

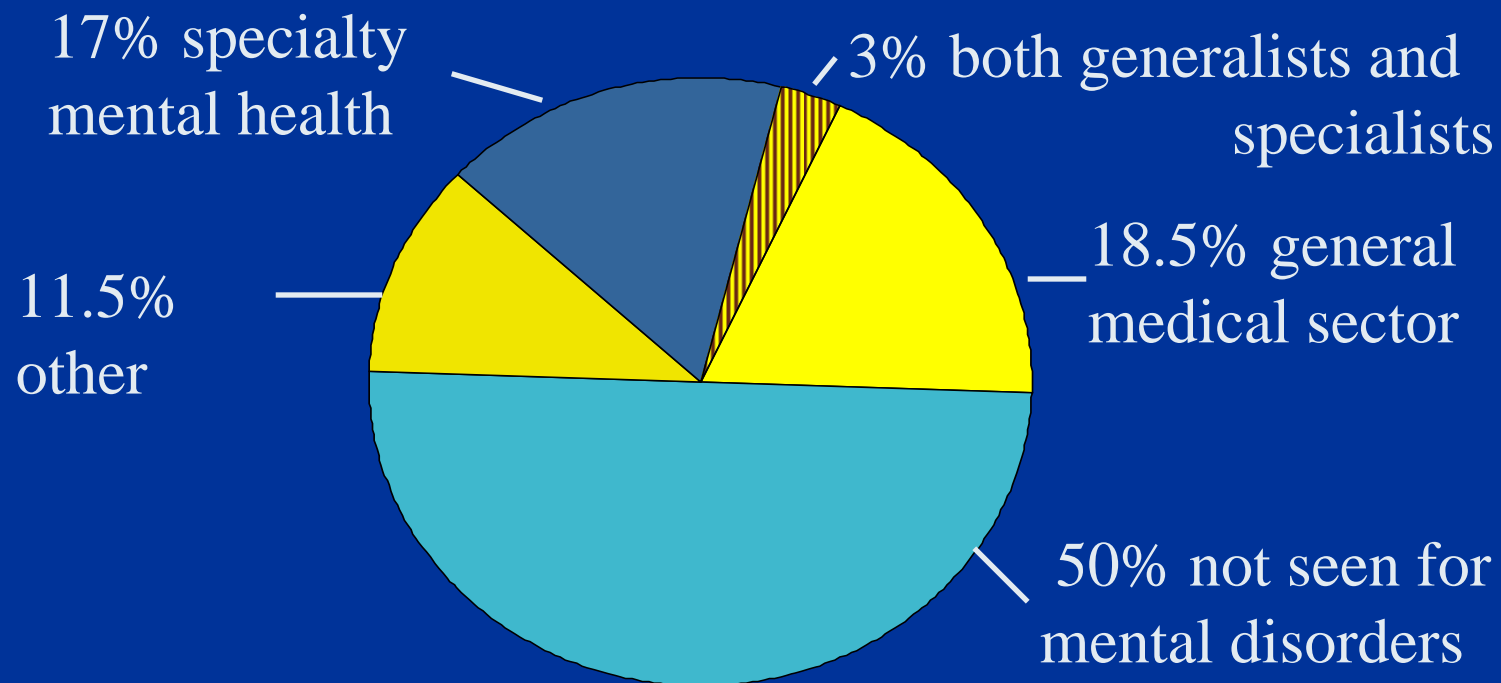


# **DEPRESSION AND ANXIETY IN THE ELDERLY AND MEDICALLY ILL**

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# MANAGEMENT OF MENTAL DISORDERS IN PRIMARY CARE

## “De Facto” Mental Health Care System



Prevalence of significant mental disorders: 28.1%

*Regier, Arch Gen Psych, 1993*

# PREVALENCE

(adult data -- very little data on the elderly)

	<u>12 Months (%)</u>	<u>Lifetime (%)</u>
Major depression	10	17.1
Social anxiety disorder	7.9	13.3
PTSD	5.0	8.0
Agoraphobia without PD	2.8	5.3
Panic disorder	2.3	3.5
Generalized anxiety disorder	3.1	5.1
OCD	1.6	2.5

*Kessler RC et al. Arch Gen Psychiatry. 1994;51:8-19*

# INCREASED PREVALENCE OF MD IN MEDICALLY ILL

- ◆ 20-50% of patients with DM, CAD, PD, MS, CVA, asthma, cancer... (etc) have MD
- ◆ Prevalence varies by illness, pathophysiology, severity, research design
- ◆ Depressed patients visit PCPs 3x more often than patients not depressed



