic -anticipatory anxiety>--cognitive -->agoraphobia
  - Reverse of order of onset
- Time Frame-Varies Significantly
  - 2-6 weeks-unexpected PA subside
  - 8-12 weeks-Cued panic, anticipatory anxiety
  - 8-? Weeks-Agoraphobic avoidance

CBT for Panic Disorder

- Based upon empirical evidence for fear of bodily sensations in panic disorder
- Target 1: Decrease physical sensations
  Technique: Breathing retraining
- Target 2: Interrupt catastrophic misinterpretation of bodily sensations
  Technique: Cognitive restructuring
- Target 3: Decrease conditioned fear of bodily sensations
  Technique: Interoceptive exposure

CBT for Agoraphobia

- Develop hierarchy of phobic situations (crowds, bridges, tunnels etc.)
- Conduct therapist-assisted and/or homework-assigned In vivo exposure to phobic situations

Panic Disorder Medications

SSRIs, Novel ADs	Activation , sexual dysfunction, weight gain
Benzodiazepines	Not antidepressant , physiologic dependence/ potential withdrawal, initial coordination and sedation effect
TCAs	Limited range of efficacy, activation, cardiovascular adverse effects , overdose danger
MAOIs	Diet / drug interaction, postural hypotension, hyposomnia, weight gain, sexual dysfunction, overdose danger

Panic Disorder
Medications That Don't Work

- Bupropion (Wellbutrin)
- Trazodone (Desyrel)
- Buspirone (Buspar)
- Neuroleptics*Beta-blockers

Panic Disorder: SSRIs are "First Line" Treatment*

- **Efficacy ~ 50-70% for each SSRI**
- **Different patients may respond to different SSRIs**
  - **Try ≥ two SSRIs before switching class**
- **Initial dose = 1/4 to 1/2 initial antidepressant dose- (or less!)**
  - **Fruit Juice ("Cran-zac", "Applezac"), water, applesauce to allow small initial dose**
- **Final dose may be more than 2x antidepressant dose**

***APA Treatment Guidelines**

SSRIs for Panic Disorder: Advantages

- Wide safety margin
- Relatively low side effect profile
- Broad spectrum of mood and anxiety efficacy
- No significant cardiovascular effects
- No or minimal anti-cholinergic effects

SSRIs For Panic Disorder: Disadvantages

- May have delayed onset
- Initial activation
- Sexual side effects -25-60%
- Weight gain over 3-12 months in small but clinically significant subgroup

SSRI Treatment of Panic Disorder

- Low initial dosing (25–50% antidepressant dose)
  - Sertraline 12.5–25 mg
  - Paroxetine 10–20 mg
  - Fluoxetine 5–10 mg
  - Fluvoxamine 25–50 mg
  - Citalopram 10–20 mg
- Antidepressant dosage level or above often required

TCAs

- **Advantages**

- **Volume of clinical experience**
- **Antidepressant**
- **Imipramine + desipramine plasma levels ≥ 100 ng/ml likely effective for many patients**

TCAs for Panic Disorder: Disadvantages

- Delayed onset of action
- Significant side effects burden
  - Weight gain
  - Sexual dysfunction 25-40%
- Anticholinergic effects
- Cardiotoxicity
- Danger with overdose

Antidepressant Discontinuation

- Gradual taper (≥ 2 months)
- Properties of agent affect timing and severity of discontinuation Sx
  - Shorter t 1/2 -earlier
  - No active metabolite-earlier
  - Extended release formulation does not protect

Discontinuation/Withdrawal Symptoms Following SSRI Treatment

- Anxiety/agitation
- Light-headedness
- Insomnia
- Fatigue
- Nausea
- Headache
- Sensory disturbance

Zajecka et al. J Clin Psychiatry 1997;58:291.

Benzodiazepines for Panic Disorder: Advantages

- Effective
- Rapid onset
- Tolerability
- Safety

Benzodiazepines for Panic Disorder: Disadvantages

- **No antidepressant efficacy**
- **Physiologic dependence**
- **Sedation and coordination problems**
  - **(2 - 4 weeks)**
- **Subjective memory loss**
  - **Inconsistent empirical evidence**

Panic Disorder: Efficacy for Common Comorbid Psychiatric Disorders

Type of Agent	Panic Disorder	Social Phobia	Major Depression
MAOIs	+++	+++	+++
SSRIs	+++	++	+++
TCAs	+++	+/-	+++
BZs	+++	+++	+/-
Bupropion	0	?	+++
Nefazodone	+	+	+++
Trazodone	+/-	?	+++
Venlafaxine	++	+	+++
Mirtazepine	+/-	?	+++

Polypharmacy for Panic Disorder

- Benzodiazepines
  - Jitteriness, anticipatory anxiety, insomnia
- Beta Blockers
  - Tremor, palpitations, sweating
- Bupropion
  - Sexual side effects

