Social Anxiety Disorder (aka Social Phobia)

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Pre-Lecture Exam Question 1

1. **The lifetime prevalance of social anxiety disorder is approximately:**

A. 13.1%

B. 0.7%

C. 3.5%

D. 24.9%

E. 13.3%

Question 2

2. **Which of the statements regarding social anxiety disorder treatment is true?**

A. Social anxiety disorder is more common than panic disorder.

B. Social anxiety disorder does not respond to tricyclic antidepressants

C. Buspirone is more effective for social disorder than alprazolam.

D. Women with social anxiety disorder is as disabling as major depression.

Question 3

3. Compared with normals, individuals with social anxiety disorder are more likely to develop all but which condition?

A. Alcoholism

B. Major Depression

C. Antisocial personality

D. Panic Disorder

E. PTSD

Question 4

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

A. GAD is the most common coexisting psychiatric disorder.

B. Social phobia is a risk factor for depression.

C. Approximately 25% of patients with social phobia abuse alcohol.

D. Generalized social anxiety disorder is more likely to be associated with comorbidity.

E. Avoidant personality disorder is the most prevalent Axis II disorder in generalized social anxiety.

Question 5

5. Social anxiety is poorly recognized because:

A. It is unimportant.

B. Sufferers are reluctant to seek attention for it.

C. Sufferers are unaware that it is a treatable condition.

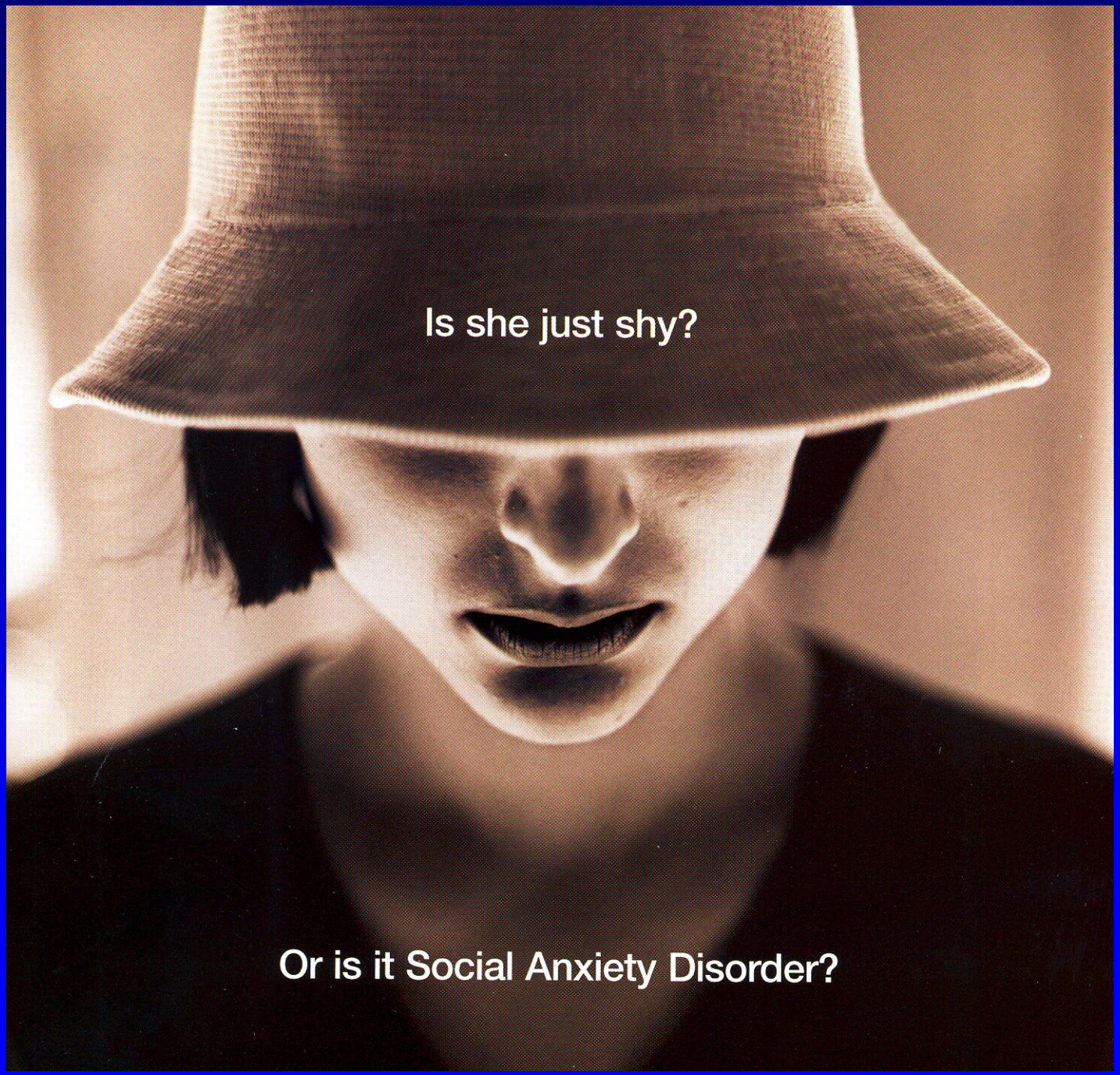
D. Professionals are unaware of it.

E. All of the above.

“The human brain is a wonderful thing. It operates from the moment you’re born, until the first time you get up to make a speech.”

–Howard Goshorn

(And Toastmasters)


Is she just shy?
Or is it Social Anxiety Disorder?

Sensitivity to Scrutiny

Social Anxiety Disorder

Ereuthrophobia	Casper, 1842
Kontacktneurosen	Stockert, 1929
Tai-jin-kyofu	Morita, 1932
Social neurosis	Shilder, 1938
Social anxiety neurosis	Myerson, 1945
Social phobia	Marks, 1968

[A man who] “through bashfulness, suspicion and timorousness, will not be seen abroad; … his hat still in his eyes, he will neither see nor be seen by his goodwill. He dare not come in company for fear he should be misused, disgraced, overshoot himself in gestures or speeches or be sick; he thinks every man observes him.”

A patient of Hippocrates as recounted by Robert Burton. In: Anatomy of Melancholy. 121 p. 272

DSM-IV: Social Anxiety Disorder

- Fear that performance will prove humiliating or embarrassing
- Not related to other axis I or III disorders
- Exposure to feared situation $\rightarrow$ anxiety
- Avoidance or distress
- Social or occupational problems or worried about fear
- Knows fear is excessive

Lifetime And 12-Month Prevalence Of Anxiety Disorders In The NCS

Affective Disorders	Lifetime/ 12 mo. (%)	
Panic Disorder	3.5	2.3
Agoraphobia without panic	5.3	2.6
Social Phobia	13.3	7.9
Simple Phobia	11.3	8.8
Generalized anxiety disorder	5.1	3.1
Posttraumatic stress disorder	7.6	3.9
Any anxiety disorder	28.7	19.3

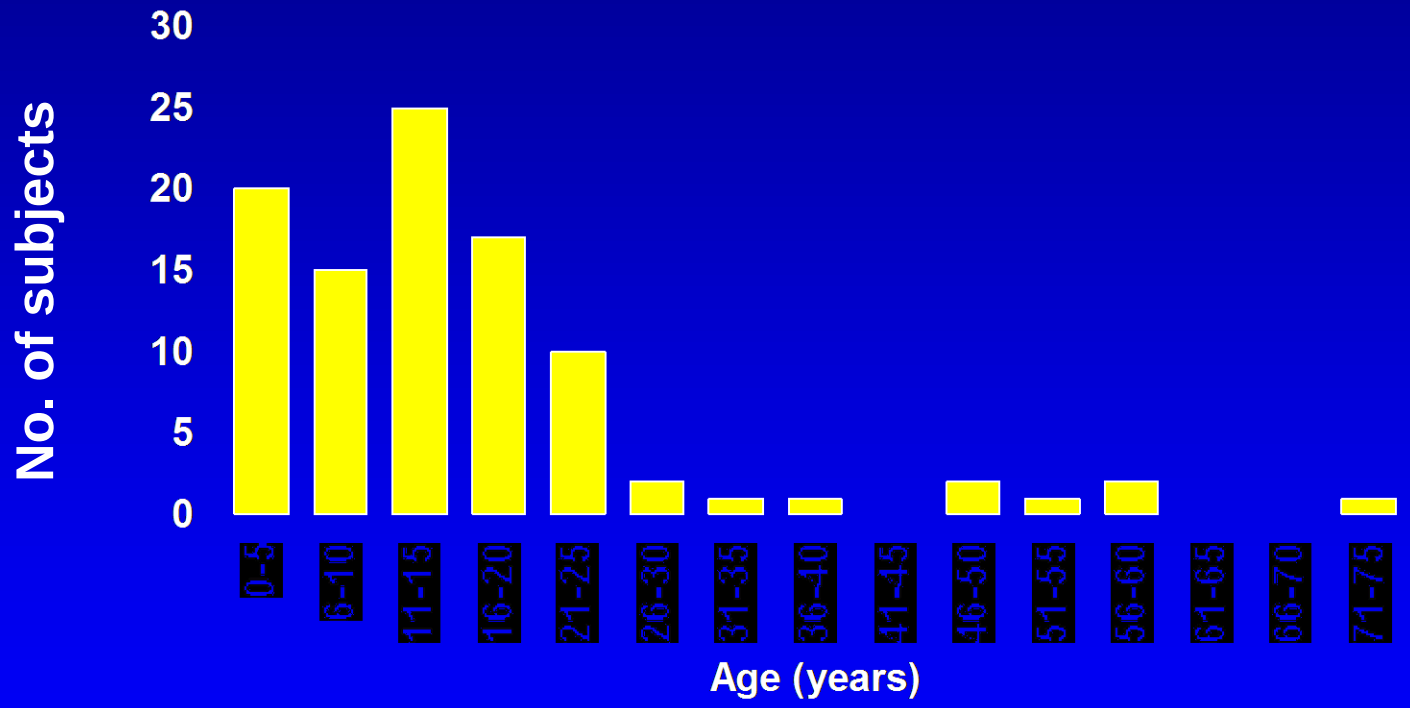
Kessler et al. *Arch Gen. Psychiatry.* 1994;51:8.

Prevalence of Social Anxiety Disorder

	Prevalence (%)	
	Lifetime	One-month
Magee et al, 1996 General population	13.3	4.5
Schneier et al, 1992 General population	2.4	-
Wacker et al, 1992 General population	16.0	-
Weiller et al, 1996 Primary care	14.4	4.9

All studies based on DSM-III-R diagnosis

Age at Onset of Social Anxiety Disorder (ECA)



Schneier et al 1992

Age of onset of social anxiety disorder

	Average age of onset (years)
Magee et al, 1996	16.0
Weiller et al, 1996	15.1
Schneier et al, 1992	15.5
Stein et al, 1990	15.2

Social Anxiety Disorder Subtypes

- Generalized
  - Almost all domains affected
- Non-generalized
  - One or two social situation--usually public speaking only

Generalized social anxiety disorder

- The most disabling form of social anxiety disorder (Stein, 1996)
- Highly familial (Mannuzza et al, 1995; Stein et al, 1998)
- High comorbidity
  - with other anxiety and mood disorders
- Chronic condition
  - requires chronic (not ‘as required’) treatment

What are the symptoms of social anxiety disorder?

Physical:	**Tachycardia** **Trembling** **Blushing** **Shortness of breath** **Sweating** **Abdominal distress**
Cognitive:	**Maladaptive thoughts and beliefs about social situations**
Behavioral:	**Freezing** **Avoidance**

Which symptoms do you fear most?

Anxiety about trembling 33%

Anxiety about blushing 12%

Van Vliet et al, 1994

Feared situations

Social

- Attending parties, weddings etc
- Conversing in a group
- Speaking on telephone
- Interacting with authority figure (eg teacher or boss)
- Making eye contact
- Ordering food in a restaurant

Performance

- Public speaking
- Eating in public
- Writing a check
- Using public toilet
- Taking a test
- Trying on clothes in a store
- Speaking up at a meeting

Precipitating situations

- Being introduced
- Meeting people in authority
- Using the telephone
- Receiving visitors
- Being watched doing something
- Writing in front of others
- Speaking in public

Cognitive patterns

- Overestimation of scrutiny by others
- Overestimating possible rejection, embarrassment or humiliation
- Misinterpretation of response of others
- Exaggerated response to rejection
- Discounting personal achievements / overemphasizing failures

Taylor and Arnow, 1991

Key Diagnostic Questions

- Addressing large or talking in small groups?
- Attending social events?
- Being watched closely while doing something?
- Fear of embarrassment?
- Blush ,sweat or tremble easily?
- Bothersome and seen as excessive?

Characteristics of patients with social anxiety disorder

More likely to:

- Have less than 11 years' education
- Earn a low income
- Never marry
- Have no occupation
- Live with parents

Magee et al 1996

Course of social anxiety disorder

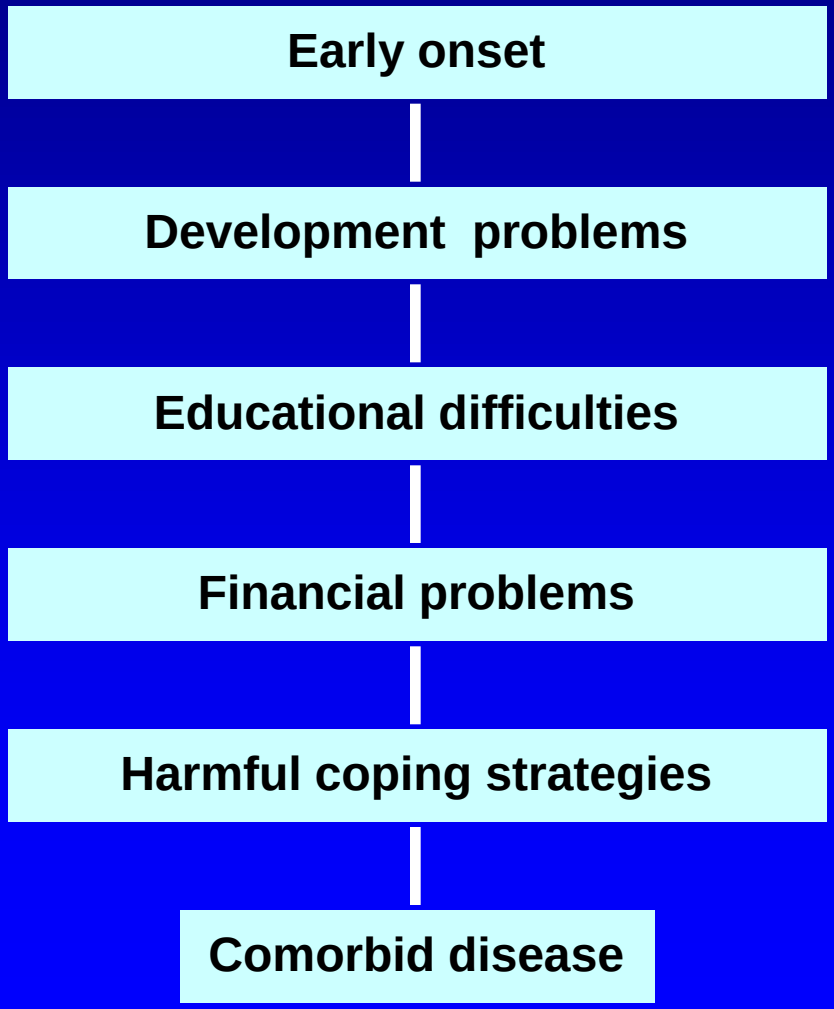
- Social anxiety is a chronic disorder
  - average duration up to 20 years
  - only 27% of patients recover
- Sufferers are more likely to recover if:
  - they have a higher level of education
  - anxiety started after the age of 11 years
  - there is no comorbid psychiatric disorder