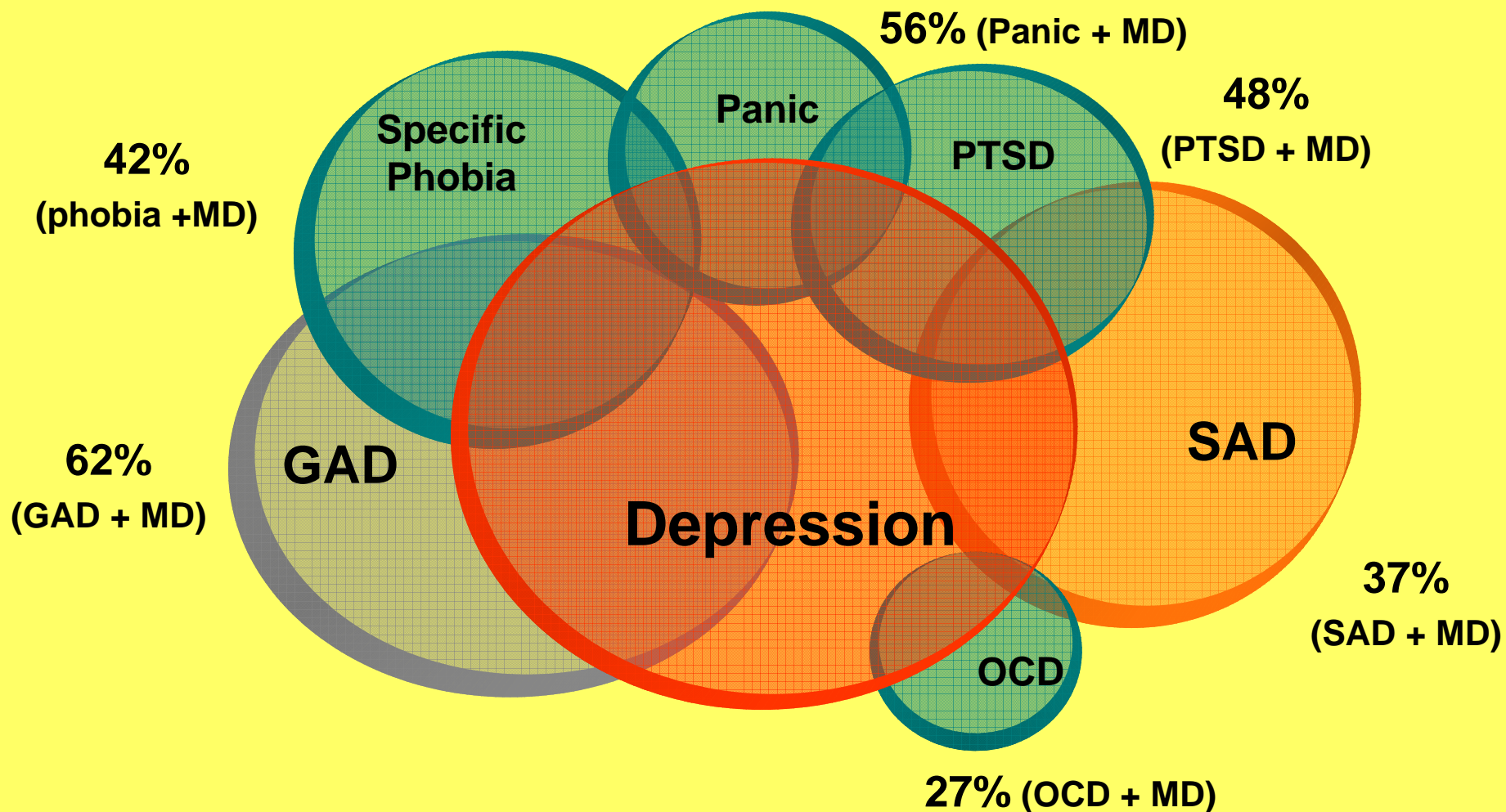
**CO-MORBIDITY  
IS THE RULE**

# ANXIETY IN MAJOR DEPRESSION

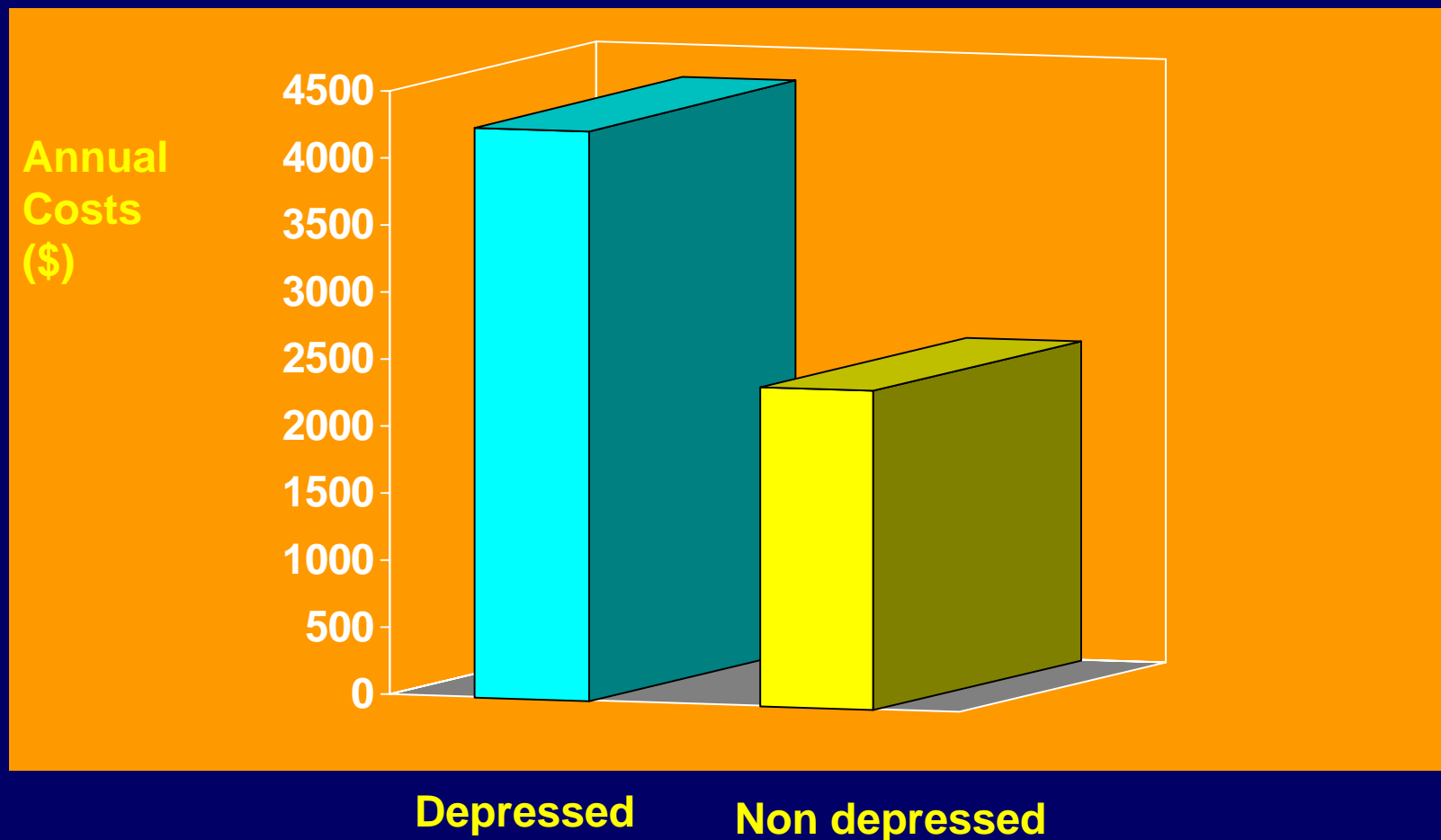
- ◆ 58% have an anxiety disorder
- ◆ >70% have anxiety symptoms

*Kessler RC et al. Br J Psychiatry Suppl. 1996;30:17-30.*

# PREVALENCE OF MAJOR DEPRESSION IN PATIENTS WITH ANXIETY



# IMPACT OF MENTAL DISORDERS: COSTS OF DEPRESSION



*Simon G, Am J Psychiatry. 1995*

# GLOBAL BURDEN OF DISEASE: WORLD HEALTH ORGANIZATION

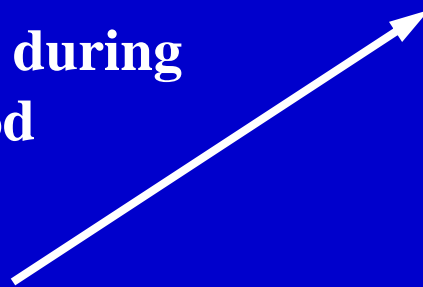
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**1990**

- 1 Lower respiratory infection**
- 2 HIV**
- 3 Conditions arising during the perinatal period**
  - **Diarrheal diseases**
  - **Unipolar major depression**
  - **Ischemic heart disease**
  - **Vaccine-preventable disease**

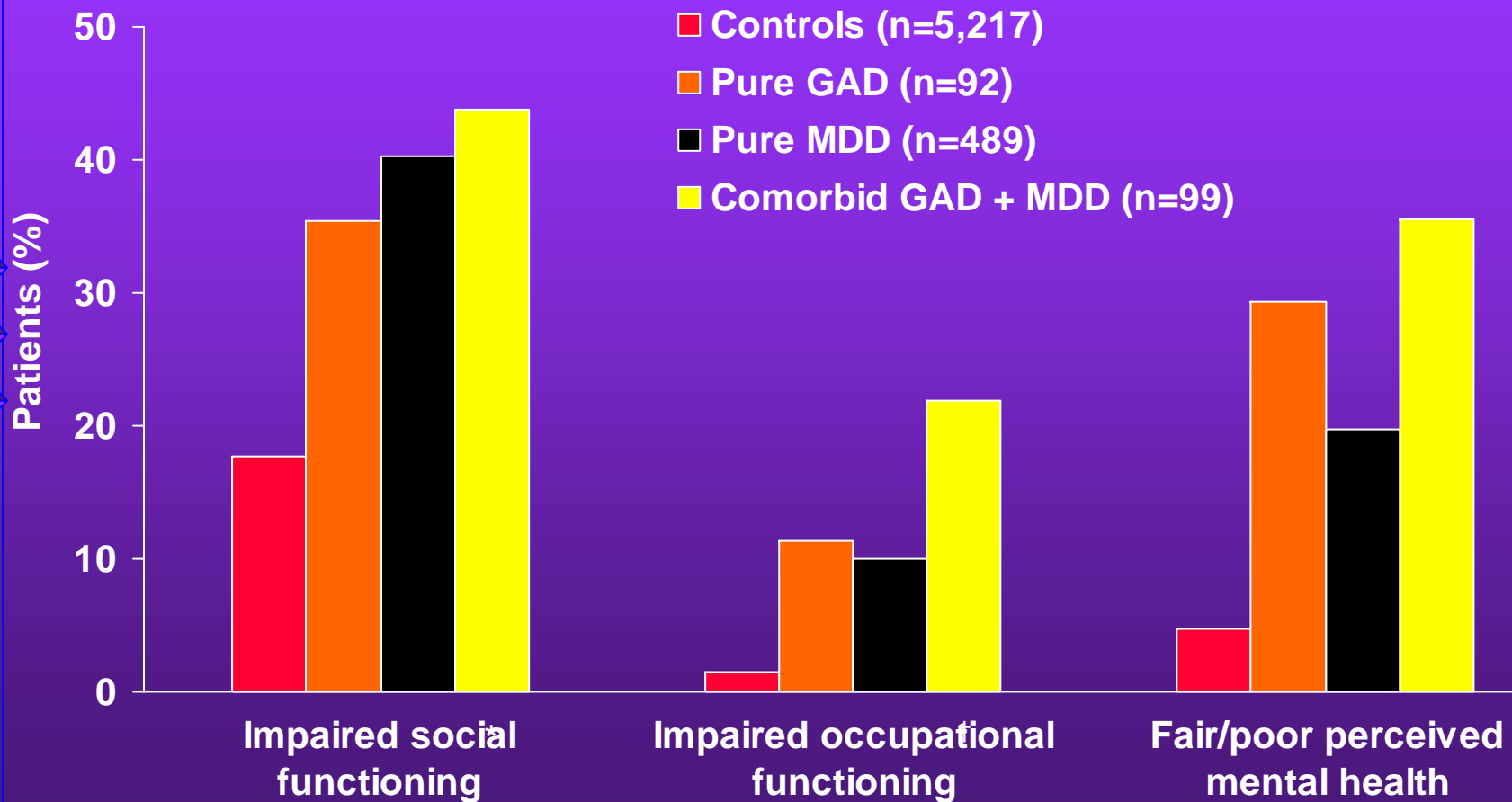
**2020**

- 1 Ischemic heart disease**
- 2 Unipolar major depression**
- 3 Road traffic accidents**
- 4 Cerebrovascular disease**
- 5 Chronic obstructive pulmonary disease**
- 6 Lower respiratory infections**



*Murray & Lopez, WHO: Global Burden of Disease, 1996; Michaud, JAMA, 2001*

# COMORBIDITY IS ASSOCIATED WITH INCREASED IMPAIRMENT



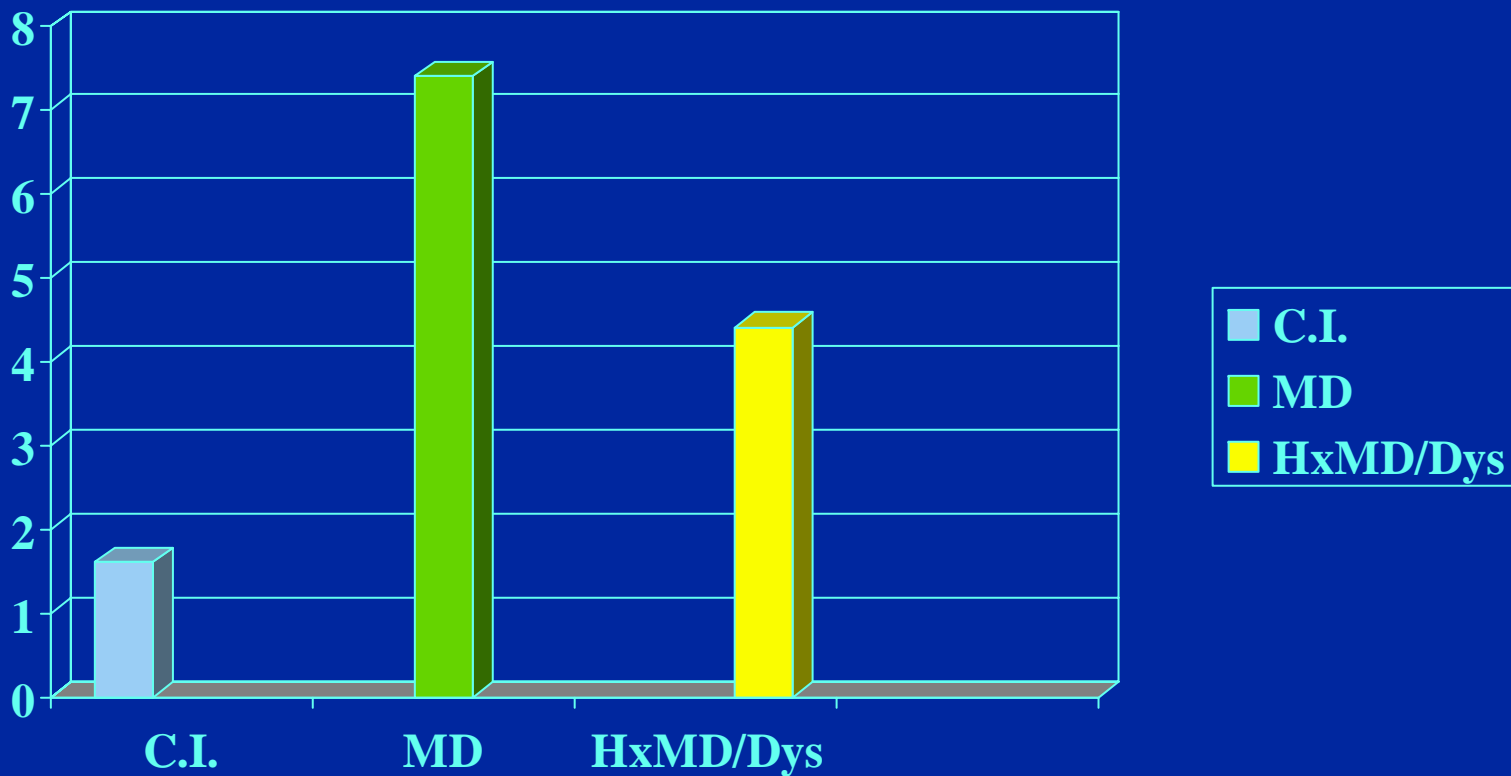
\*. Kessler RC, et al. Am J Psychiatry. 1999;156:1915-1923.