Panic Disorder: Definition of Response

- Symptoms
  - Panic attacks: at least 50% decrease
  - Other PD symptoms clearly much or very much improved (anticipatory anxiety, phobic symptoms)
- Time frame
  - to response: 6-12 weeks
  - of response: 4 -8 weeks

Definition Remission

- Full relief of symptoms
- No panic attacks (or not more than 1 mild one in a 4-8 week period)
- No clinically significant anxiety
- No clinically significant phobic symptoms
- Remission may be rare

Panic: Inadequate or Non-response

- Identify element (s) unimproved
  - Panic attacks, avoidance, anticipatory anxiety, depression
- Medication dose and duration inadequate?
  - No-->Increase?
  - Yes-->Augment?
  - Yes-->Change?
- All adequate?-->Add CBT
- Reconsider diagnosis

Panic Disorder: Who needs Long-term Treatment?

- The majority of patients need long-term Rx
- Relapse rates after discontinuation of medication significant
  - -60% within 3-4 months after stopping meds*
  - CBT may assist in successful discontinuation
- Tapering medication should be very gradual and correlate with duration of treatment (2-6 months**)

*Relapse may be higher for BZ monotherapy

**Optimal taper may be longer after long-term BZ

Effective Long-term Treatments for Panic

- SSRIs and other antidepressants
  - Preferred for long-term treatment
- Benzodiazepines
  - Monotherapy effective; risk for emergent depression
- CBT
- Combination

Benzodiazepine Pearls

- **Benzodiazepines**
  - **Tolerance to anxiolytic effects very rare**
  - **Lower maintenance than acute doses often sufficient**
  - **Abuse in anxious patients *very rare***
  - **Clinician's confidence in his ability to help patient completely discontinue BZ is critical**

Patients Can Discontinue BZs if:

- Patient is motivated and well-informed about taper plan
- Clinician concurs
- No stressful events expected
- Very gradual taper is used
- Patient understands that
  - Return of original Sx is NOT FAILURE
  - Continued Rx may indicated

BZ Taper Outcome

- Panic-related symptoms which stably persist reappear during taper
  - Clinically informative outcome of taper attempt
  - Indicate that continued Rx necessary
- Options
  - Continue pharmacotherapy
  - Add CBT, attempt taper again later
  - Combined

BZ Taper Strategy

- ~10% reduction in dose / 2-3 wks
  - No more than 25% per week
- At 50% of initial dose, slow taper
- Short-acting BZ: Maintain multiple daily doses to minimize plasma level fluctuations
- Switch to long-acting agent may be useful but probably not necessary
- CBT may enhance taper success

Recurrence of Sx during Taper Suggested Strategy

- Stop taper
  - May increase dose to tolerable discomfort level
- Hold at same dose 2-4 weeks
  - If Sx Persistent =Probably Panic-related
  - If Sx gone= Probably BZ taper -related
- New Sx more likely withdrawal
  - Sensitivity to noise and light
  - Dysesthesia, others

Is Long Term BZ for Panic Disorder Acceptable?

- PDR: BZ are ok for 4 months--
  - Then what???
- American Psychiatric Association Formally Supports Use of Long-term BZ As Needed (Salzman)
  - For Panic Disorder, GAD
  - Intolerance to other meds
  - Incomplete response

Long Term BZ May Be Justified

- Document rationale for long-term requirement in record
- Significant other(s) can corroborate if:
  - Continued benefit
  - No non-medical BZ use (abuse)
  - No BZ-related toxicity
- Consultation from colleague to document medico-legal and clinical clarity

If it’s anxiety look for depression

When in doubt, treat as if depression was imminent

Summary
Treatment Decisions

- Initial pharmacotherapy: SSRIs; start low
- Start with low dose
- Use ≥ 2 different SSRIs before changing classes
- Utilize CBT to reduce attrition, reduce fear of bodily sensations, eliminate phobic avoidance, and facilitate discontinuation of medication

Summary

- "If it quacks like a duck and waddles, it is likely a duck."
- Panic disorder is common and disabling, and is treatable
- Under-recognized and under-treated
- Functional status -NOT panic attacks for outcome

Post Lecture Exam
Question 1

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B. 0.7%

C. 3.5%

D. 24.9%

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C. Hypertension

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4. Which one of the following statements about co-morbidity in panic disorder is not true?

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B. Social phobia is the most common coexisting comorbid psychiatric disorder.

C. Approximately 30% of those seeking attention have concomitant depression.

D. Somatization co-occurs with panic disorder in up to 15%.

E. Avoidant personality disorder is the most prevalent Axis II disorder in these patients.

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D. Buspirone carries no risk of dependence or withdrawal symptoms.

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B. The long acting benzodiazepine diazepam is the preferable medication in these patients.

C. Hepatic clearance of anxiolytic medications is decreased in the elderly.

D. The use of TCA's is contraindicated in the elderly.

E. Elderly patients require higher doses of buspirone in order to achieve therapeutic effect.

Answers to Pre & Post Competency Exams

1. C
2. B
3. B
4. C
5. D
6. C