Davidson et al 1993

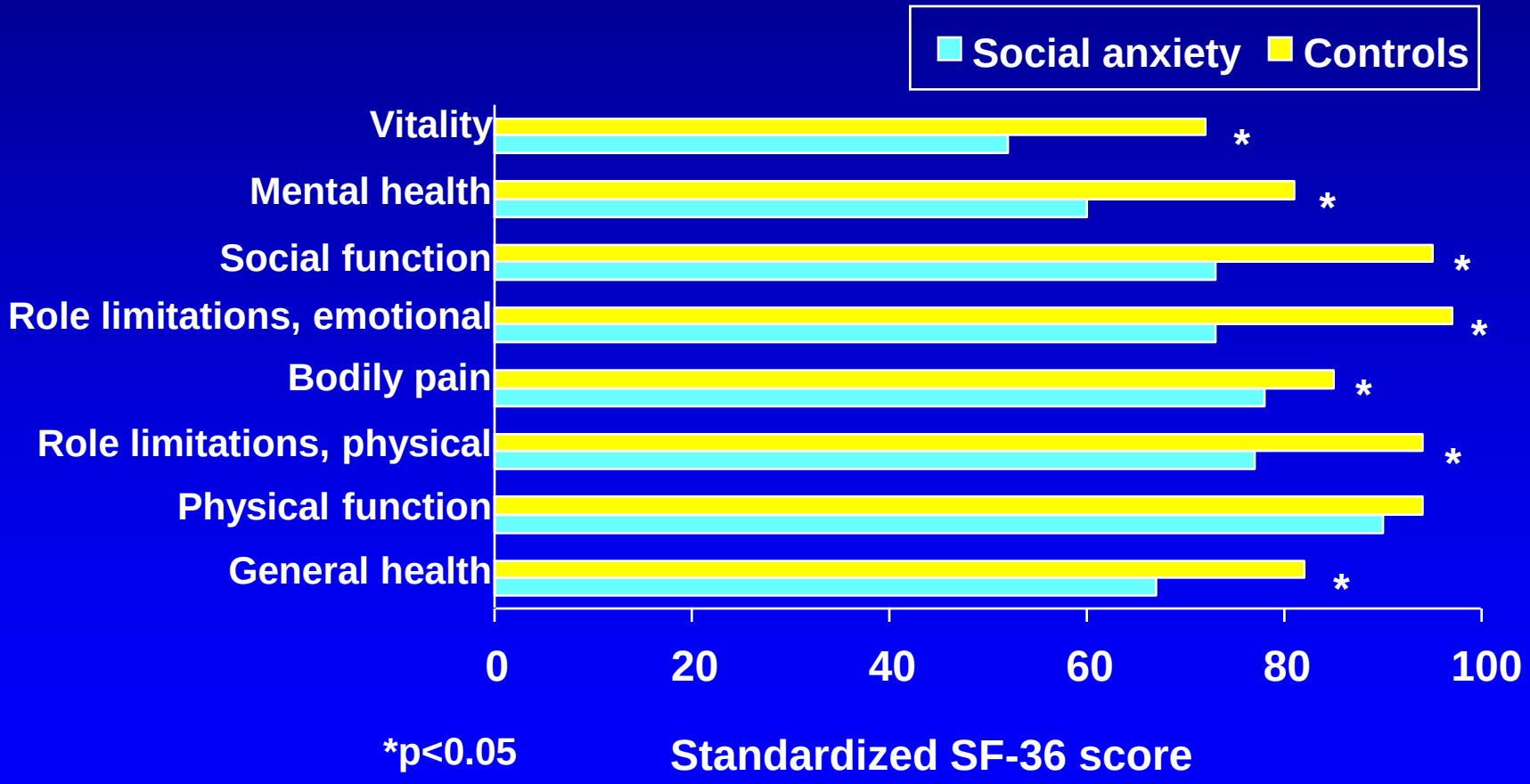
Complications of Social Anxiety Disorder in Adolescents

- Depression
- Truancy
- Other conduct problems
- Alcohol and other substance abuse

Progression of Impairment



Quality of life in patients with social anxiety disorder as assessed with the SF-36 scale

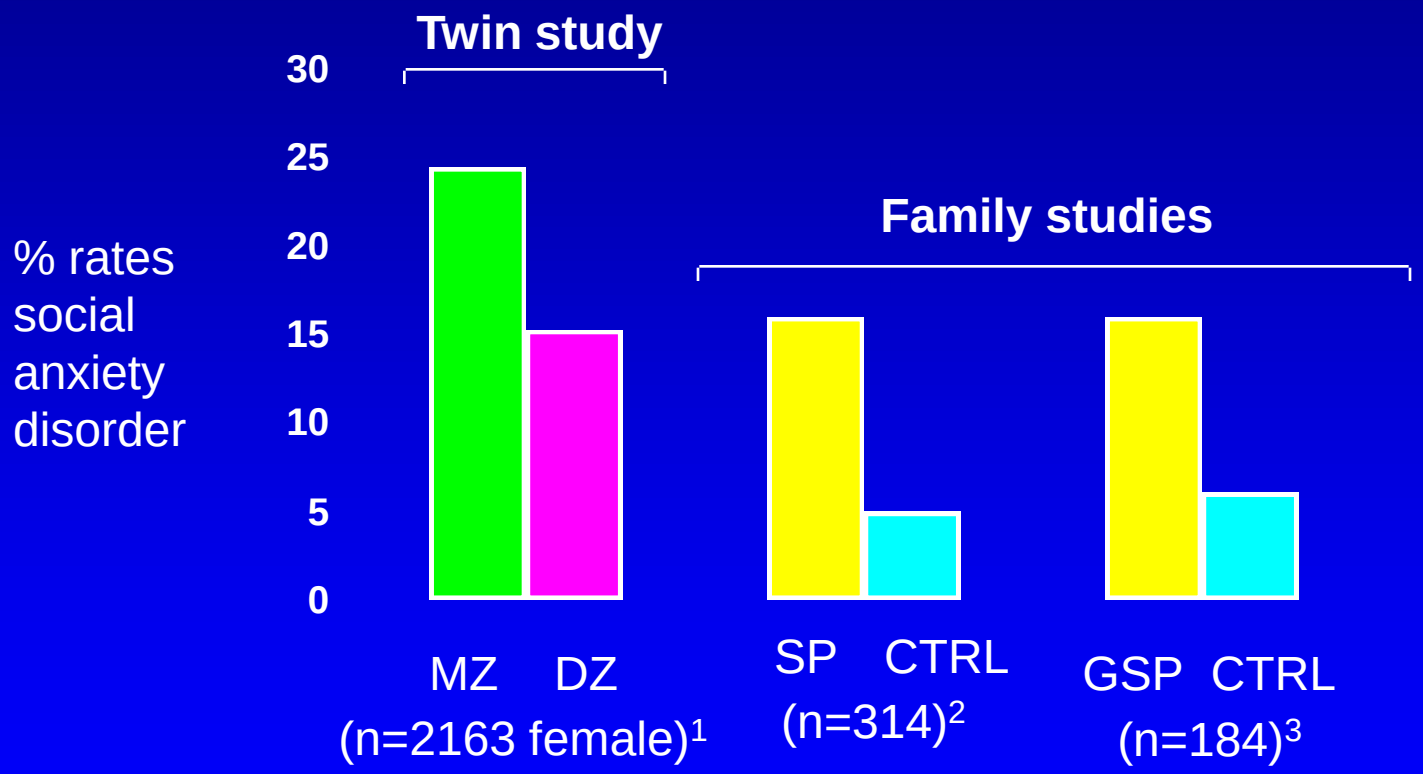


Wittchen, 1996

Social Anxiety Disorder Etiology

- Genetic / familial
- Behavioral inhibition
- Early experiences / parenting
- Ethological
- Cognitive
- Neurobiological
- Traumatic / conditioning

Genetic / family studies of social anxiety disorder



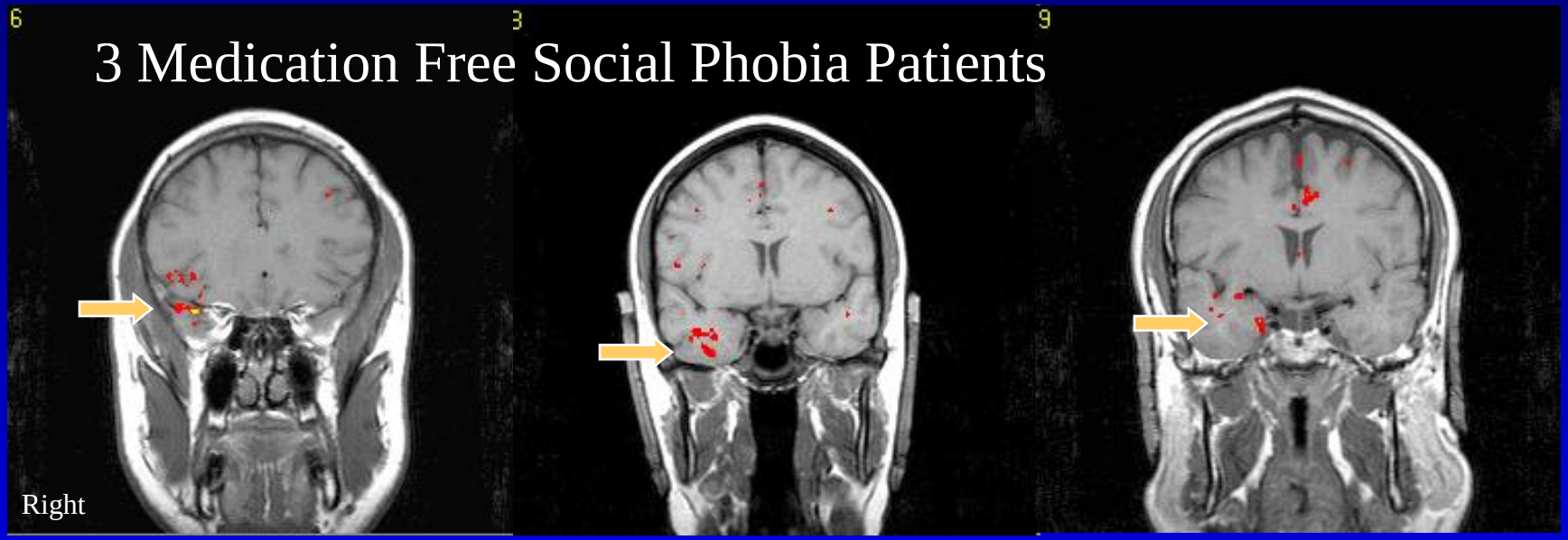
[1]Kendler et al, 1992; [2]Fyer et al, 1993; [3]Manuzza et al, 1995

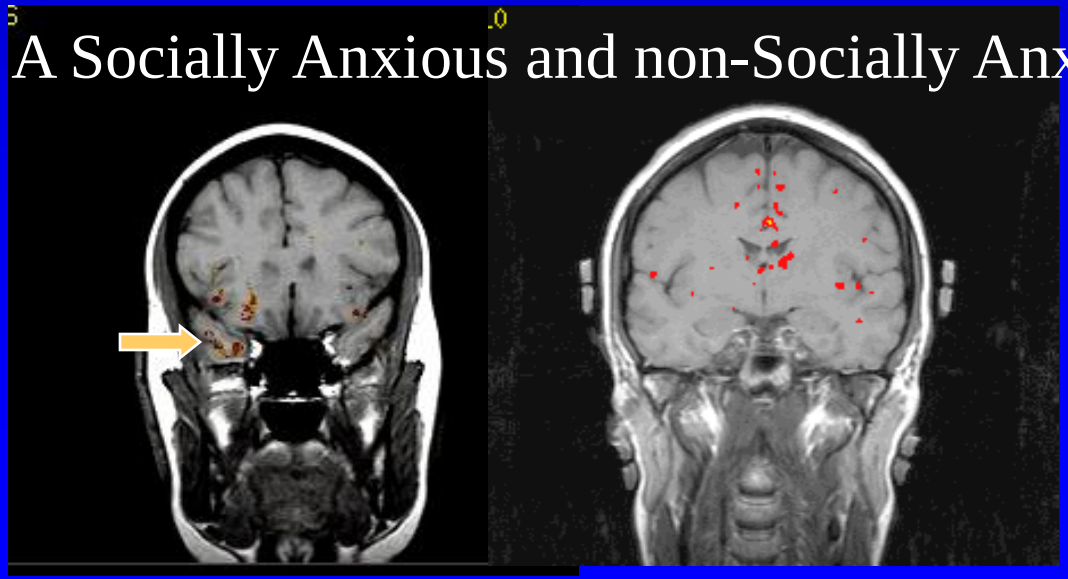
Family / Environment

- Factors that may contribute to the onset of social anxiety disorder:
  - parental predisposition to anxiety
  - parental restriction of children's social engagement
  - transfer of fear and anxiety via observational learning or verbal information transfer

Beidel and Turner, 1998

Increased Right Temporal Lobe Activity During Provoked Social Anxiety





Functional Neuroimaging Research Division, Medical University of South Carolina, Charleston, SC

BOLD fMRI studies within subjects

P<0.001 for display

Figure Legend:

These are coronal structural MRI scans from three medication-free subjects with Generalized Social Phobia (GSP), (top row), and two healthy adults without social phobia (bottom row). Superimposed on the structural MRI scans are the brain regions (in color, $p<0.001$) which had significantly more blood flow while subjects were self-evaluating their performance after a just completed speech in the MRI scanner in front of an audience. Note that in all 3 subjects with GSP, there is increased activity in the right temporal lobe region. This was not seen in one healthy control (bottom right). Interestingly, the other healthy control had social anxiety about their speech and also has increased right temporal lobe activation. These pilot findings are being rigorously addressed in ongoing work.