## **IMPACT OF DEPRESSION IN MEDICAL PATIENTS**

- **↑↑ disability**
- **↑↑ morbidity/mortality**
- **↑↑ healthcare utilization and costs**
- **↓↓ adherence**
- **↓↓ productivity at work  
(absenteeism; presenteeism)**
- **↓↓ recognition; ↓↓ response to Rx.**

# DEPRESSION PREDICTS IN-HOSPITAL MORTALITY

ODDS ratios



Cavanaugh et al, Am J Psychiatry, 2001

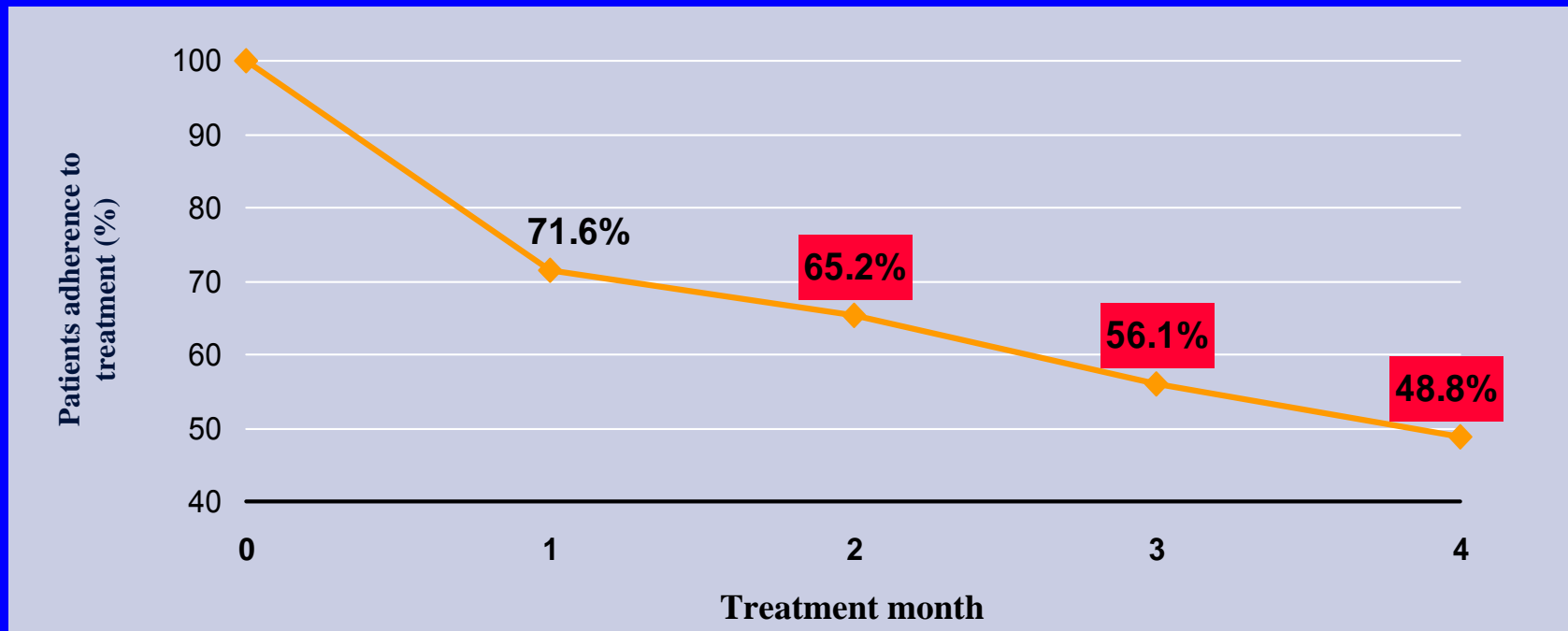
# UNDER-RECOGNITION/ UNDERTREATMENT

- ◆ 30%-70% of depression missed
- ◆ 50% of treated patients in primary care remain depressed after 1 year

# DEPRESSION—ADHERENCE

*In a study examining adherence,*

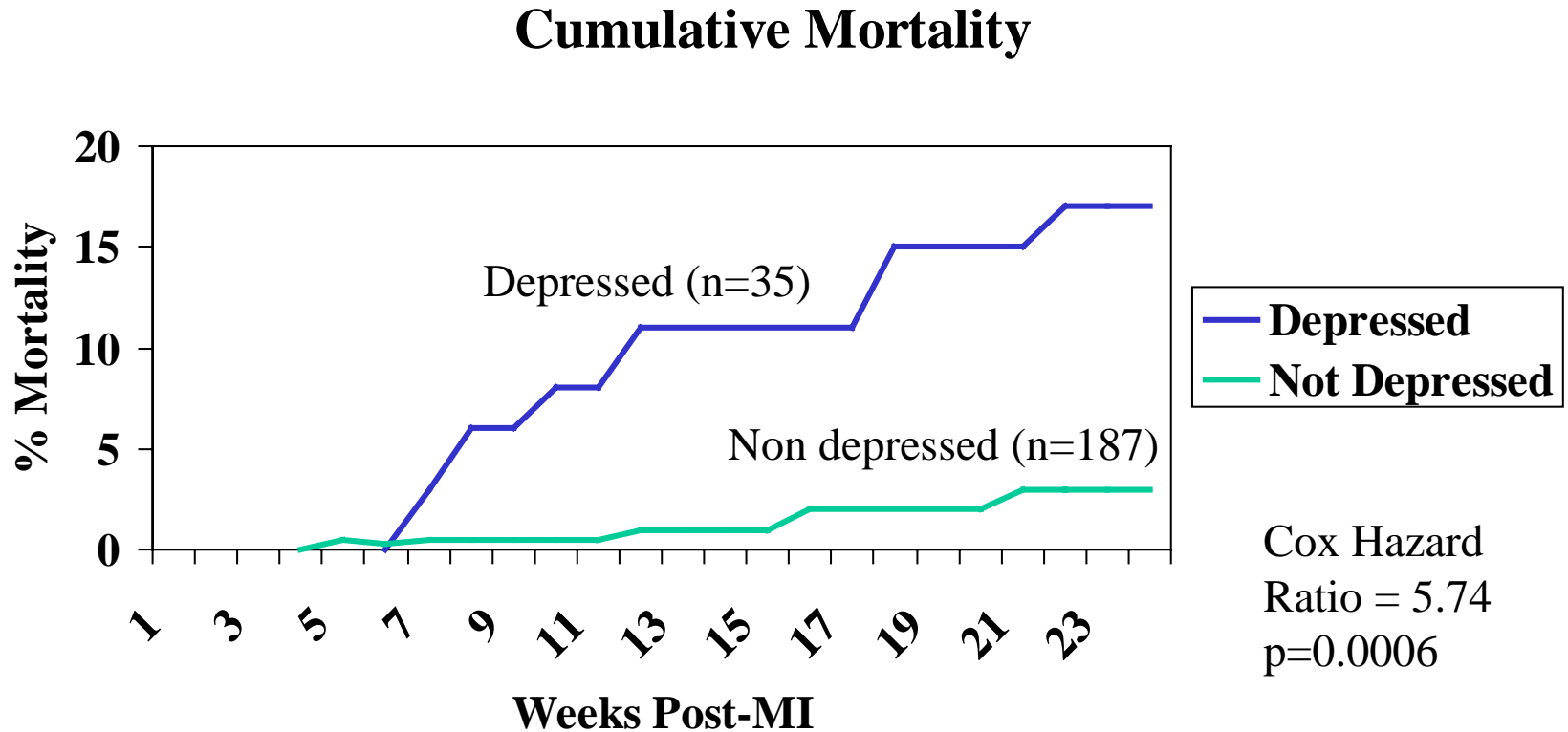
**28% of patients discontinued antidepressant treatment within the first month**



- According to AHCPR, patients who discontinue medication early have a relapse rate of about 25% within 2 months

Lin, Medical Care, 1995; *Depression in Primary Care*, 2 (AHCPR) 1993.

# CUMULATIVE MORTALITY FOR DEPRESSED AND NONDEPRESSED PATIENTS AFTER MI



*Frazure-Smith, JAMA 1993;270:1819-1825*

# DEPRESSION IN CAD

- ◆ Dep is risk factor for future CAD, MI
- ◆ 15-23% major depression
- ◆ ↑↑ risk (3-5x) of death after MI (independent of other risks)
- ◆ ↑↑ HPA activation
- ◆ ↑↑ sympatho-medullary activity
- ◆ ↑↑ platelet aggregation; ↓↓ HR variability

*Musselman et al Archives Gen Psych 1998*

*van Kanel et al Psychosom Med 2001*

# DEPRESSION IN DIABETES

- ◆ 11-15% major depression (OR 2:1)
- ◆ ↑↑ non-adherence
- ◆ ↑↑ GHb
- ◆ ↑↑ retinopathy; ↑↑ neuropathy; ↑↑ nephropathy
- ◆ ↑↑ macrovascular complications (CAD, etc)

*Katon, Biological Psychiatry, 2003*

*Groot et al Psychosom Med 2001*

*Van Tilburg et al Psychosom Med 2001*

# DEPRESSION IN CANCER

- ◆ 6/30 studies show positive association with depression and later cancer
- ◆ 25-33% prevalence of maj dep in cancer
- ◆ 15/24 studies link depression as predictor of poor outcome in cancer
- ◆ Depression more commonly precedes pancreatic cancer than other CA (4:1)

*Spiegel and Giese-Davis, Biological Psychiatry, 2003*

*Carney et al, Psychosomatic Medicine, 2003*

# DEPRESSION AND PAIN

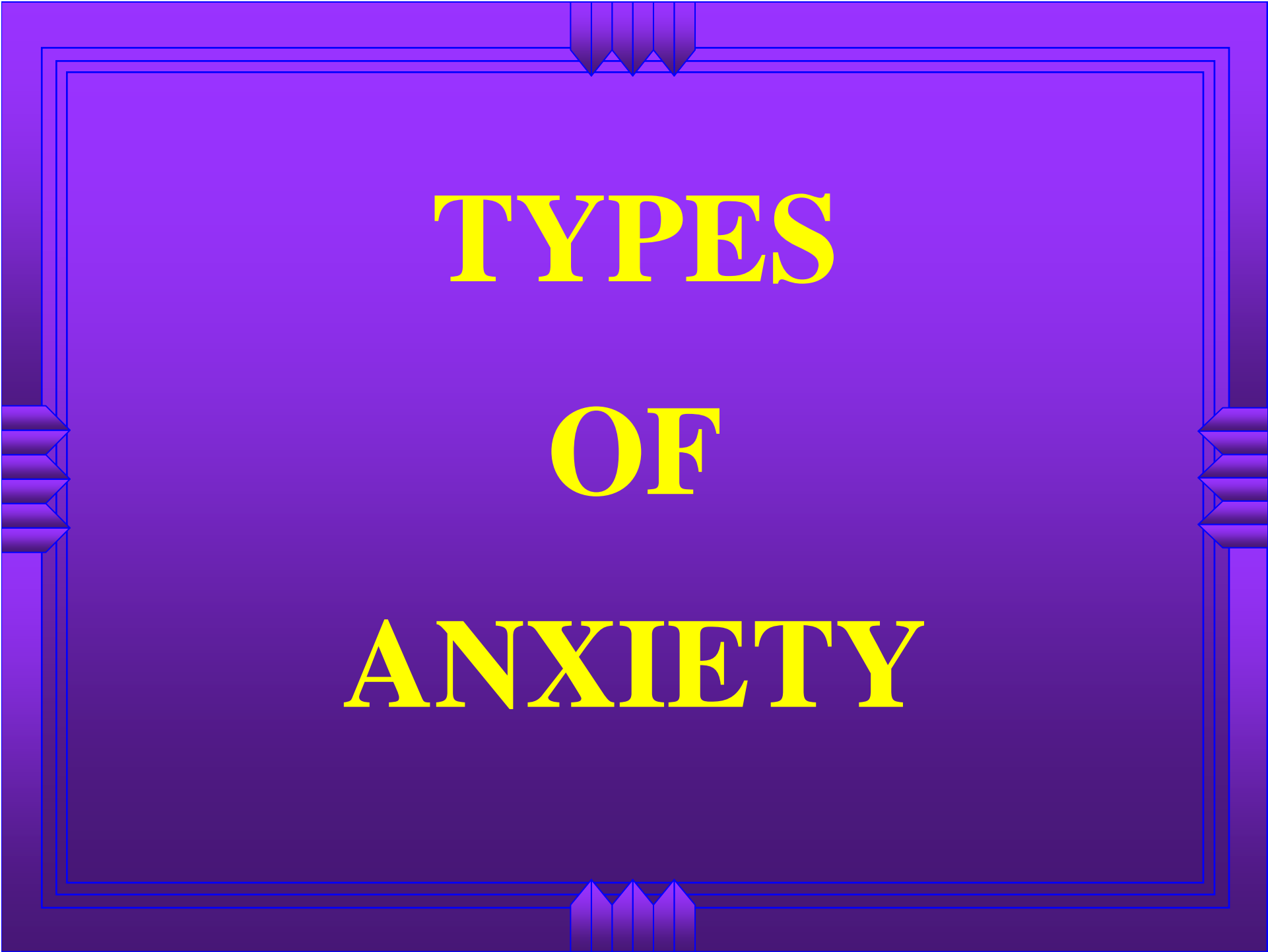
- ◆ Depression/pain 'cause' each other
- ◆ 30-54% of patients with chronic pain have MD
- ◆ 43% of MD have CPPC (OD 4:1)\*
- ◆ MD w/CPPC is more severe and lasts longer\*
- ◆ 5-HT and NE involved in both pain and MD
- ◆ Dual action antidepressants (tricyclics, venlafaxine, duloxetine) effective for pain

*\*Ohayon J Clin Psychiaatry 2004*

*Campbell, Biological Pschiatry, 2003*

# TYPES OF DEPRESSION

- ◆ Major depression
- ◆ Chronic depression (dysthymia)
- ◆ Minor depression
  - ✎ adjustment disorder
  - ✎ depressive disorder nos



**TYPES  
OF  
ANXIETY**

# TYPES OF ANXIETY

- ◆ Panic disorder
- ◆ Generalized anxiety disorder
- ◆ Obsessive-compulsive disorder
- ◆ Post-traumatic stress disorder
- ◆ Phobias (specific/agoraphobia)
- ◆ Social anxiety disorder

# PANIC DISORDER

- ◆ **Recurrent unexpected panic attacks**
- ◆ **Panic attacks associated with  $\geq 1$  of the following, lasting  $\geq 1$  month**
  - **Persistent concern about attacks**
  - **Worry about the implications of attacks**
  - **A significant change in behavior**

# GENERALIZED ANXIETY DISORDER

- ◆ **Excessive worry (cannot be controlled)**
  - About events/activities
  - 6 months
- ◆ **At least three of the following**
  - **Restlessness**
  - **Fatigue**
  - **Poor concentration**
  - **Irritability**
  - **Muscle tension**
  - **Insomnia**

# **OBSESSIVE COMPULSIVE DISORDER**

## **◆ Obsessions**

- Recurrent thoughts (ego-dystonic)**
- Often of a violent or sexual nature**

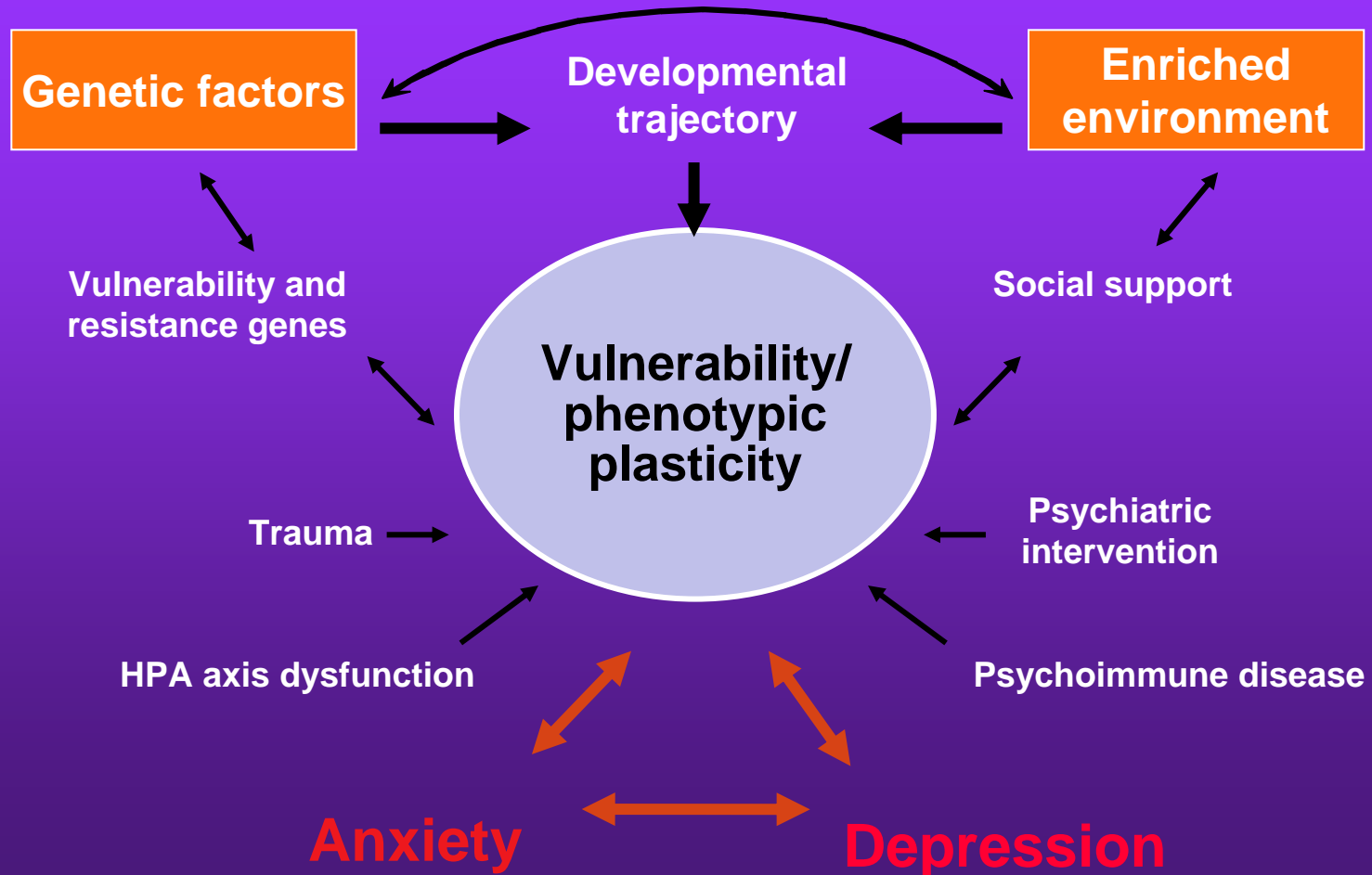
## **◆ Compulsions**

- Repetitive behaviors that cannot be controlled**

# PTSD

- ◆ **Exposure to extreme traumatic event**
  - **Intense fear, helplessness, or horror**
- ◆ **Significant dysfunction/distress**
- ◆ **Symptom clusters**
  - **Re-experiencing**
  - **Avoidance /emotional numbing**
  - **Increased arousal**
- ◆ **Symptoms persist for > 1 month**