From the Medical University of South Carolina Functional Neuroimaging Research Group and the Mood and Anxiety Program, Charleston, SC

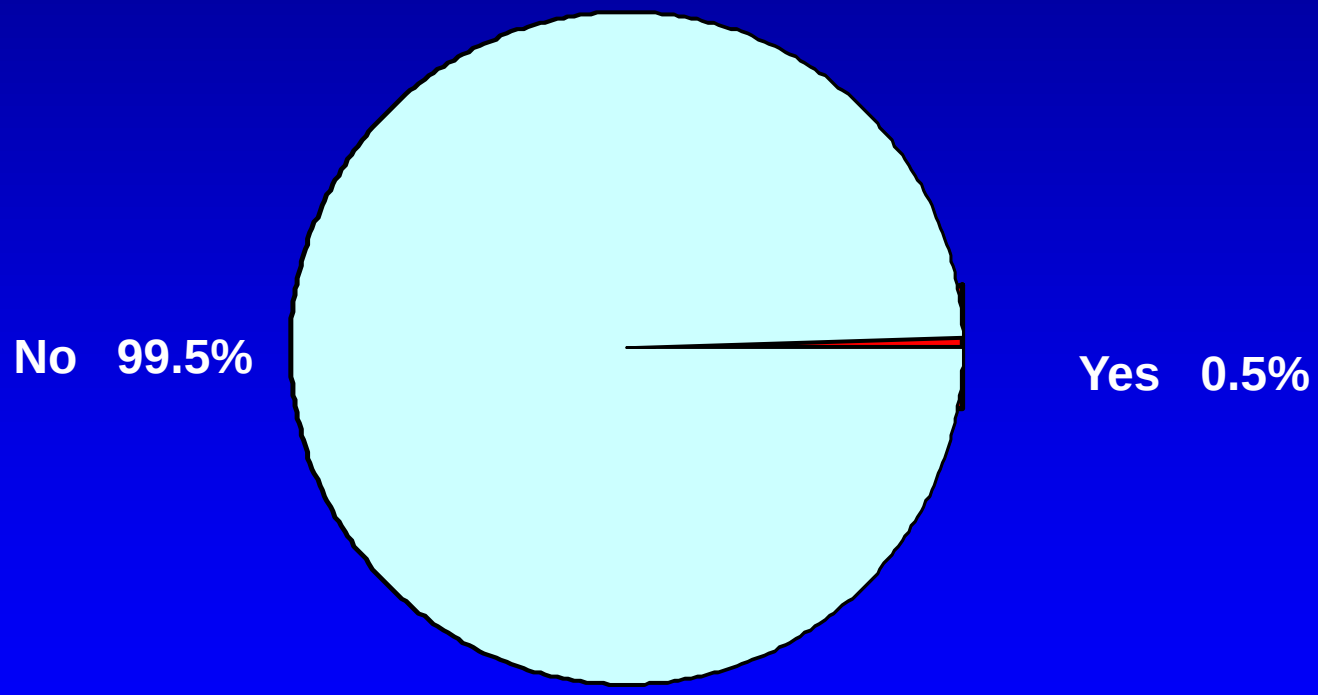
Lorberbaum JP, George MS, Johnson MR, Emmanuel NP, Book SW, Mintzer O, MortonA, Nahas Z, Bohning DE, Vincent D, Shastri A, Hamner M, Arana GW, Ballenger JC, Lydiard RB. Feasibility of using fMRI in Social Phobics undergoing a Public Speaking Task. Biological Psychiatry 1999; 45:8s, #429

Delay to Diagnosis

- The nature of social anxiety disorder causes the patient to delay seeking help
- When the patient does consult a doctor, it will often be to seek treatment for the physical symptoms

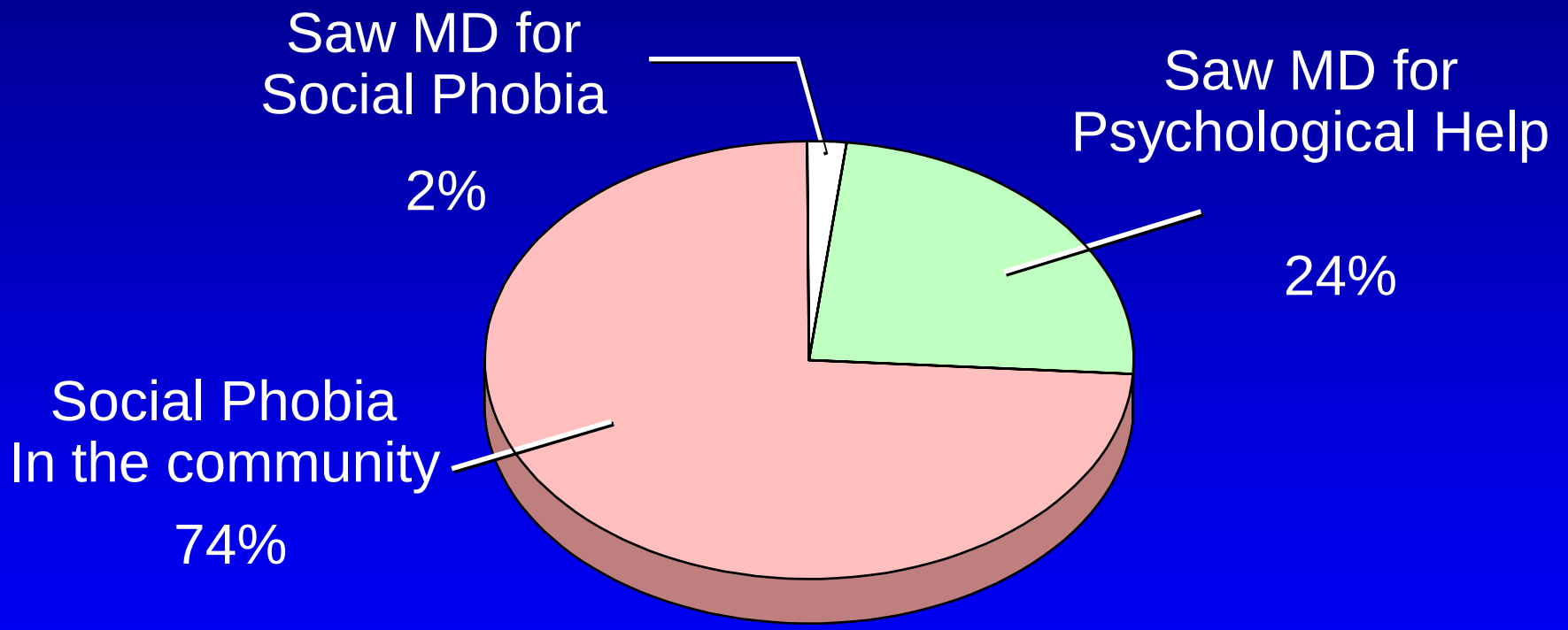
Generalized Social Anxiety Disorder

Percent Diagnosed by Physician in Past Year



Katzelnick et al, 1999

Missed Opportunity for Treatment



Duke ECA study
Davidson et al. Psychol Med. 1993;23:709

Social anxiety disorder is undertreated

- Only a minority of patients seek professional help
- An estimated 2.4 million sufferers in the US go untreated
- In a French study, a diagnosis of anxiety disorder was made by GPs in only 24% of a sample of patients with social anxiety disorder

Why Is It Undertreated?

- Lack of information that social anxiety disorder is treatable
- Sufferer's belief that it is 'just part of my personality' or acceptance of shyness as a normal human characteristic
- Trivialization of the problem by family, friends and professionals
- Stigma attached to social anxiety disorder as a mental disorder
- Inherent avoidance of strangers , including professionals

Untreated Social Anxiety Disorder

- Academic underachievement
- Inability to work, or under-performance at work
- Financial dependence
- Difficulty making and maintaining friendships or relationships
- Extensive and often unnecessary medical examinations
- Development of alcoholism, depression, agoraphobia, or suicidal ideation

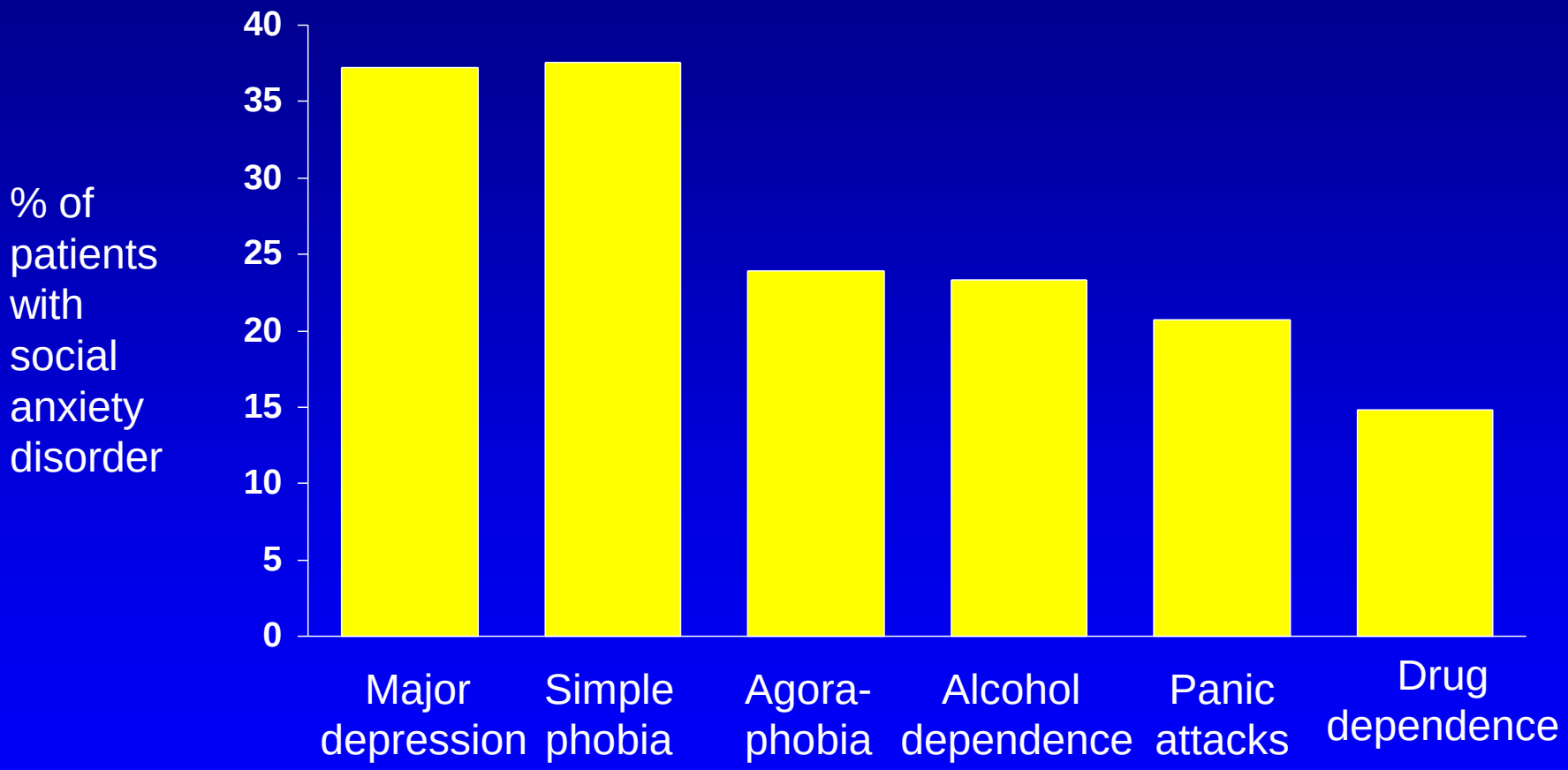
Comorbidity

- Around 80% of patients with social anxiety disorder report at least one other psychiatric disorder
- Typically, social anxiety disorder occurs before the comorbid condition

53% of patients (Magee et al, 1996)

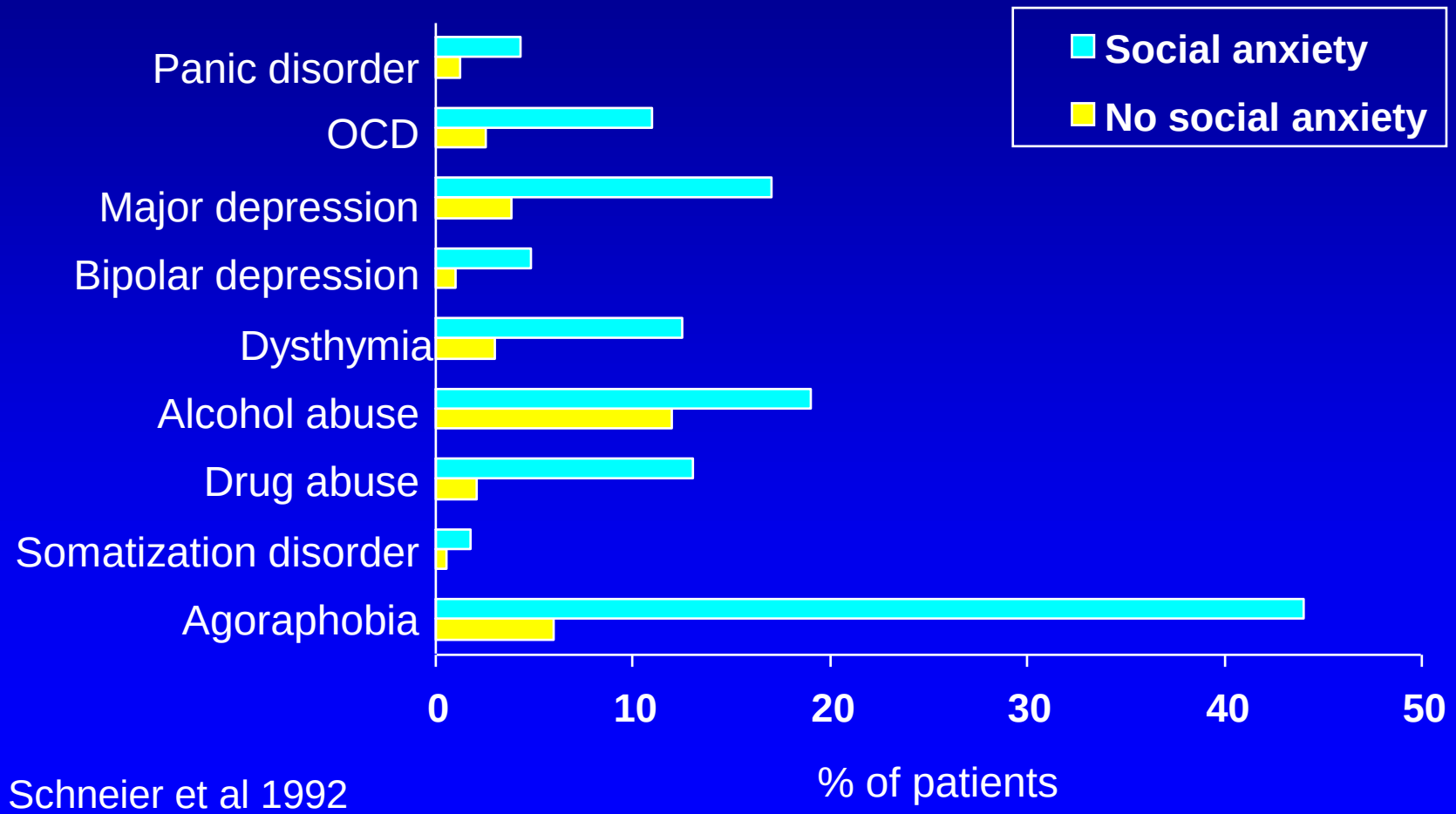
69% of patients (Schneier et al, 1992)

Common comorbid conditions



Magee et al, 1996

Lifetime comorbidity in social anxiety disorder



Schneier et al 1992

Alcoholism in social anxiety disorder
Clinical studies

	n	Alcoholism (%)
1983 Amies et al	87	20
1986 Thyer & Curtis	42	36.4
1990 Perugi & Savino	25	20.0
1991 Van Amerigen et al	57	28.1
1991 Cardot	35	14.3
1992 Otto et al	30	43.3
1996 Weiller et al	74	23.6

Social anxiety disorder in alcoholic patients
Clinical studies

	n	Social anxiety disorder (%)
1979 Mullaney & Tripett	102	23.5
1984 Stockwell et al	42	57
1984 Bowen et al	48	8.3
1984 Smail et al	60	39
1985 Weiss & Rosenberg	84	2.4
1986 Stravynsky et al	96	7.8
1987 Chambless et al	75	18.7
1988 Ross et al	501	12.0
1990 Servant et al	152	15
1991 Thevos & Latham	33	15
1995 Clark et al	43	20.9
1995 Marra	44	40.9
1996 Driessen et al	100	10.0
1997 Chignon et al	507	20.1

Social anxiety disorder - Odds ratio of lifetime comorbidity with alcohol abuse/dependence