# ETIOLOGICAL MODEL



# MAJOR DEPRESSION

## *Four Hallmarks:*

- ◆ **Depressed mood**
- ◆ **Anhedonia**
- ◆ **Physical symptoms**
- ◆ **Psychological symptoms**

# DEPRESSED MOOD

## *Hallmark 1*

- ◆ **Neither necessary, nor sufficient**
- ◆ **Can be misleading**
- ◆ **Beware of asking the question, “Are you depressed?”**

# ANHEDONIA

## *Hallmark 2*

- ◆ **Loss of interest or pleasure**
- ◆ **May be most important and useful hallmark**
- ◆ **Ask, “What do you enjoy doing?”**

# PHYSICAL SYMPTOMS

## *Hallmark 3*

- ◆ **Sleep disturbance**
- ◆ **Appetite or weight change**
- ◆ **Low energy or fatigue**
- ◆ **Psychomotor changes**

# PSYCHOLOGICAL SYMPTOMS

## *Hallmark 4*

- ◆ **Low self-esteem or guilt**
- ◆ **Poor concentration**
- ◆ **Suicidal ideation or persistent thoughts of death**

# **CHRONIC DEPRESSION (DYSTHYMIA)**

- ◆ **Characterized by 2 years of depressed mood, occurring more days than not**
- ◆ **Persists with at least 2 other symptoms of depression**
- ◆ **Increases risk of major depressive episodes**

# COMPLEXITIES OF ASSESSMENT

## Complexity #1 (stigma)

### “Fallacy of good reasons”

- “I have good reasons to be depressed...”
- “who wouldn’t be depressed?...I would too”

## Complexity #2 (multi-determined symptoms)

### “Confound of overlapping etiology”

- 4/9 signs/sx. may be ‘caused’ by either or both depression or co-morbid physical illness
  - low energy/fatigue
  - loss of appetite
  - trouble sleeping
  - slowing of motor movements

# DMS IV TR: MODIFIED INCLUSIVE APPROACH

“Count all physical symptoms...  
*unless they are clearly and fully accounted  
for by the physical illness*”

# MINOR DEPRESSION

- ◆ Depressed mood or anhedonia
- ◆ + additional dep. symptoms
- ◆ Symptoms present <2 yrs
- ◆ Dx = Adjustment disorder
- ◆ Dx = Depressive disorder nos
- ◆ Significant disability

# PATIENT HEALTH QUESTIONNAIRE: (PHQ)

- ◆ 9-item, self-administered questionnaire
- ◆ Validated for diagnostic assessment
  - 1st 2 questions useful for screening
- ◆ Validated for follow up of outcomes
- ◆ Clinically significant depression (“CSD”): PHQ = 10 or greater

*Spitzer R, et al. JAMA 1999; Kroenke K et al, Medical Care, 2003  
Kroenke K et al, J Gen Int Med, 2001*

# PHQ - 9 Symptom Checklist

1. Over the <u>last two weeks</u> have you been bothered by the following problems?	Not at all 0	Several days 1	More than half the days 2	Nearly every day 3
a. Little interest or pleasure in doing things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Feeling down, depressed, or hopeless	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Trouble falling or staying asleep, or sleeping too much	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Feeling tired or having little energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Poor appetite or overeating	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Feeling bad about yourself, or that you are a failure . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Trouble concentrating on things, such as reading . . .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Moving or speaking so slowly . . .	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Thoughts that you would be better off dead . . .	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. ... how <u>difficult</u> have these problems made it for you to do your work, take care of things at home, or get along with other people?				
Subtotals:		3	4	9
TOTAL:		16		

# SCORING THE PHQ: SEVERITY

## ◆ Count numerical values of symptoms

- 0-4 not clinically depressed
- 5-9 mild depression
- 10-14 moderate depression
  - 88% sensitivity, 88% specificity (MD)
- >14 severe depression

# USE OF THE PHQ

- ◆ **Assess high-risk, ‘red flag’ patients**
  - **Chronic illness**
  - **Unexplained physical complaints**
    - sleep disorder, fatigue
  - **Patients who appear sad**
  - **Recent major stress or loss**

**3. Questions about anxiety.**

	NO	YES
a. In the <u>last 4 weeks</u> , have you had an anxiety attack—suddenly feeling fear or panic?	<input type="checkbox"/>	<input type="checkbox"/>
<b>If you checked "NO," go to question 5.</b>		
b. Has this ever happened before?	<input type="checkbox"/>	<input type="checkbox"/>
c. Do some of these attacks come <u>suddenly out of the blue</u> —that is, in situations where you don't expect to be nervous or uncomfortable?	<input type="checkbox"/>	<input type="checkbox"/>
d. Do these attacks bother you a lot or are you worried about having another attack?	<input type="checkbox"/>	<input type="checkbox"/>

**4. Think about your last bad anxiety attack.**

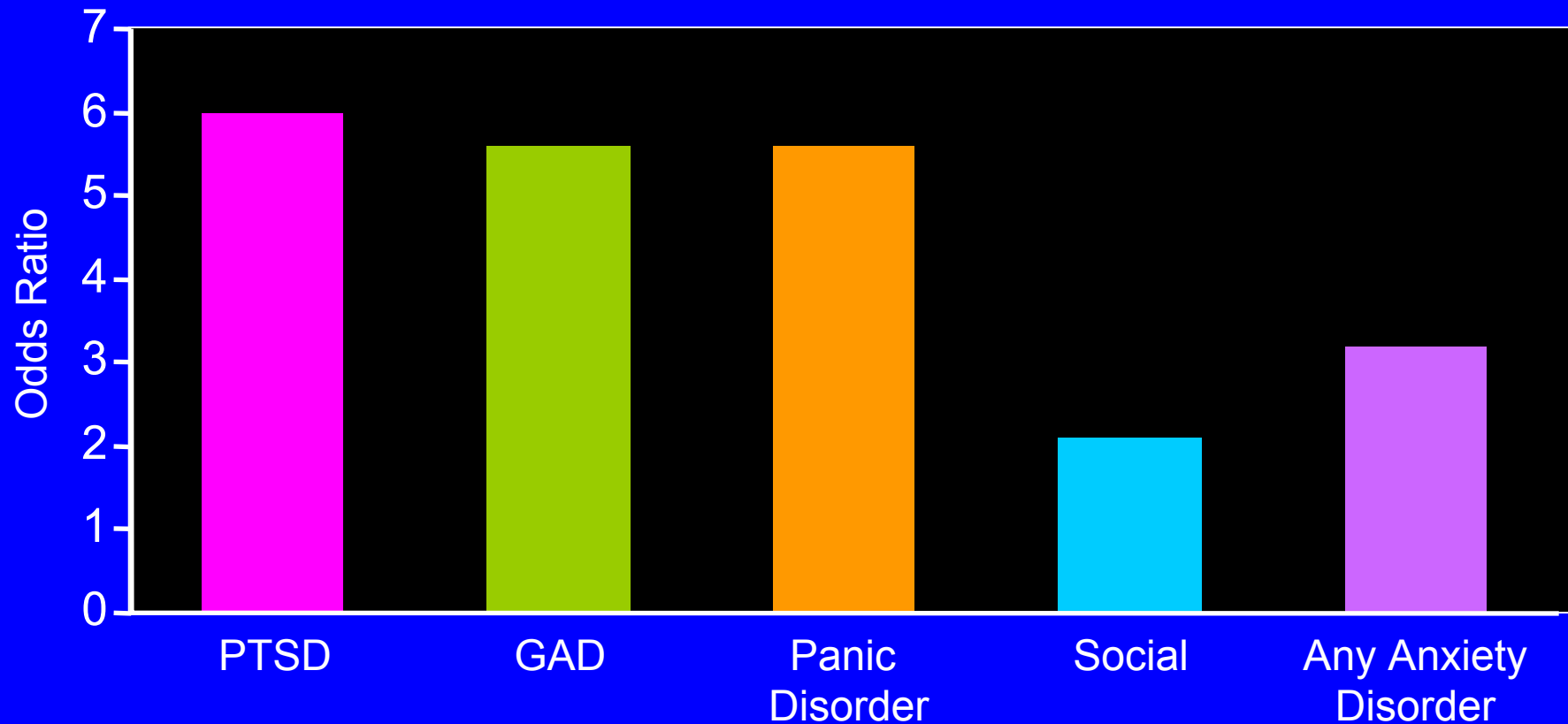
	NO	YES
a. Were you short of breath?	<input type="checkbox"/>	<input type="checkbox"/>
b. Did your heart race, pound, or skip?	<input type="checkbox"/>	<input type="checkbox"/>
c. Did you have chest pain or pressure?	<input type="checkbox"/>	<input type="checkbox"/>
d. Did you sweat?	<input type="checkbox"/>	<input type="checkbox"/>
e. Did you feel as if you were choking?	<input type="checkbox"/>	<input type="checkbox"/>
f. Did you have hot flashes or chills?	<input type="checkbox"/>	<input type="checkbox"/>
g. Did you have nausea or an upset stomach, or the feeling that you were going to have diarrhea?	<input type="checkbox"/>	<input type="checkbox"/>
h. Did you feel dizzy, unsteady, or faint?	<input type="checkbox"/>	<input type="checkbox"/>
i. Did you have tingling or numbness in parts of your body?	<input type="checkbox"/>	<input type="checkbox"/>
j. Did you tremble or shake?	<input type="checkbox"/>	<input type="checkbox"/>
k. Were you afraid you were dying?	<input type="checkbox"/>	<input type="checkbox"/>

**5. Over the last 4 weeks, how often have you been bothered by the following problems?**

	Not at all	Several days	More than half the days
a. Feeling nervous, anxious, on edge, or worrying a lot about different things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>If you checked "Not at all," go to question 6.</b>			
b. Feeling restless so that it is hard to sit still	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Getting tired very easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Muscle tension, aches, or soreness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Trouble falling asleep or staying asleep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Trouble concentrating on things, such as reading a book or watching television	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Becoming easily annoyed or irritated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FOR OFFICE CODING: Pan Syn if all of #3a–d are "YES" and four or more of #4a–k are "YES." Other Anx Syn if #5a and answers to three or more of #5b–g are "More than half the days."

# Risk of Suicide Attempts Among Patients with Anxiety Disorders



Kessler RC et al. *Arch Gen Psychiatry*. 1999;56:617-626.



# TREATMENT OF DEPRESSION

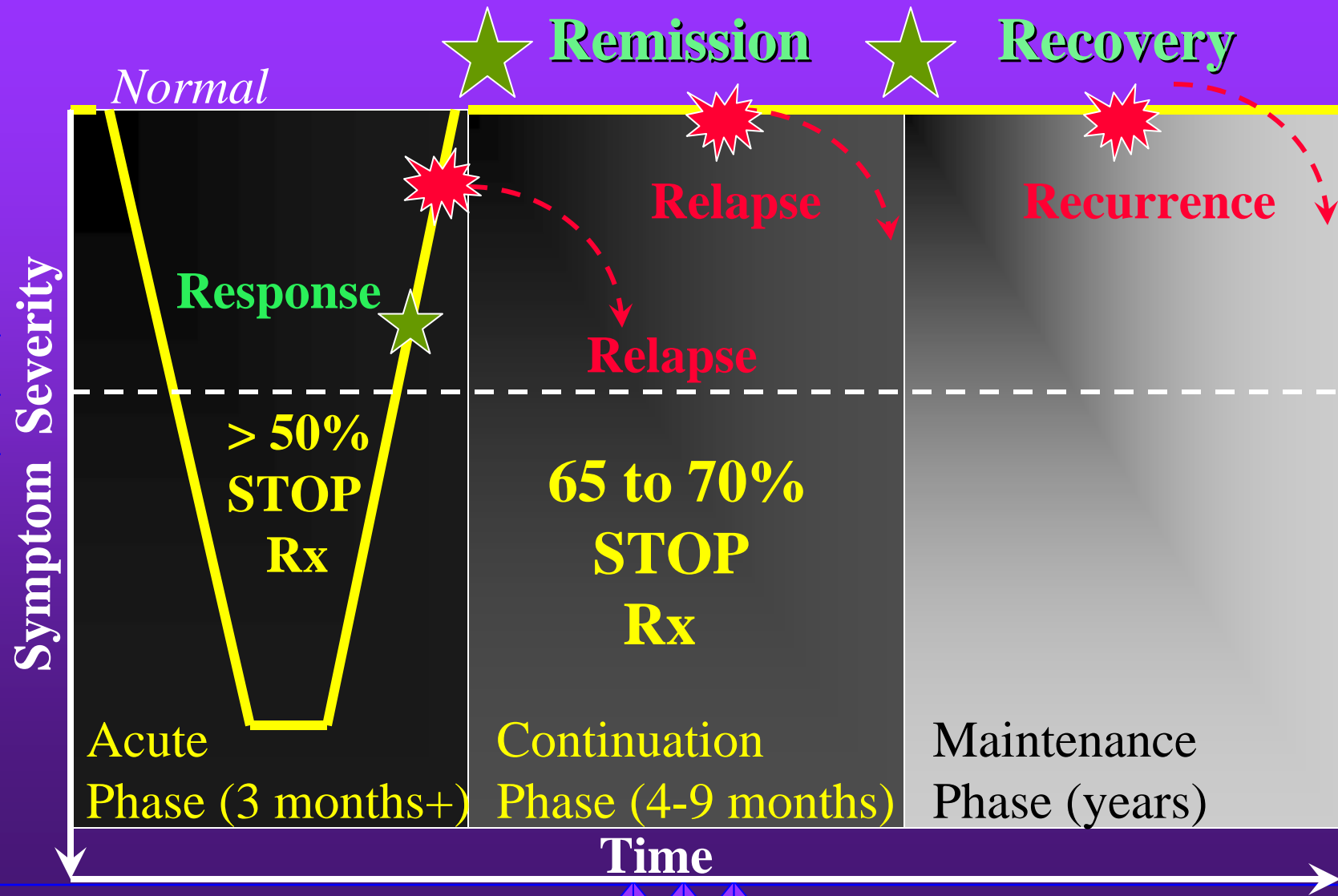
# TREATMENT

- ◆ Watchful waiting
- ◆ Psychotherapy
- ◆ Antidepressant medication
- ◆ Combination therapies

# WATCHFUL WAITING (WW)

- ◆ **Some low intensity depressions remit spontaneously**
- ◆ **WW is an acceptable “treatment plan”**
- ◆ **Initial treatment of choice for minor depression**
- ◆ **Intensity of WW**
  - **Low: repeat PHQ only (mild depression)**
  - **Moderate: w/care management (mod. depression)**
  - **If no remission in 6 months, treat more aggressively**

# THREE PHASES OF TREATMENT



# GOAL: FULL REMISSION

- ◆ **Remission of symptoms treatment goal**
  - Resolution of emotional/physical symptoms
- ◆ **Restoration of full functioning**
  - Return to work, hobbies, relationships
- ◆ **PHQ score < 5 for three months**

# Potential Consequences of Failing to Achieve Remission

- ◆ Increased risk of relapse and resistance<sup>1-3</sup>
- ◆ Continued psychosocial limitations<sup>4</sup>
- ◆ Decreased ability to work and productivity<sup>5,6</sup>
- ◆ Increased cost for medical treatment<sup>6</sup>
- ◆ Sustained depression may worsen morbidity/mortality of other conditions<sup>7-9</sup>

1. Paykel ES, et al. *Psychol Med*. 1995;25:1171-1180.

2. Thase ME, et al. *Am J Psychiatry*. 1992;149:1046-1052.

3. Judd LL, et al. *J Affect Disord*. 1998;59:97-108.

4. Miller IW, et al. *J Clin Psychiatry*. 1998;59:608-619.

5. Simon GE, et al. *Gen Hosp Psychiatry*. 2000;22:153-162.

6. Druss BG, et al. *Am J Psychiatry*. 2001;158:731-734.

7. Frasure-Smith N, et al. *JAMA*. 1993;270:1819-1825.

8. Penninx BW, et al. *Arch Gen Psychiatry*. 2001;58:221-227.

9. Rovner BW, et al. *JAMA*. 1991;265:993-996.

# PSYCHOTHERAPY

- ◆ **Effective (CBT/IPT/PST)**
  - **Mild to moderate major depression**
  - **Adjunct to antidepressants**
- ◆ **Possibly effective**
  - **Dysthymia (chronic depression)**
  - **Minor depression**
  - **For patients in life transitions or with personal conflicts**

# OFFICE COUNSELING

**S** *schedule regular activities*

**P** *plan pleasant events*

**E** *exercise*

**A** *assertiveness*

**K** *kind thoughts about self*

Christensen et al: Psychiatry for Primary Care, 2002

# NON-SPECIFIC SUPPORT

## Reflective listening

- If I understand you correctly, you...

## Empathic communication

- I can see you feel very sad...(reflection)
- I can understand...(legitimation)

## Specific offer of support

- I am here to help you...

## Partnership

- Let's you and I together...

## Respect

- I am very impressed by...

# PHARMACOTHERAPY

## ◆ **Effective**

- **major depression**
- **chronic depression (dysthymia)**

## ◆ **Equivocal**

- **minor depression**

# ANTIDEPRESSANTS

## ◆ TRICYCLICS

## ◆ SSRI<sub>s</sub>

❧ citalopram (Celexa)

❧ escitalopram (Lexapro)

❧ fluoxetine (Prozac)

❧ paroxetine (Paxil)

❧ sertraline (Zoloft)