Epidemiological studies

	n	Alcohol abuse / dependence
ECA, 4 sites	10,314	2.2
ECA, North Carolina	3801	2.2
Zürich	591	3.5
NCS	8098	2.2

Lépine & Pélissolo, 1996

Social Anxiety Disorder: Alcohol Abuse and Dependence

Alcohol abuse		Alcohol dependence	
Men	Women	Men	Women
0.97	2.16*	2.04*	2.57*

*p<0.05

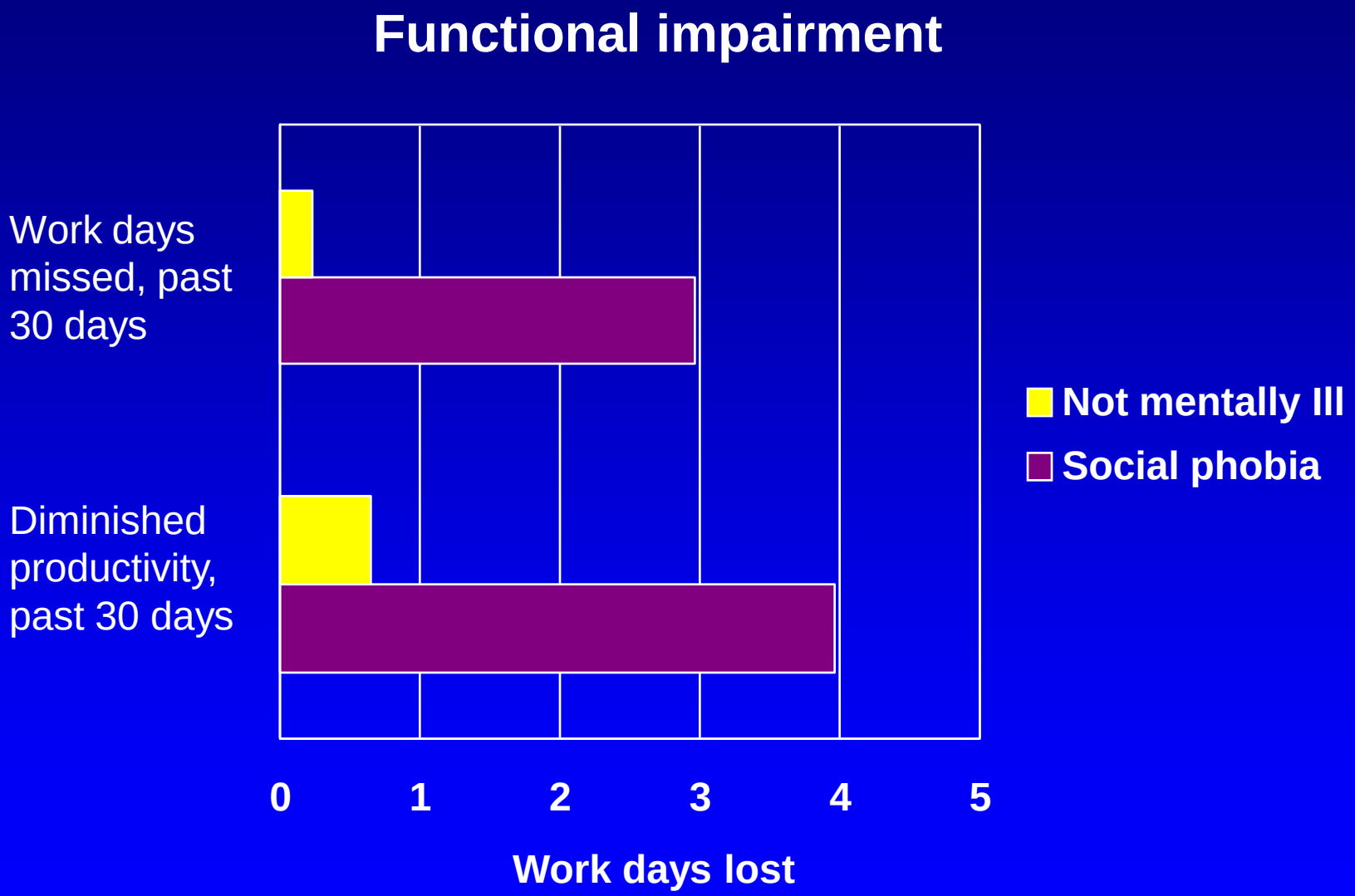
Kessler et al, 1997

Risk of suicidality in comorbid social anxiety disorder

	Nil disorder	Pure social anxiety	Social anxiety plus 1 disorder	Social anxiety plus ≥2 disorders	
Lifetime suicide attempts	0.4%	0.0%	2%	21%	p=0.0001
Have you ever wished to die?	1.4%	3.8%	2%	25.3%	p=0.0001
Have you ever thought about death?	11.6%	39.5%	38.1%	60.4%	p=0.0001

Davidson et al, 1993

UCSD social phobia in primary care



Key diagnostic questions

- Are you afraid of speaking to large groups?
- Are you afraid of talking in small groups?
- Do you avoid social events?
- Do you fear being watched closely while doing something?
- Are you afraid of embarrassment?
- Do you blush or sweat easily?
- Do any of these bother you?
- Are any of these fears excessive?

Social Phobia Inventory (SPIN)

Examples	Not at all 0	A little bit 1	Some-what 2	Very much 3	Extremely 4
1. I am afraid of people in authority	☐	☐	☐	☐	☐
7. Sweating in front of people causes me distress	☐	☐	☐	☐	☐
9. I avoid activities where I am the center of attention	☐	☐	☐	☐	☐

Total (1 - 17) = 0 - 68

Screening for social anxiety disorder with the SPIN

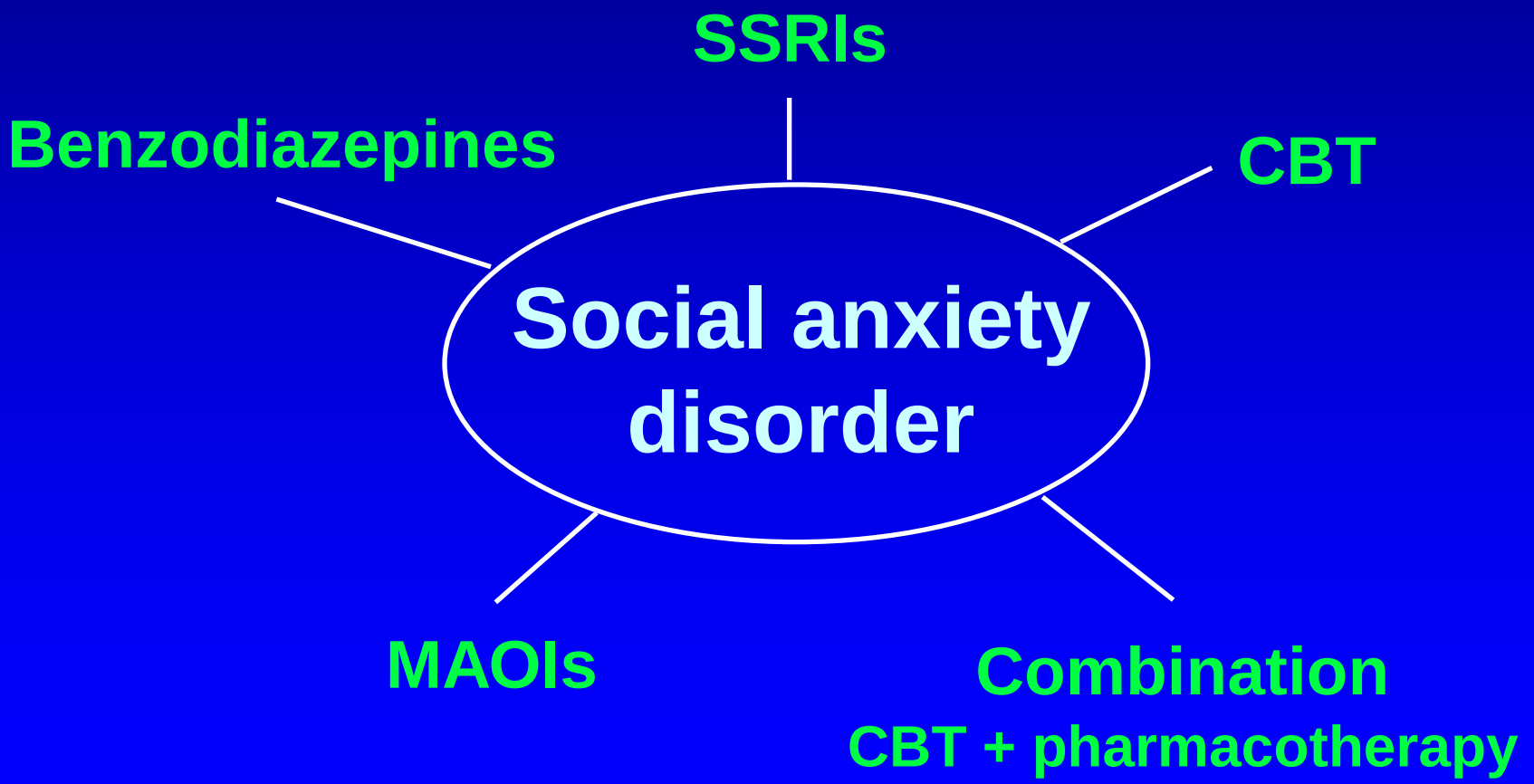
AT CUT-OFF OF 19

Sensitivity	72.5%
Specificity	84.3%
PPV	80.7%
NPV	77.1%
Efficiency	78.6%

Differential Diagnosis

- Panic disorder/ Agoraphobia
- Posttraumatic stress disorder
- Depression-related social avoidance
- Atypical depression
- Schizotypal / schizoid PD
- Avoidant PD
- Body Dysmorphic disorder

Social anxiety disorder
Treatment options



Social anxiety disorder
Treatment goals

- Control anxiety and phobic avoidance
- Reduce associated disability
- Treat depression / other comorbid disorders
- Tolerability over long term
- Eventual medication-free status

Pharmacological management of social anxiety disorder

- Consider initial choice of an SSRI
- Initial dose for 2-4 weeks, then increase if necessary
- Some benefit evident by 2-4 weeks
- If no response by 6-8 weeks, switch to drug of another class or augment
- Consider psychosocial treatments in some circumstances
- Continue pharmacotherapy for at least 1 year

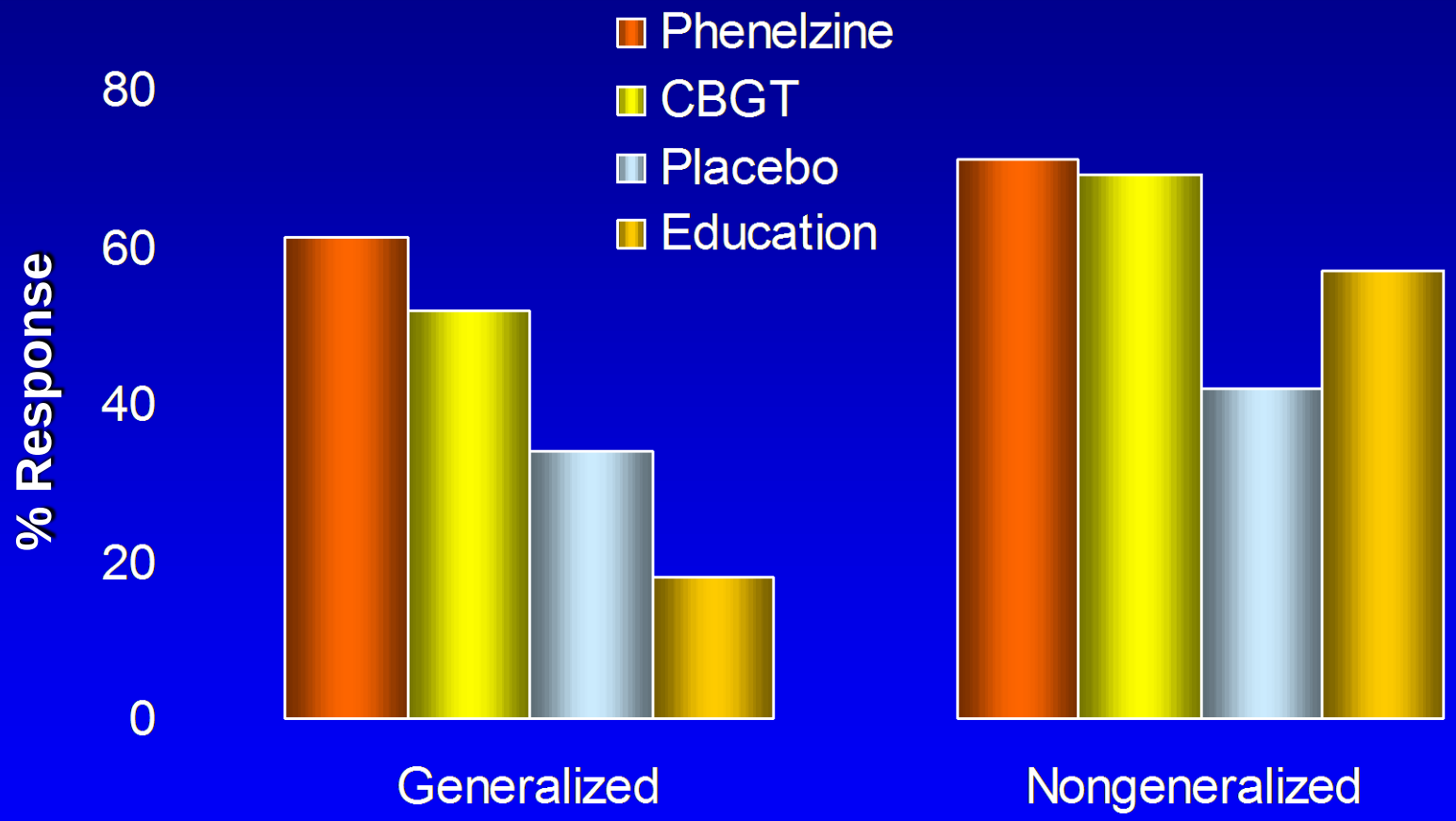
Social Anxiety Disorder: Pharmacological Treatments

- Monoamine oxidase inhibitors (standard/RIMAs)
- Benzodiazepines
- SSRIs

Social Anxiety Disorder Issues for Pharmacotherapy

- Uneven efficacy across agents
- Range of response
- Subtypes of social anxiety disorder
- Which core features respond?
- Relapse after Rx discontinuation
- Future directions

Cognitive-Behavior Group Therapy vs Phenelzine Response by Subtype of Social Phobia*