## ◆ OTHER NEW AGENTS

❧ bupropion (Wellbutrin SR, XL) - DA/NE

❧ duloxetine (Cymbalta) - SRI/NRI

❧ mirtazapine (Remeron) - NE/5HT

❧ venlafaxine (Effexor XR) - SRI/NRI

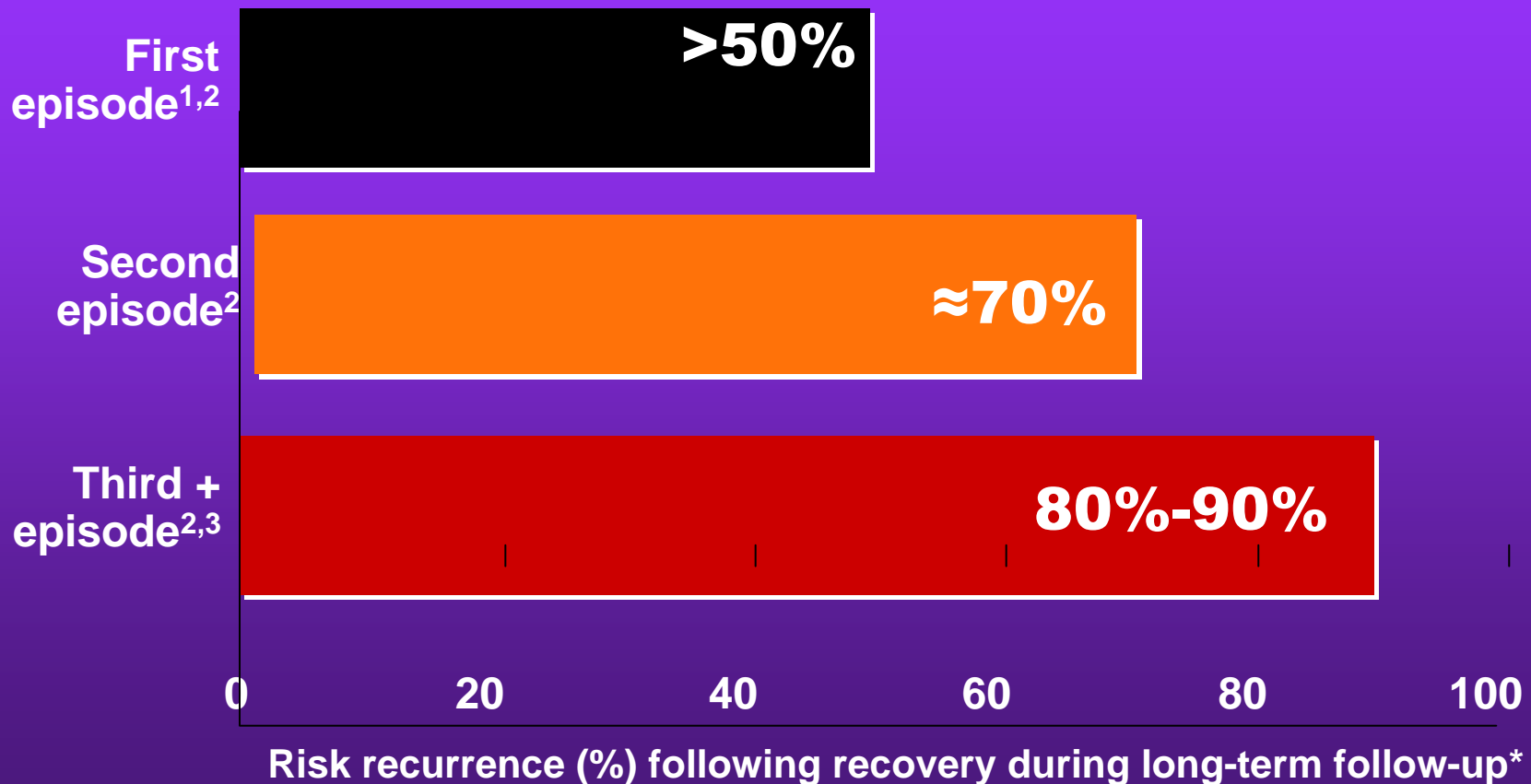
# MEDICATION ALGORITHM

- ◆ Start with SSRI or new agent
- ◆ Early follow-up (1-2 weeks)
- ◆ Increase dose every 2-4 weeks (to evaluate effect of each dose change)
- ◆ Repeat PHQ every month
- ◆ MCID=5 points on PHQ
- ◆ Raise dose or change treatment until PHQ<5 for 3 months (remission)

## PARTIAL OR NON-RESPONSE

- ◆ If no response, switch class
- ◆ If partial response at maximum dose, consider augmentation or consultation
- ◆ Continue medication for at least 4-9 months after full remission
- ◆ Use full-dose maintenance for recurrent depressions

# RECURRENCE BECOMES MORE LIKELY WITH EACH EPISODE OF DEPRESSION



1. Judd LL, et al. *Am J Psychiatry*. 2000;157:1501-1504.
2. Mueller TI, et al. *Am J Psychiatry*. 1999;156:1000-1006.
3. Frank E, et al. *Arch Gen Psychiatry*. 1990;47:1093-1099.

# TRICYCLIC ANTIDEPRESSANTS

## *Side Effects:*

- ◆ anticholinergic
  - ◆ antihistaminergic
  - ◆ antiadrenergic
  - ◆ quinidine-like effects
- \* nortriptyline and desipramine  
least toxic

# ADVANTAGES OF SSRI<sub>s</sub> AND OTHER NEW AGENTS

- ◆ Fewer side effects
- ◆ Safety profile
- ◆ Increased patient satisfaction
- ◆ Improved adherence to therapy
- ◆ Cost savings

# CHOOSING AGENTS IN ELDERLY/MEDICALLY ILL

## ◆ Generics

- fluoxetine; paroxetine; mirtazapine; bupropion
- (citalopram will be generic soon)

## ◆ Fluoxetine (Prozac) - long half-life; P450 inhibition; ↑↑ anxiety (only in short term), ↑↑ insomnia

## ◆ Paroxetine (Paxil) – sedating/multiple indications/weight gain/P450 inhibition/significant withdrawal problems/anti-cholinergic activity

# DRUG INTERACTIONS

## (INHIBITION OF CYTOCHROME P450)

### IID<sub>6</sub>

- **Moderate inhibition**
  - duloxetine (Cymbalta)
  - fluoxetine\* (Prozac)
  - paroxetine\* (Paxil)
- **Low inhibition**
  - bupropion\* (Wellbutrin)
  - escitalopram (Lexapro)
  - mirtazapine\* (Remeron)
  - sertraline (Zoloft)
  - venlafaxine (Effexor)

\*generic available

# **DRUG INTERACTIONS**

- ◆ **Obtain medication history**
- ◆ **Be aware that all drugs can affect the action and serum levels of other drugs**
- ◆ **Monitor the clinical effects and serum levels of all medications**
- ◆ **Use electronic data base**

# HALF-LIFE

*Long* (longer than 1 day)

✂ fluoxetine (Prozac)

*Short*

✂ other SSRIs (once a day)

✂ Cymbalta (once a day)

✂ Effexor XR (once a day)

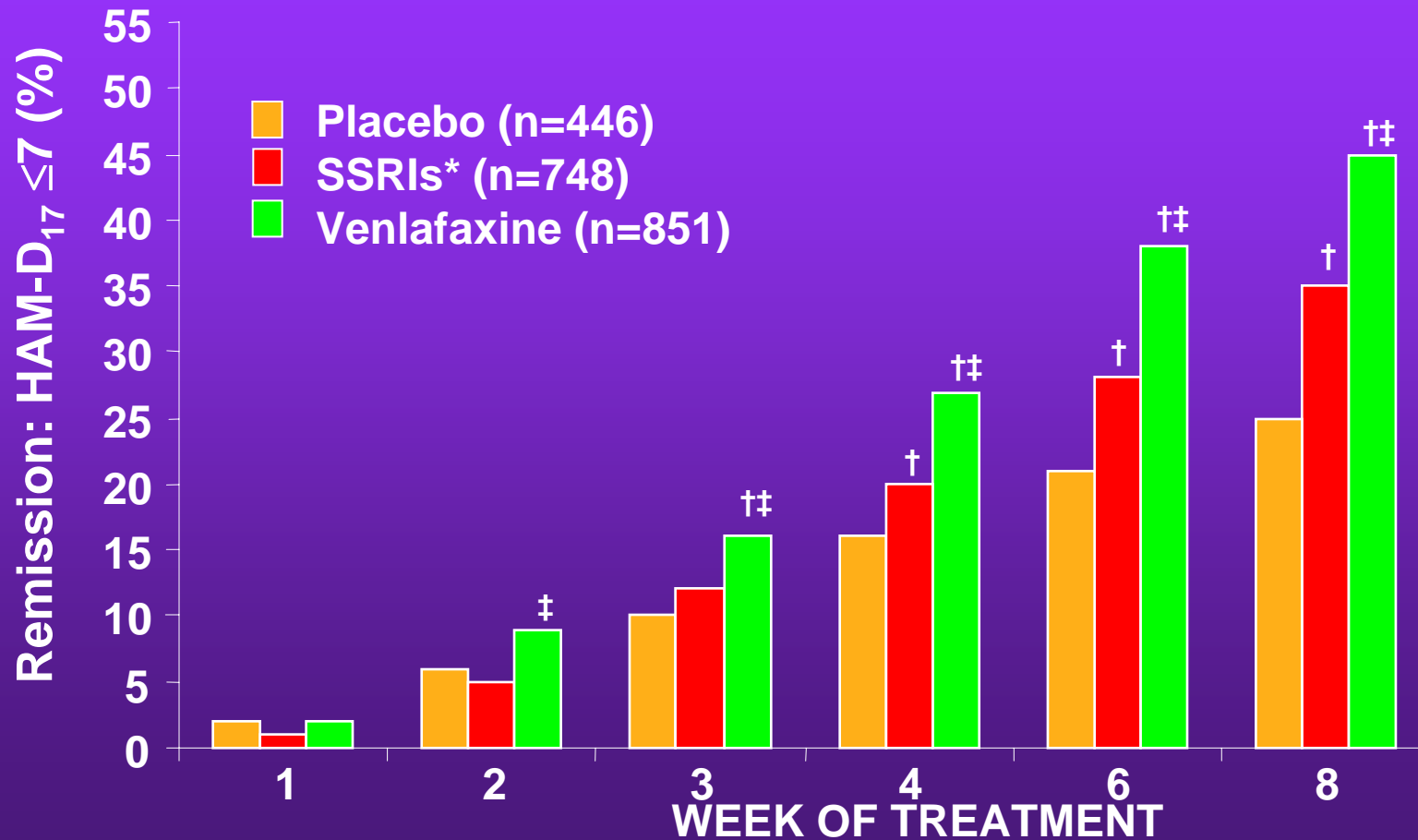
✂ mirtazapine (once/day)

✂ bupropion SR (1-2x/day)

## **POTENTIAL ROLE OF DUAL AGENTS (venlafaxine, amitriptylene, duloxetine)**

- ◆ all antidepressants may not be equally effective
- ◆ dual agents (NE, 5 HT) may be more effective
- ◆ if more patients reach remission with dual agents, may be ultimate pharmacoeconomic advantage to dual agents

# VENLAFAXINE VS. SSRI<sub>s</sub>



\*Fluoxetine (6 studies), paroxetine (1 study), fluvoxamine (1 study).