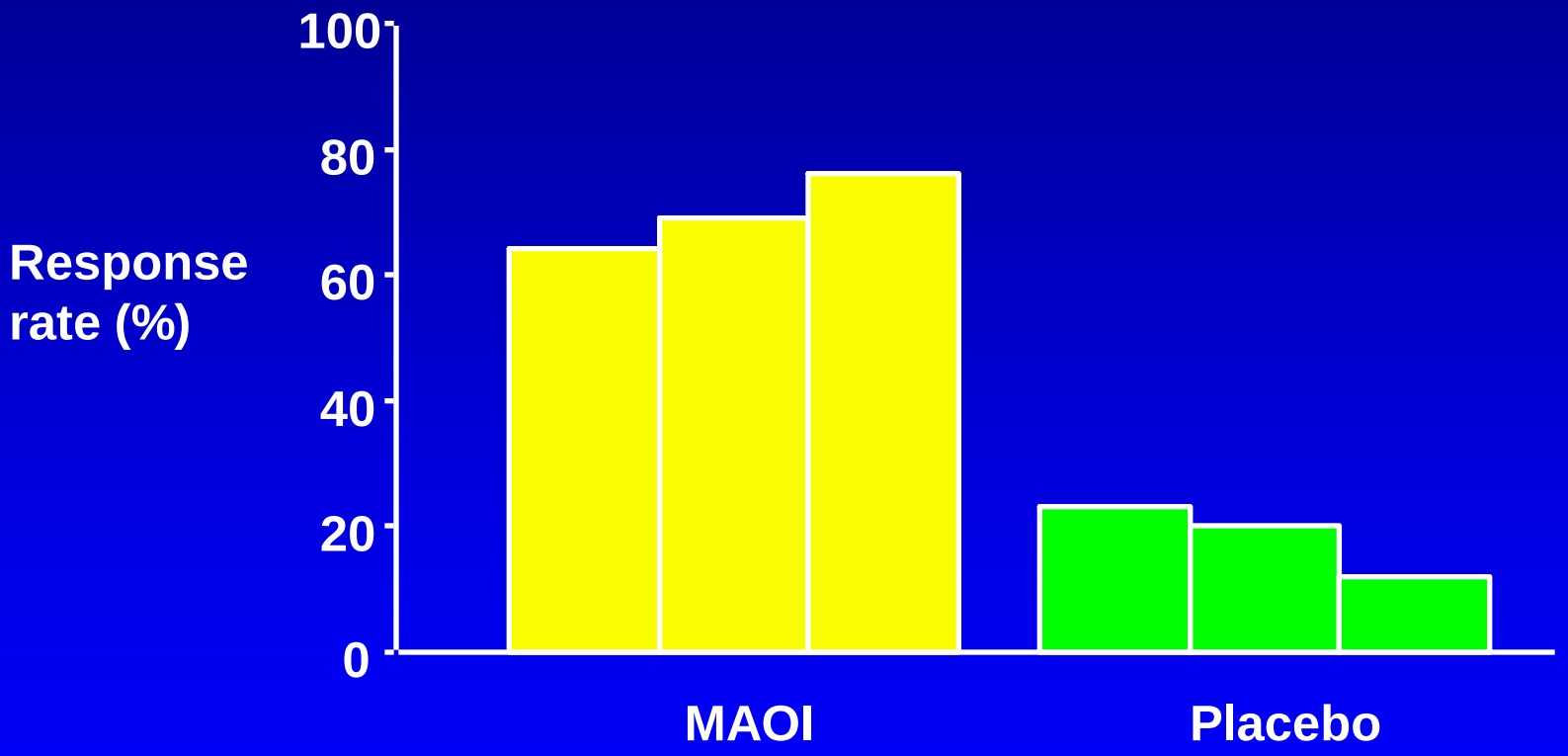
*Intent to treat.

Heimberg et al AGP 1998 55: 1133-41.

Phenelzine vs. CBGT: Different Strengths

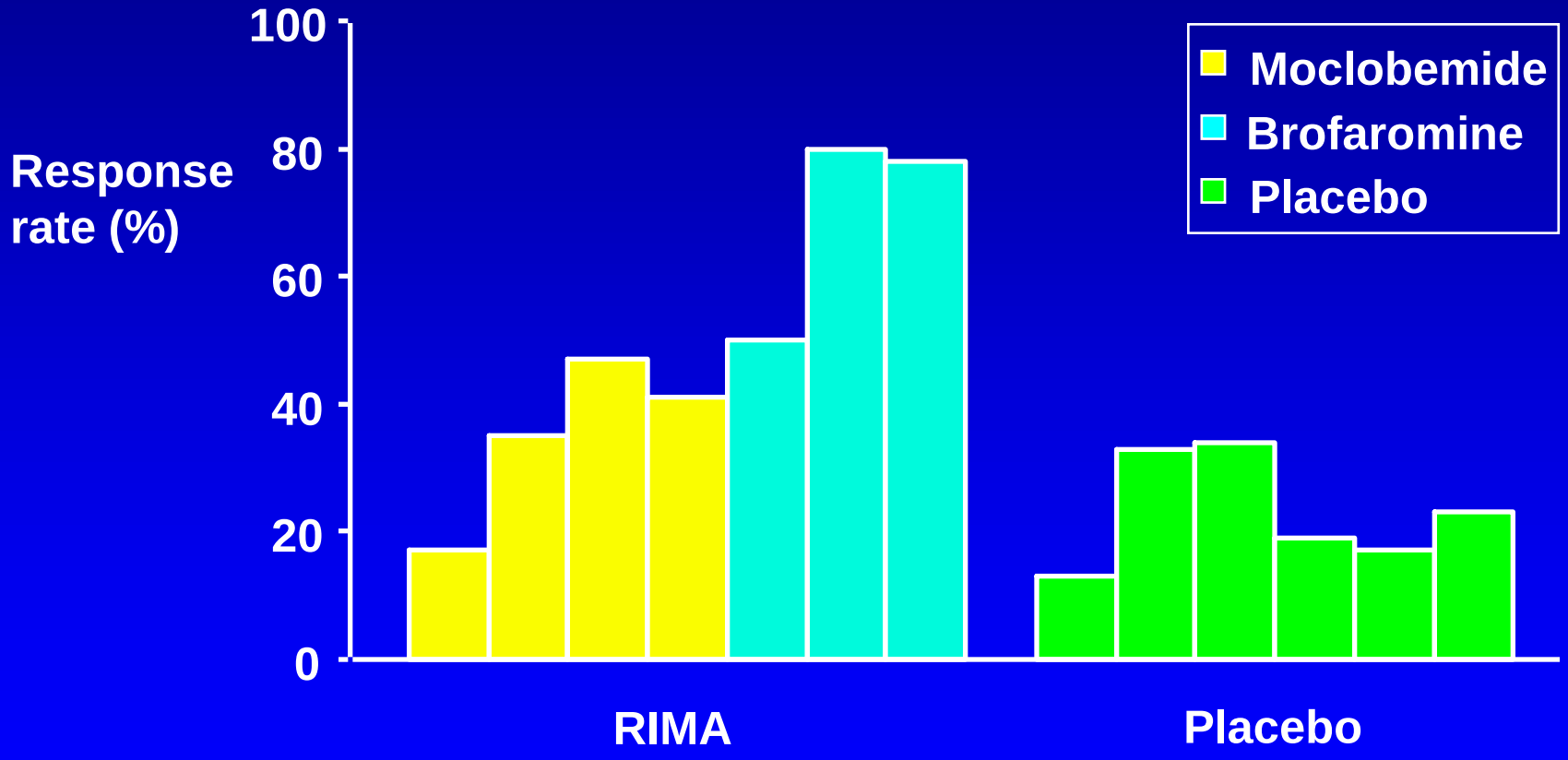
- Phenelzine results in greater improvement
- CBGT results in more durable improvement

MAOI Response in Social Anxiety Disorder



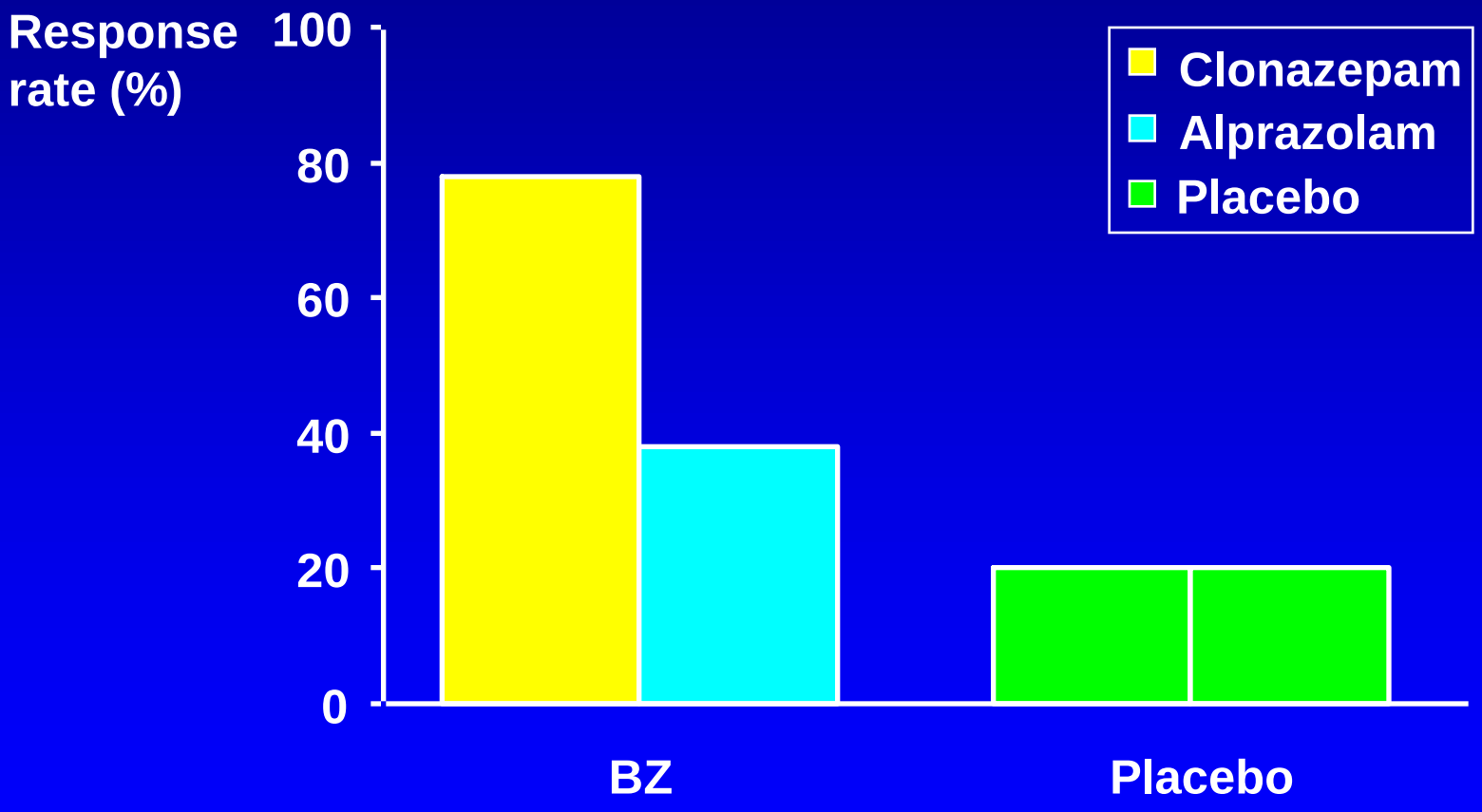
Liebowitz et al, 1992; Gelernter et al, 1991; Versiani et al, 1992

RIMA Response Rates in Social Anxiety Disorder



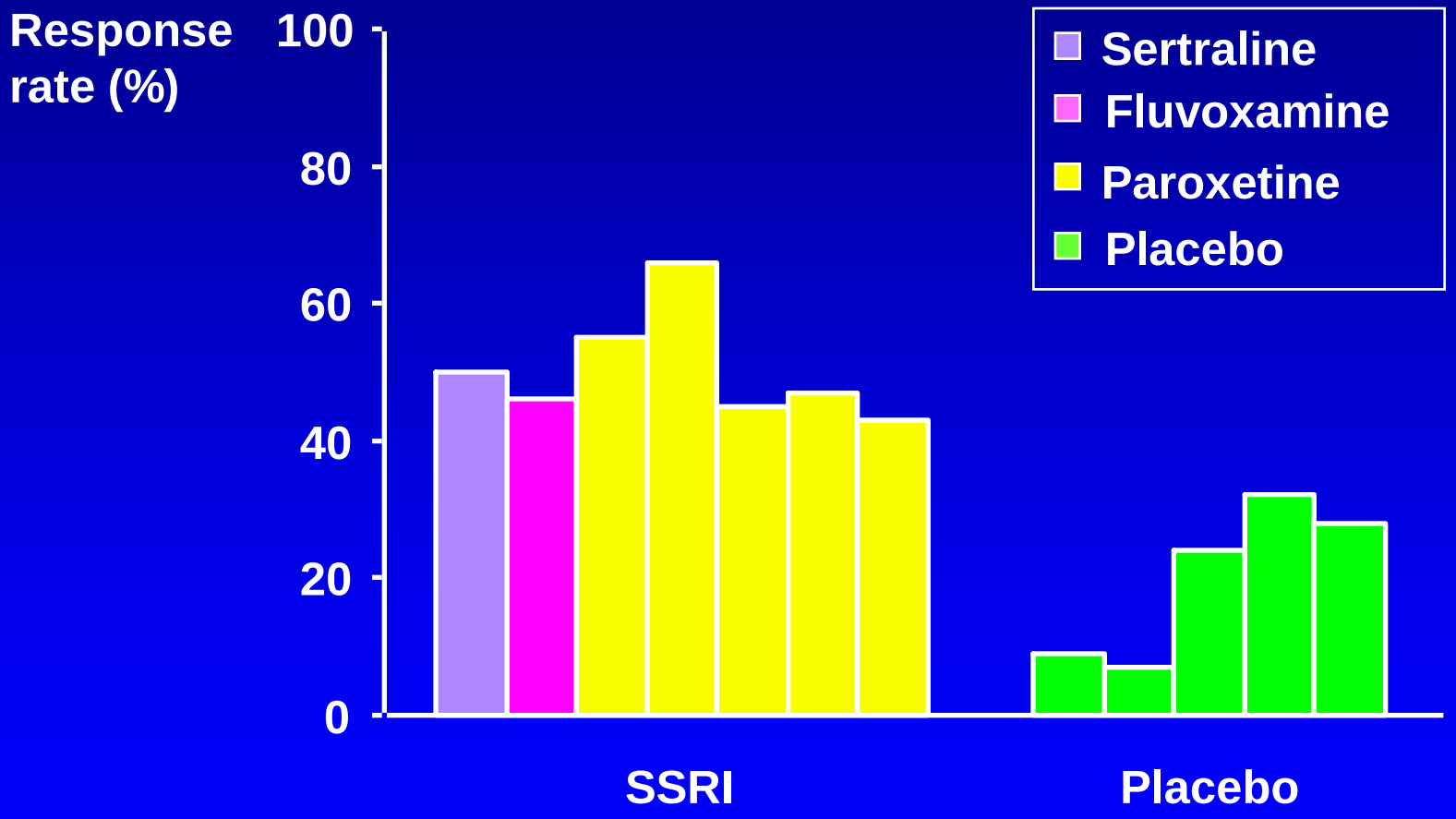
Schneier et al, 1998; Noyes et al, 1997; Internatl GP, 1997; Lott et al, 1997; Van Vliet et al, 1992; Fahlen et al, 1995