<sup>†</sup> $P \leq 0.05$  drug vs placebo. <sup>‡</sup> $P \leq 0.05$  venlafaxine vs SSRI. Thase ME, et al. *Br J Psychiatry*. 2001

## **SIDE EFFECTS (SSRIs)**

- ◆ **Agitation/insomnia**
- ◆ **GI distress**
- ◆ **Sexual dysfunction**

## **SIDE EFFECTS (OTHER NEW AGENTS)**

- ◆ **bupropion - agitation; (seizure risk)**  
**(Wellbutrin)**
- ◆ **duloxetine - nausea**  
**(Cymbalta)**
- ◆ **mirtazapine - sedation; weight gain**  
**(Remeron)**
- ◆ **venlafaxine - GI distress; (1-3% ↑↑ BP)**  
**(Effexor)**

# MANAGING SIDE EFFECTS

## ◆ Insomnia/agitation

- Use adjunctive sedating agent
- Switch to mirtazapine

## ◆ Sexual dysfunction

- Switch to bupropion, mirtazapine
- Add bupropion, sildenafil, yohimbine

# MANAGING SIDE EFFECTS

- ◆ Sedation
  - Give medication HS
- ◆ GI distress
  - Give medication after meals
- ◆ Anticholinergic effects
  - Bulk in diet, lemon drops
- ◆ Postural hypotension
  - Hydration, change position slowly, support hose

# **COMORBID ANXIETY SYMPTOMS/DISORDER**

- ◆ **Educate patient: SSRIs effective but increase anxiety in short-term**
- ◆ **Start with low dose SSRI, titrate slowly**
- ◆ **Consider adjunctive sedative/hypnotic, (trazodone at hs or benzodiazepine)**
- ◆ **Use buspirone for anxiety (not panic)**
- ◆ **Consider venlafaxine/mirtazapine monotherapy**

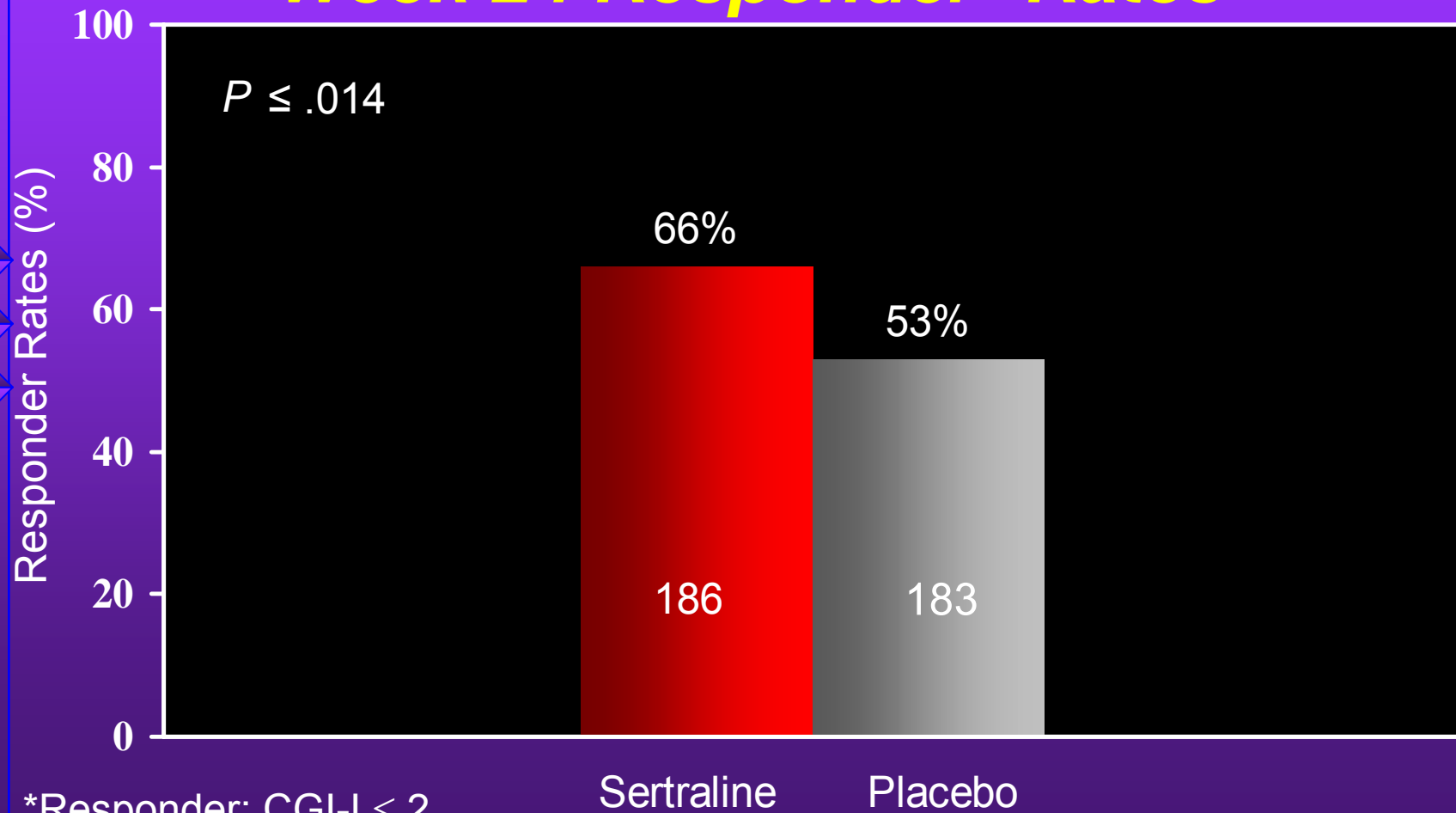
# ANTIDEPRESSANTS IN DIABETES

- ◆ **Tricyclics**
  - **useful for diabetic neuropathy**
  - **watch for postural hypotension and gastroparesis**
  - **may impair glycemic control**
- ◆ **SSRIs shown to improve depression/GHb**
- ◆ **Evidence of efficacy of new dual agents (venlafaxine, duloxetine) for neuropathy**

# ANTIDEPRESSANTS IN CAD/CVD

- ◆ **Tricyclics**
  - **prolong conduction**
  - **cause postural hypotension**
  - **may decrease HR variability**
- ◆ **SADHART** (*Glassman et al JAMA 2002*)
  - **Sertraline is safe and effective**
  - **Sertraline inhibits platelet aggregation**

# SADHART: Sertraline in Post-MI Depression: *Week-24 Responder\* Rates*



\*Responder: CGI-I  $\leq 2$ .

# SUMMARY OF ADVERSE EVENTS

Adverse events* (%)	Total		Severe	
	Severe	Sertraline† Placebo‡	Sertraline†	Placebo‡
Total cardiovascular§ (%)	52.7	59.0	<b>14.5</b>	<b>22.4</b>
Others (%)				
Nausea	<b>19.9</b>	<b>10.9</b>	<b>1.6</b>	<b>0.5</b>
Diarrhea	<b>18.8</b>	<b>7.7</b>	<b>1.6</b>	<b>0.5</b>
Insomnia	18.8	18.8	2.7	3.3
Dyspnea	13.4	19.7	1.6	2.2
Fatigue	14.5	13.7	1.1	1.1
Pain	10.2	11.5	1.1	1.6
Headache	20.4	16.4	2.7	2.2
Dizziness	15.6	12.0	2.2	0

\*≥ 10% in either group.

†(n = 186).

‡(n = 183).

§Includes angina, chest pain, edema, palpitations, syncope, postural dizziness, CHF, MI, BP, tachycardia, bradycardia,

## **PARTIAL OR NO RESPONSE**

- ◆ **Check for adherence**
- ◆ **Re-evaluate diagnosis**
- ◆ **Adjust dosage**
- ◆ **Change antidepressant**
- ◆ **Augment (lithium, T3, other class)**
- ◆ **Consider dual action agent**
- ◆ **Add psychotherapy**
- ◆ **Atypical antipsychotic**
- ◆ **Refer for expert consultation**

# OTHER TREATMENTS

## ◆ Psycho-stimulants

- methylphenidate (Ritalin)
- dextroamphetamine
- modafinil (Provigil)

## ◆ Electroconvulsive therapy



# TREATMENT OF ANXIETY

## 5-HT DRUGS-OTHER APPROVED INDICATIONS

	MD	Panic	OCD	SAD	GAD	PTSD	
citalopram	<b>X</b>						
escitalopram	<b>X</b>				<b>X</b>		
fluoxetine	Adult and children	<b>X</b>	<b>X</b>				<b>BN</b>
fluvoxamine			<b>X</b>				
paroxetine	Adult	<b>X</b>	Adult	<b>X</b>	<b>X</b>	<b>X</b>	
sertraline	<b>X</b>	<b>X</b>	Adult and children	<b>X</b>		<b>X</b>	<b>PDD</b>
venlafaxine	<b>X</b>			<b>X</b>	<b>X</b>		

DEP=major depression; OCD= Obsessive-compulsive disorder; SAD=social anxiety disorder; GAD=generalized anxiety disorder; PTSD=post-traumatic stress disorder; BN=bulemia nervosa; PDD=premenstrual dysphoric disorder

# TREATMENTS FOR ANXIETY DISORDERS

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				Other		
	CBT	SSRI	Bus**	Antidep*	BZ***	
Panic Disorder	X	X		X		X
Soc anxiety disorder	X	X		X		X
OCD	X	X		X		
Generalized anxiety	X	X	X	X		X
PTSD	X	X		X		
Specific phobia	X					

\*Tricyclic antidepressants and venlafaxine (duloxetine soon)

\*\*buspirone \*\* CBT = cognitive behavioral therapy; \*\*\*BZ = benzodiazepines.

# **BENZODIAZEPINES**

**(all available as generics)**

**Short acting: Ativan (lorazepam)\***

**Serax (oxazepam)\***

**Intermediate: Xanax (alprazolam)**

**Long acting: Klonopin (clonazepam)**

**Valium (diazepam)**

**Librium (chlordiazepoxide)**

\*excreted in the urine, after simple metabolism

# PSYCHOPHARMACOLOGY IN THE ELDERLY: SPECIAL CONSIDERATIONS

- ◆ **Pharmaco-kinetics - increased effect**
  - hepatic metabolism decreased
  - decreased protein binding
- ◆ **Pharmaco-dynamics - increased effect**
  - increased receptor sensitivity
- ◆ **Start low, go slow, but GO!**