BZ Response Rates in Social Anxiety Disorder



Davidson et al, 1993; Gelernter et al, 1991

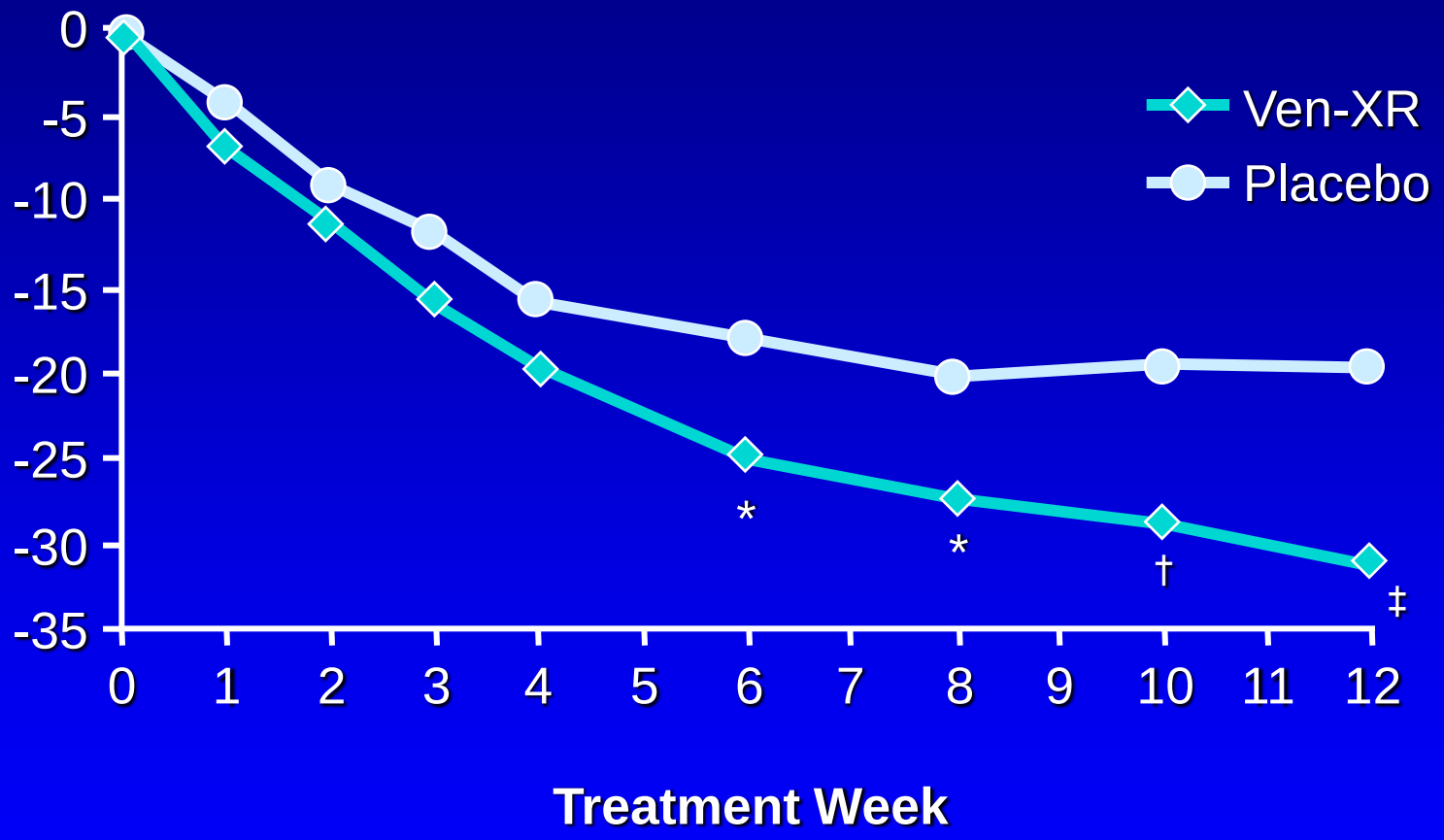
SSRI Response Rates in Social Anxiety Disorder



Katzelnick et al, 1995; von Vliet et al, 1993; Stein et al, 1998; data on file

Venlafaxine XR for SAD

Flexible Dose 75-225 mg/day

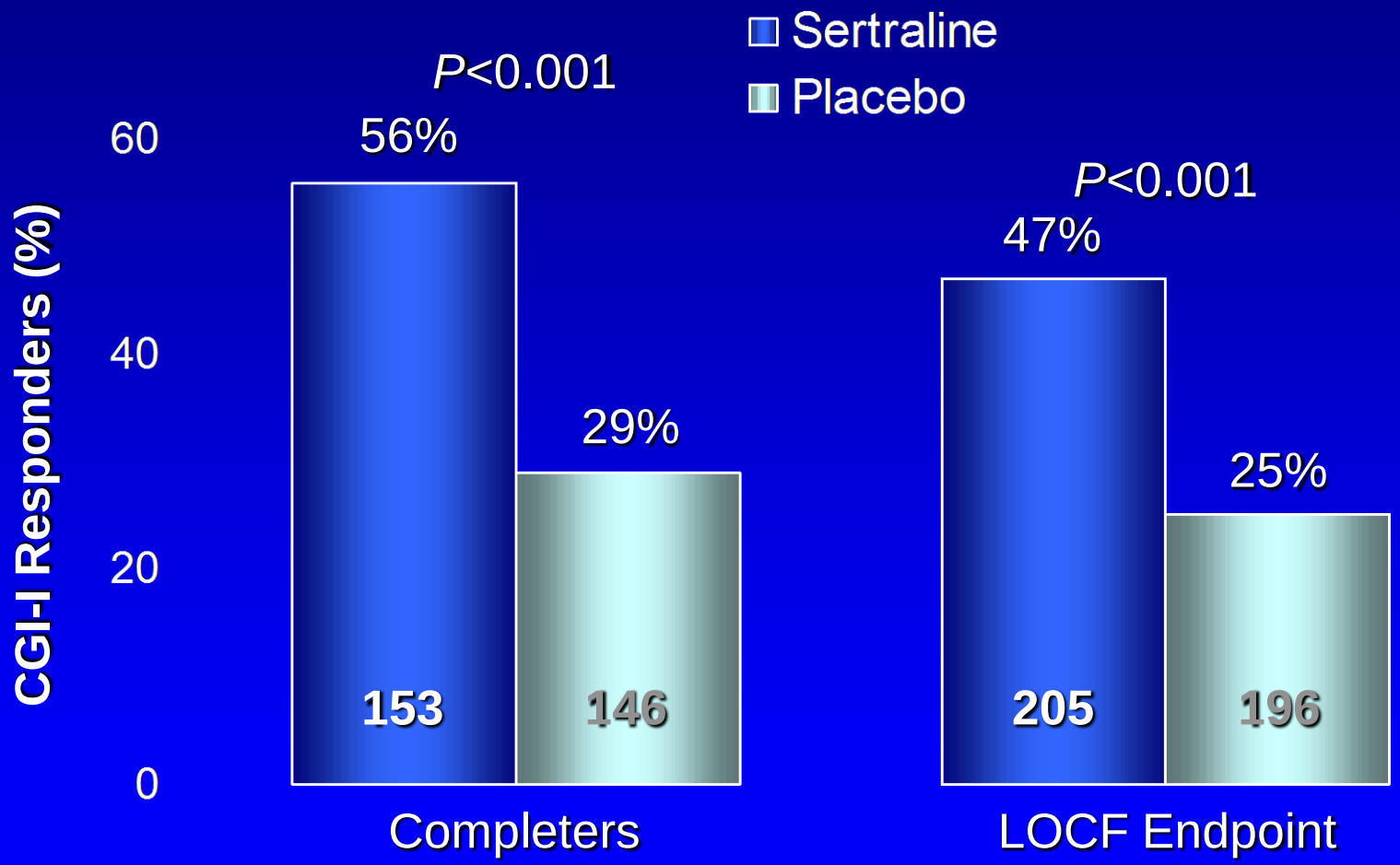


*P = 0.022; †P = 0.003; ‡P = 0.0002.

ITT Population, LOCF Analysis Liebowitz, APA, 2003.

Sertraline in Social Anxiety Disorder

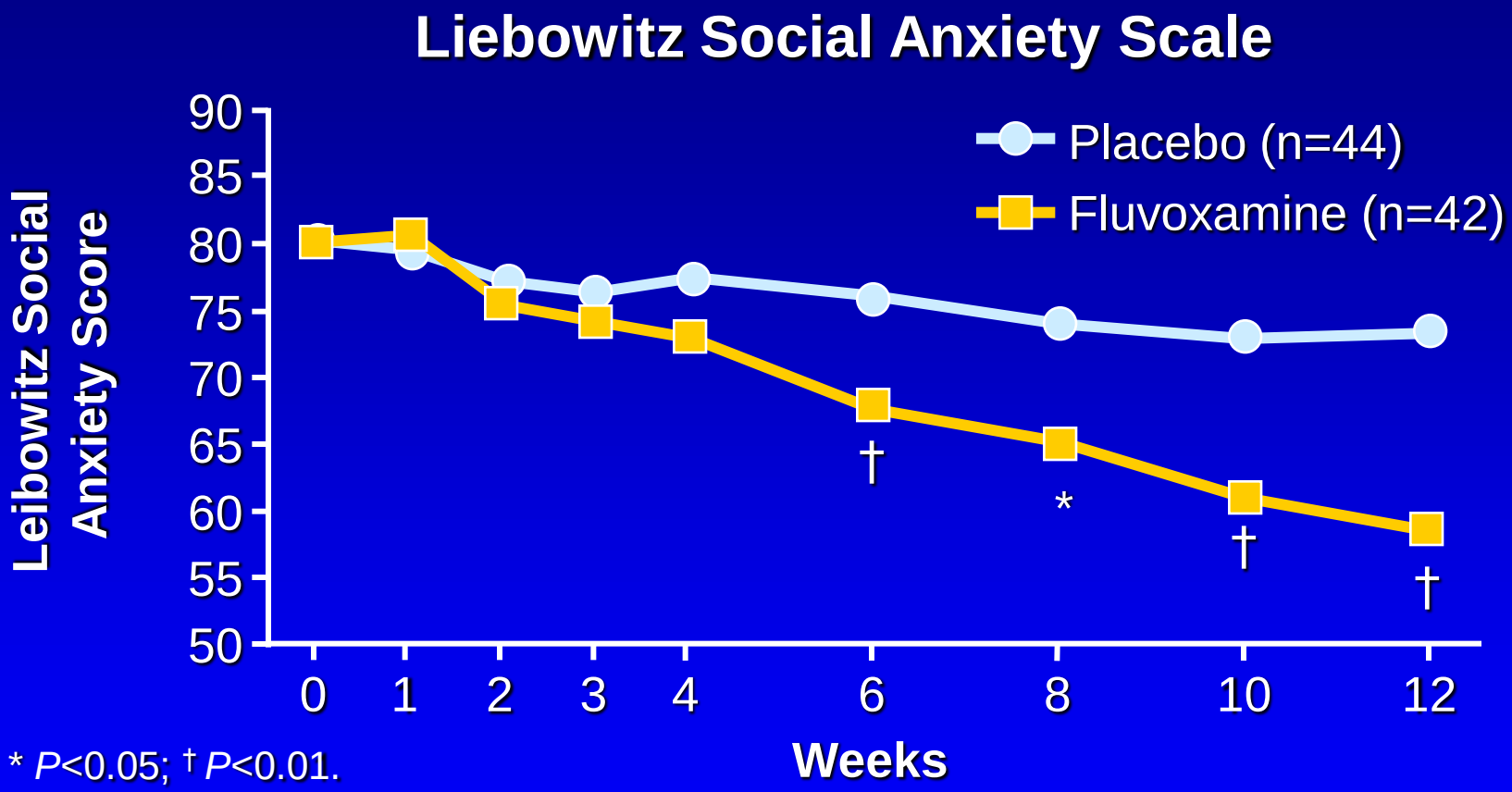
Status at Week 12 Endpoint



*ITT Responder: CGI-I ≤2.

Liebowitz ACNP 2001

Effect of Fluvoxamine for Social Phobia (Social Anxiety Disorder; SAD)



* *P*<0.05; † *P*<0.01.

Subjects: Patients with SAD (n=86).

Method: A 12 week multicenter, double blind, randomized, placebo controlled trial, patients with SAD were treated fluvoxamine 50-300 mg/day or placebo.

Stein MB, et al. *Am J Psychiatry*. 156(5):756-760.1999.

Future Treatment Options

- Gabapentin → Clinical Trial Evidence of Efficacy versus Placebo
- Pregabalin → Trials Ongoing. One positive study vs placebo

Buspirone for Social Phobia

- Social phobia (DSM-III-R)*
  - 12-week open label (N=17)
  - Much improved: 47%
  - Dose range: 15-60 mg
- Performance anxiety in musicians**
  - CBT > placebo = buspirone
  - Small sample size

*Schneier et al. J Clin Psychiatry. 1993 (August)
**Clark & Agras. Am J Psychiatry. 1991 (May)

Tricyclic Antidepressants

- Open trials with imipramine and clomipramine in heterogeneous patient groups suggestive of efficacy
- Imipramine: Placebo-controlled trial
  - N=41, 8-week trial
  - Mean dose: 149 mg/d
  - Result: imipramine no more effective than placebo

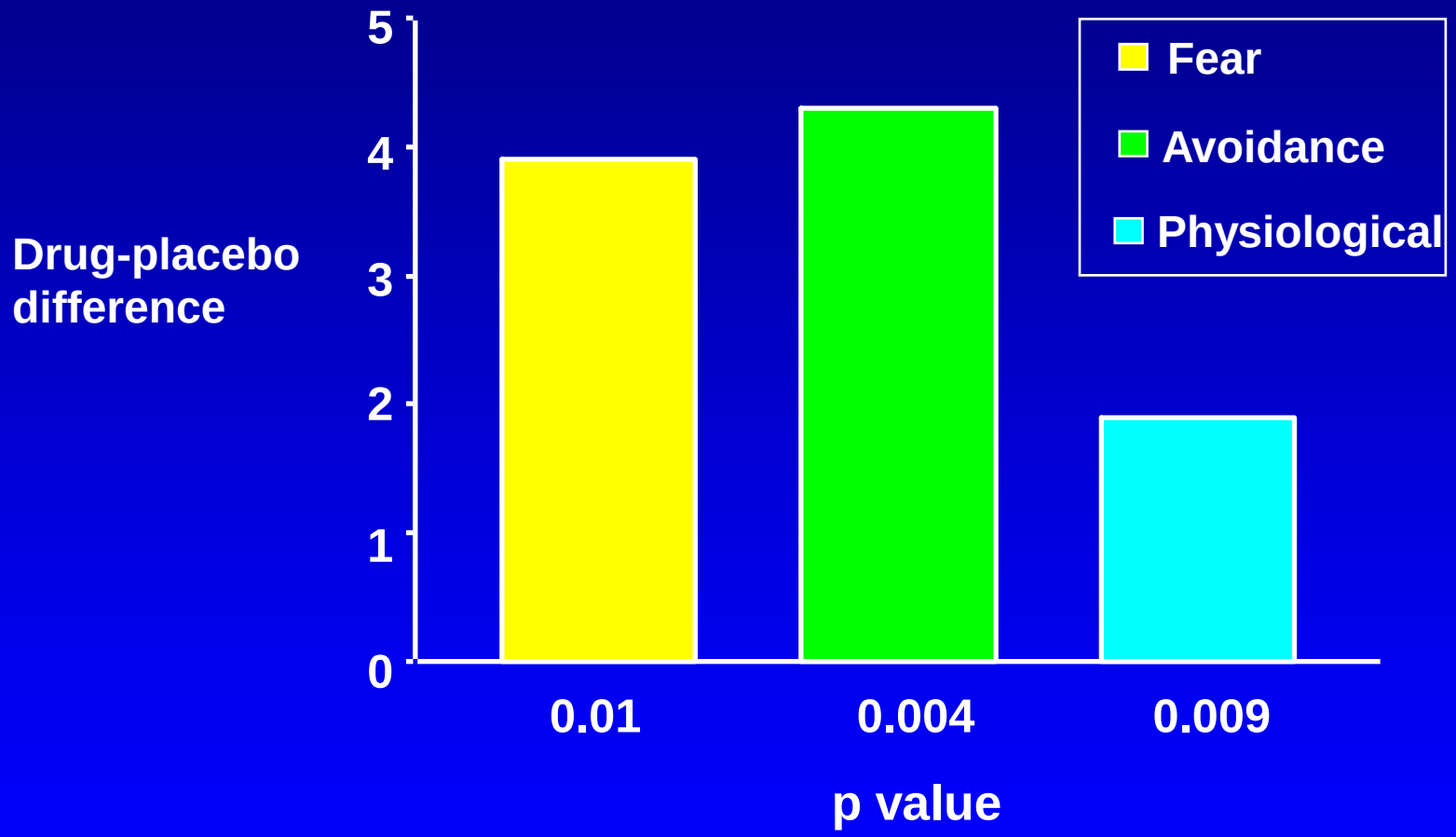
Emmanuel et al, 1997

Other Drug Treatments

- Newer ADs
  - Mirtazepine-limited evidence
- Anticonvulsants
  - gabapentin, pregabalin
- Beta-blockers*
  - Atenolol, propranolol

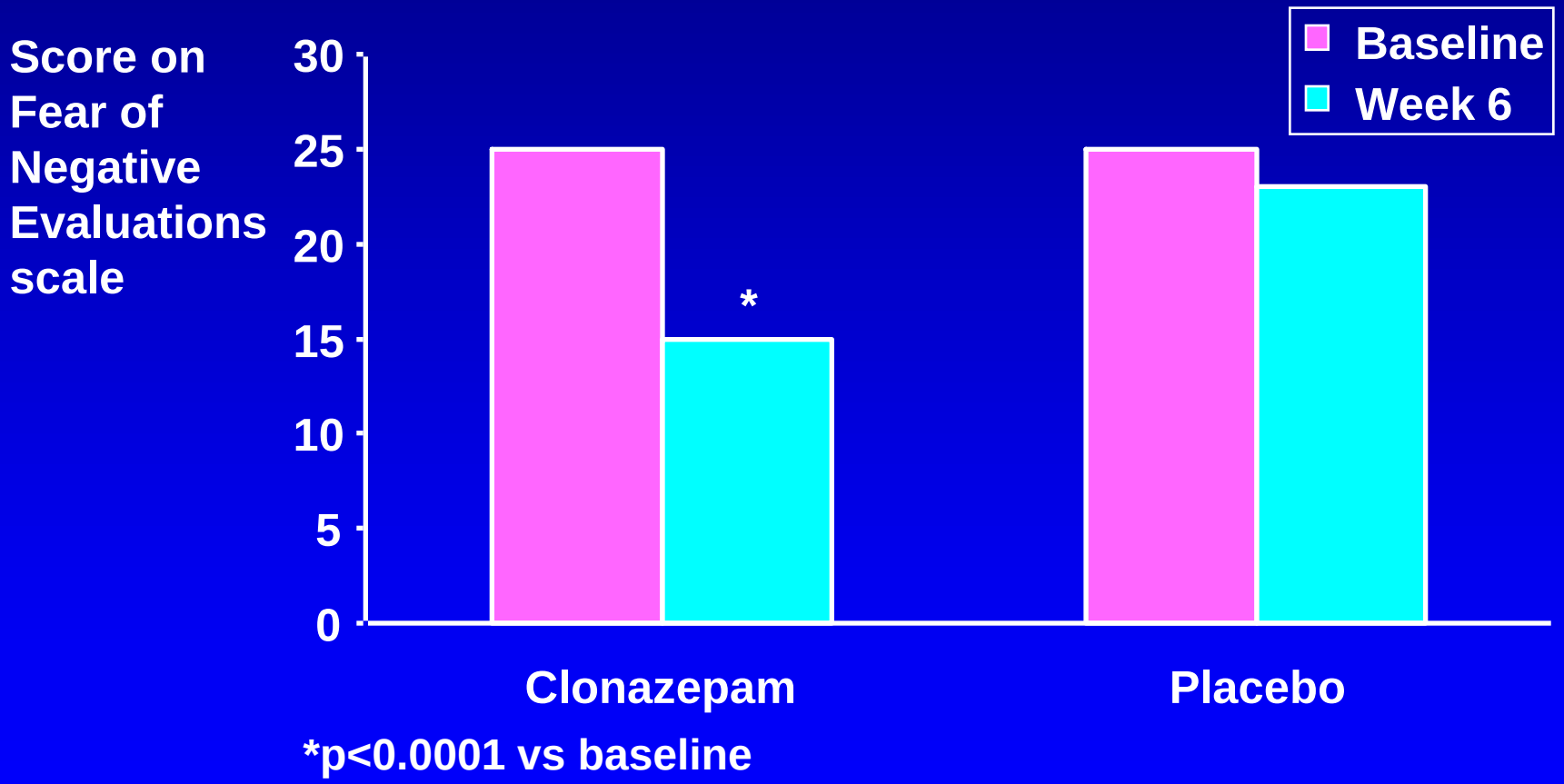
*limited to performance subtype

Pharmacotherapy improves core aspects of social anxiety disorder in SSRIs



Data from BSPS; Davidson et al, 1993

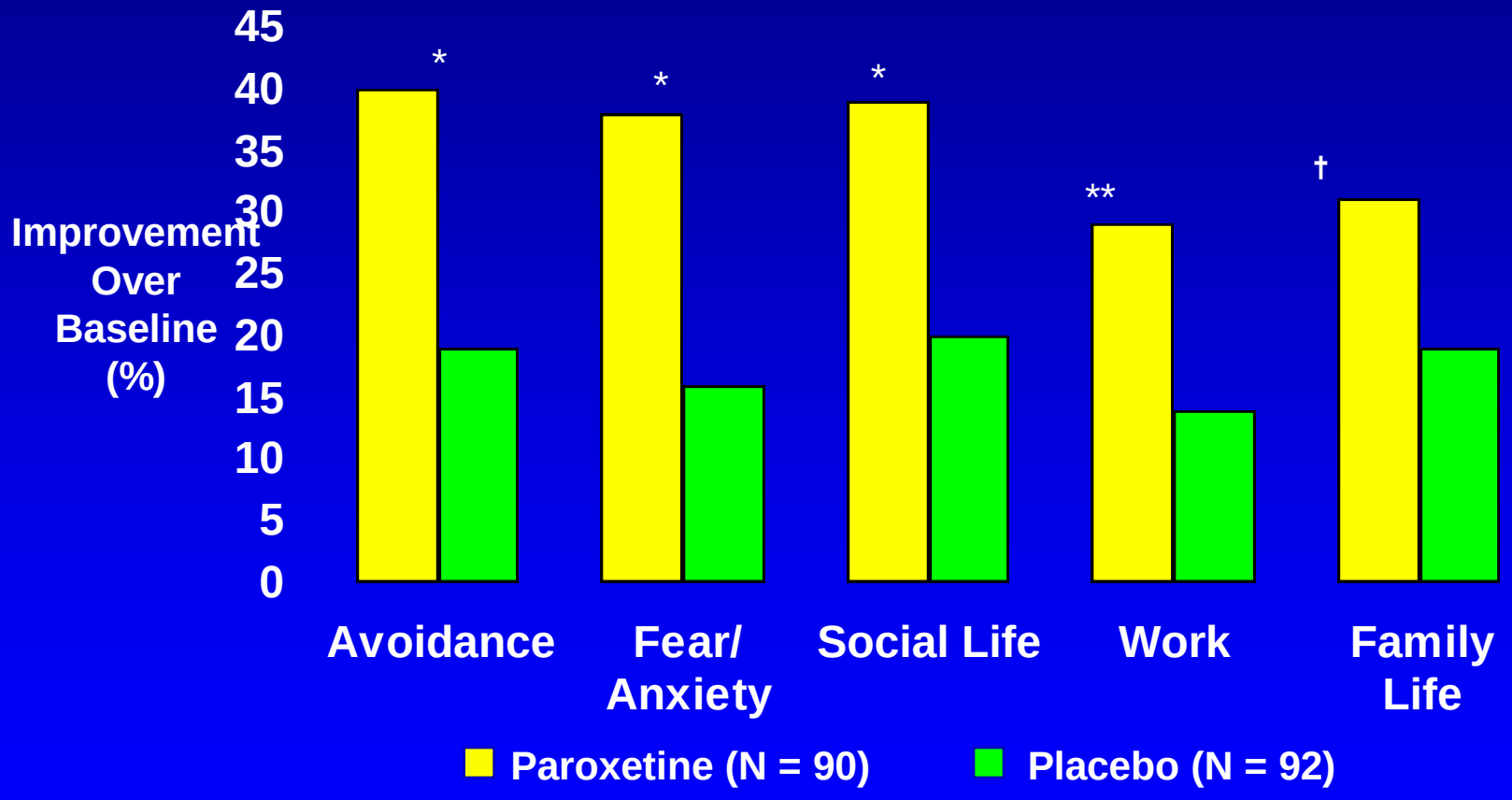
Pharmacotherapy Improves Negative Cognitions



Davidson et al, 1993

Paroxetine Treatment Of Social Anxiety Disorder

Improvement In Disability (ITT/LOCF)

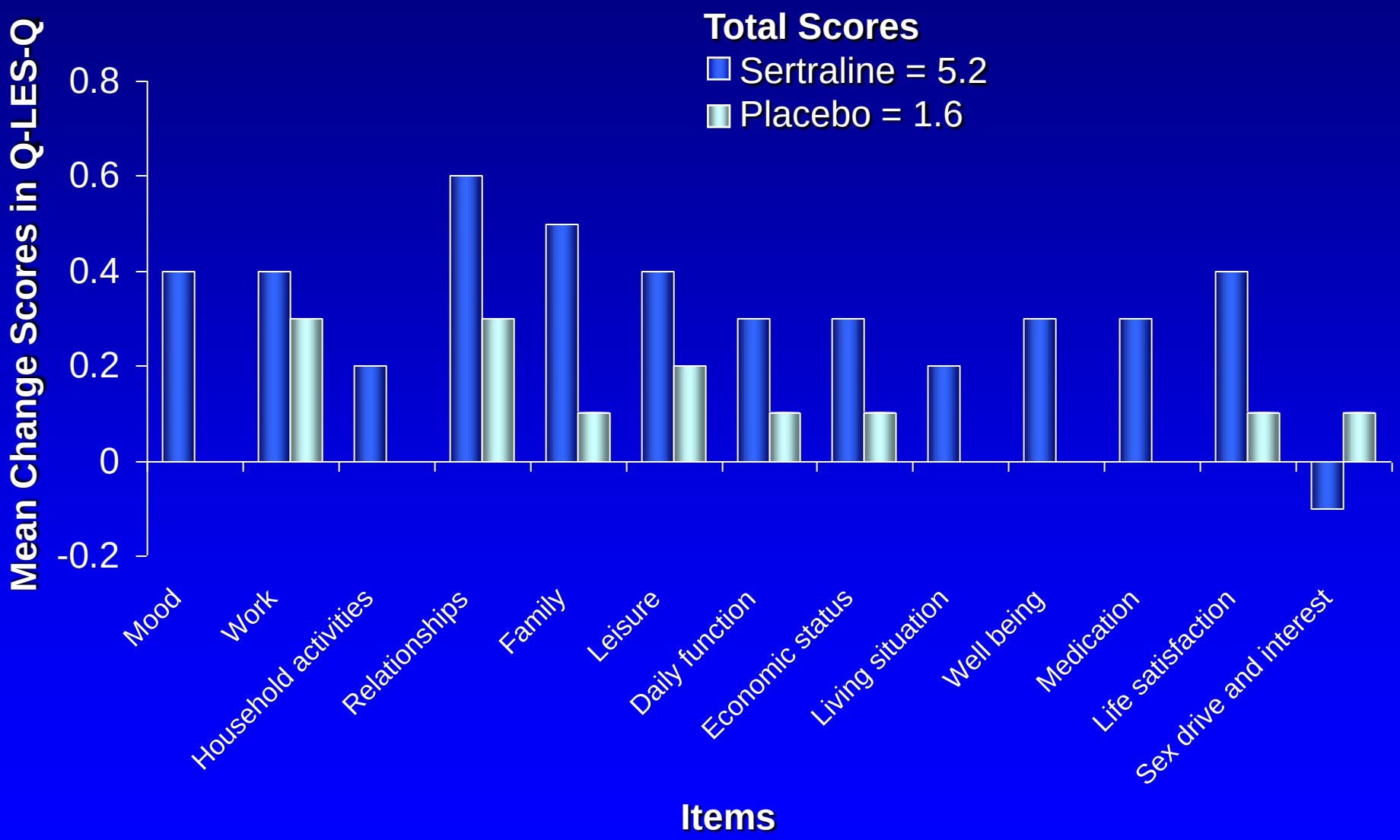


* *P*<.001; ** *P*=.03; † *P*=.17.

These data represent secondary endpoint analyses.

Stein et al. *JAMA*. 1998;280:708.

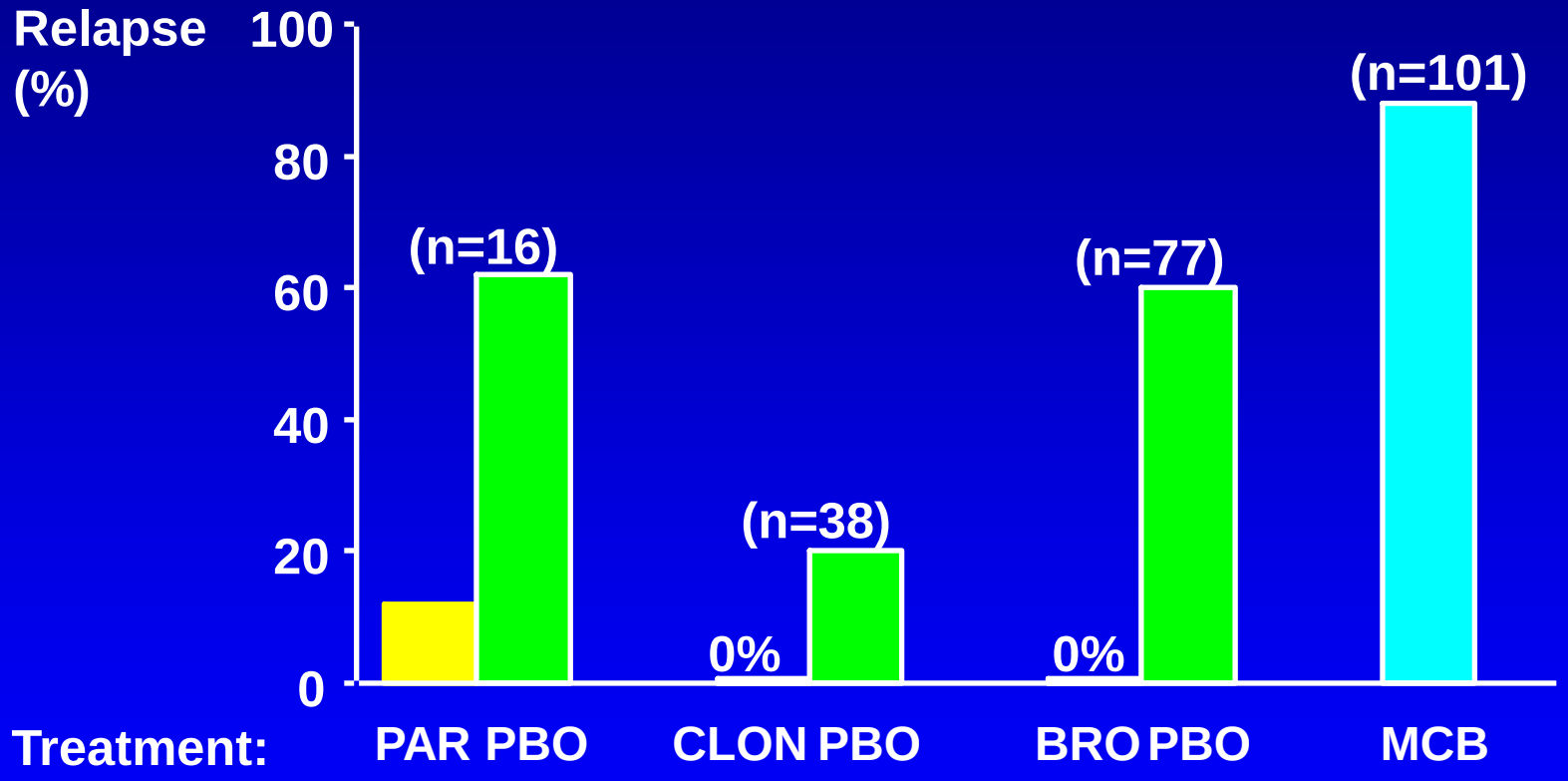
QoL in US Study



All *P*-values are significant (*P*<0.05).

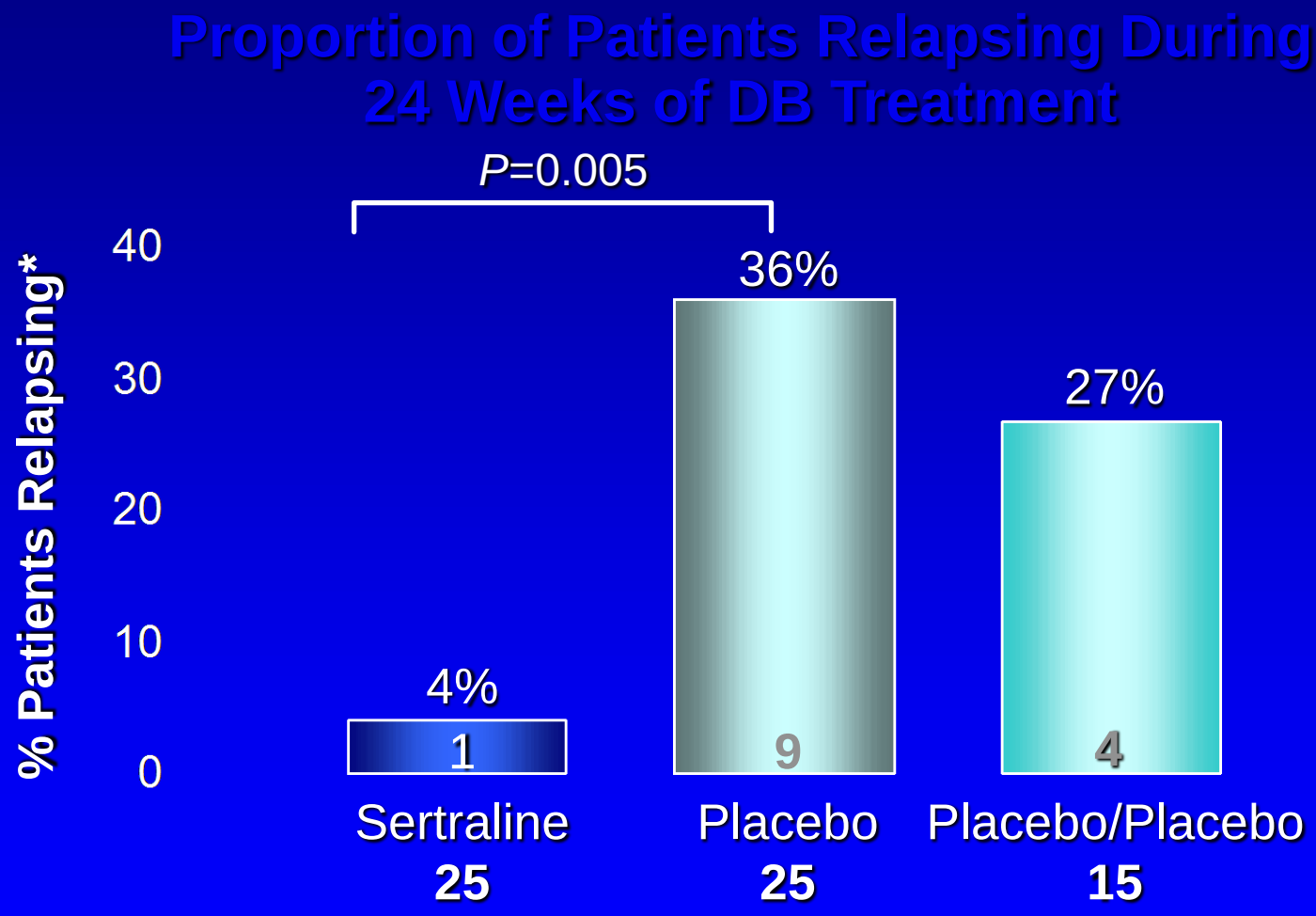
Liebowitz, APA, 2003

Relapse Prevention: Medication Maintenance



Stein et al, 1996; Davidson et al, 1998;
Fahlen et al, 1995; Versiani et al, 1996

Sertraline: Relapse* Prevention in Social Anxiety Disorder



*Relapse = CGI-S increase ≥2 from continuation study baseline *or* discontinuation due to lack of efficacy.

Walker et al. *J Clin Psychopharm*. 2000.

Pharmacological Treatment : Current Guidelines

- SSRIs or venlafaxine first-line treatment
- Higher dosing may be necessary
- Benefit often evident by 2-4 weeks
- Maintain dose achieving response
- If no response by 6-8 weeks, switch to second SSRI

Pharmacological Treatment : Current Guidelines (cont)

- If no response, try another class
- Adjunctive BZ often useful
- Add formal psychosocial treatment
- Continue for at least 1 year after maximum improvement achieved

CBT Pros and Cons

- Advantages
  - It works
  - It keeps working
  - Most people like it
  - Time-limited
    - overall low price
  - Few side-effects
- Disadvantages
  - More work
  - Limited supply
  - May not be covered by insurance
  - Not for everyone

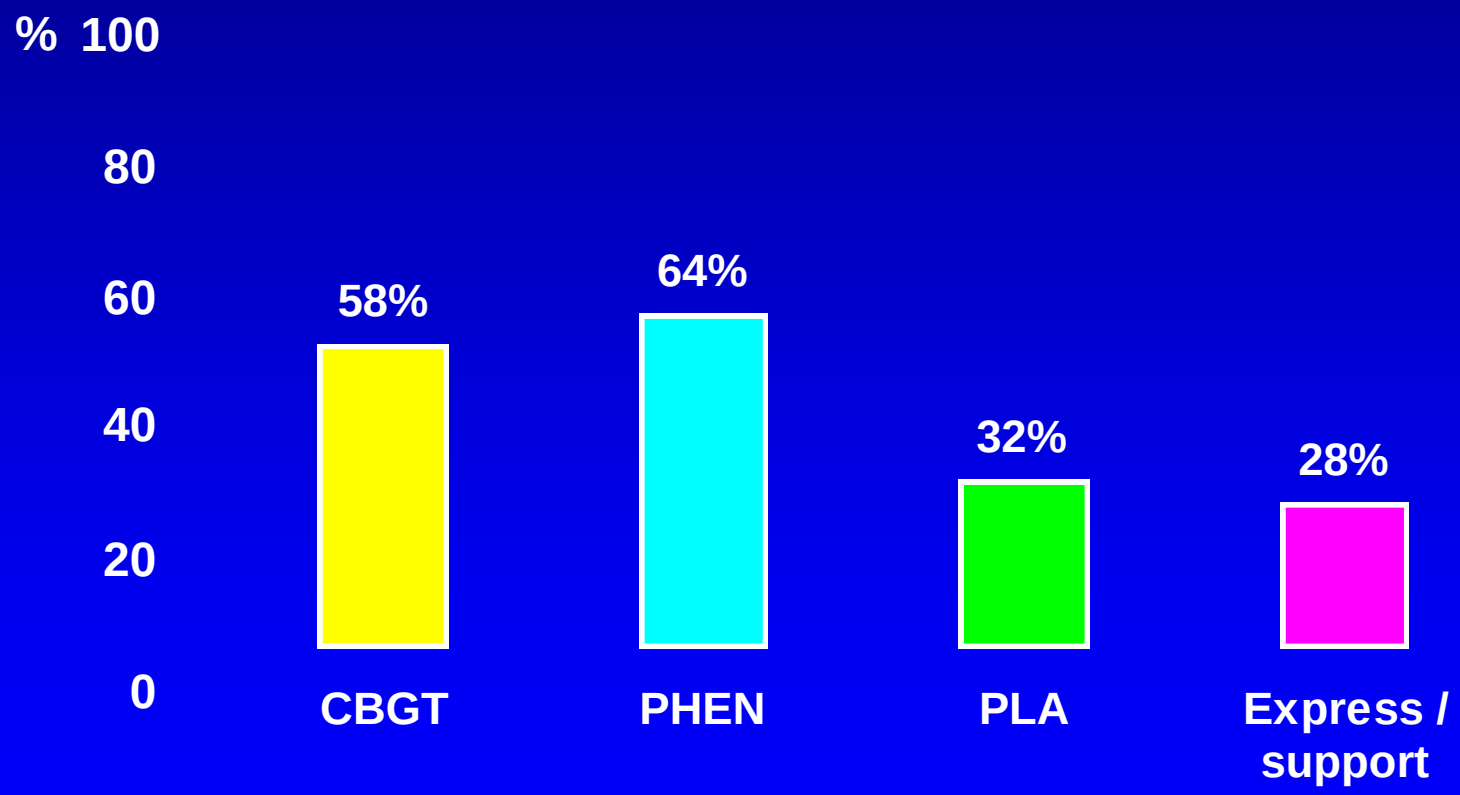
Social Anxiety Disorder Psychosocial Treatments

- Exposure
- Cognitive-behavioral
- Social skills

Cognitive-Behavioral Treatments

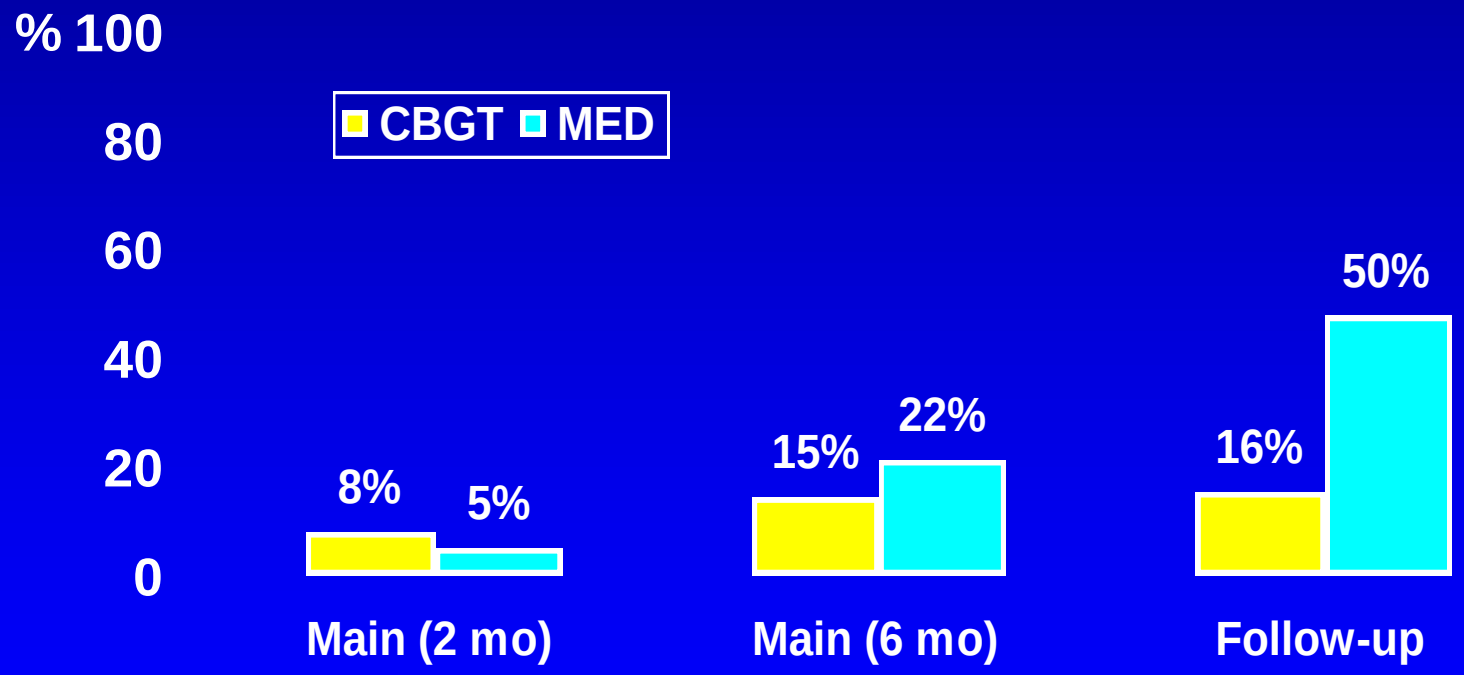
- CBT Group setting (Heimberg et al)
- Social effectiveness training (Turner , Beidel , Cooley-Quille)
- Other treatments (Foa and others)
- Comparative efficacy established

Response rate at 12 weeks (Intent-to-treat)



Gelernter, et al, Arch Gen Psychiatry 48:938-945, 1991

Cumulative relapse: CBT vs Phenelzine



Liebowitz, M. R et al; Depress Anxiety 10: 89-98,1999

Long-term Treatment Indications

- Persistent social anxiety symptoms; relapse after stopping prior treatment
- Comorbid conditions
- Early onset / avoidant personality

Social Anxiety Disorder: Conclusions

- Common and disabling disorder
- Requires prompt diagnosis to prevent long-term disability
- Underdiagnosed and undertreated
- Demands increased awareness from health professionals and the public

Post Lecture Exam Question 1

1. **The lifetime prevalance of social anxiety disorder is approximately:**

A. 13.1%

B. 0.7%

C. 3.5%

D. 24.9%

E. 13.3%

Question 2

2. **Which of the statements regarding social anxiety disorder treatment is true?**

A. Social anxiety disorder is more common than panic disorder.

B. Social anxiety disorder does not respond to tricyclic antidepressants

C. Buspirone is more effective for social disorder than alprazolam.

D. Women with social anxiety disorder is as disabling as major depression.

Question 3

3. Compared with normals, individuals with social anxiety disorder are more likely to develop all but which condition?

A. Alcoholism

B. Major Depression

C. Antisocial personality

D. Panic Disorder

E. PTSD

Question 4

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

A. GAD is the most common coexisting psychiatric disorder.

B. Social phobia is a risk factor for depression.

C. Approximately 25% of patients with social phobia abuse alcohol.

D. Generalized social anxiety disorder is more likely to be associated with comorbidity.

E. Avoidant personality disorder is the most prevalent Axis II disorder in generalized social anxiety.

Question 5

5. Social anxiety is poorly recognized because:

A. It is unimportant.

B. Sufferers are reluctant to seek attention for it.

C. Sufferers are unaware that it is a treatable condition.

D. Professionals are unaware of it.

E. All of the above.

Answers to Pre & Post Competency Exams

1. A
2. E
3. C
4. A
5. E