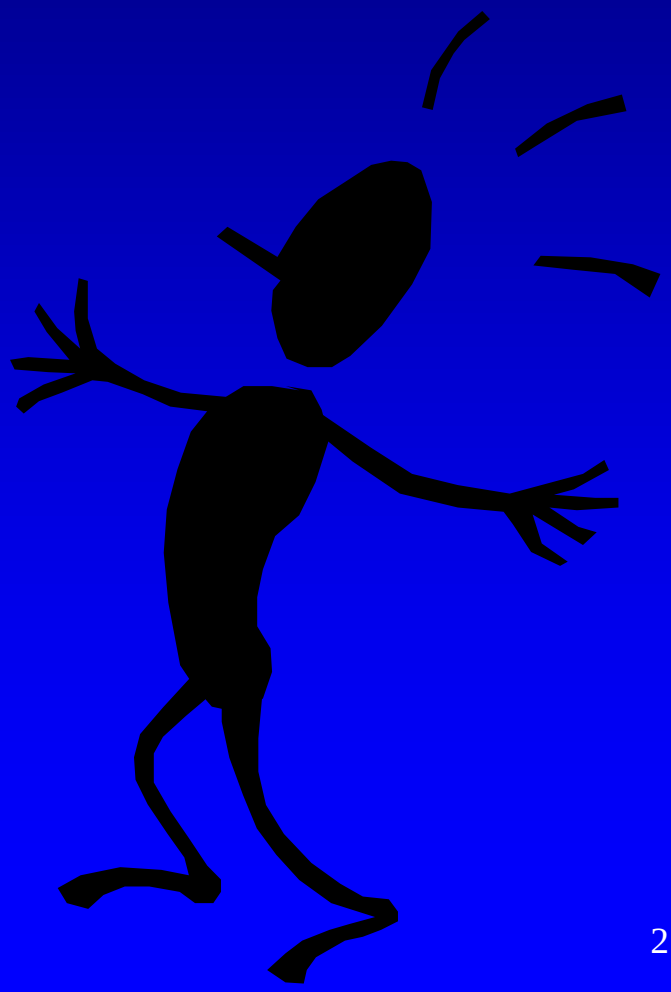
Psychopharmacology in the Primary Care Setting

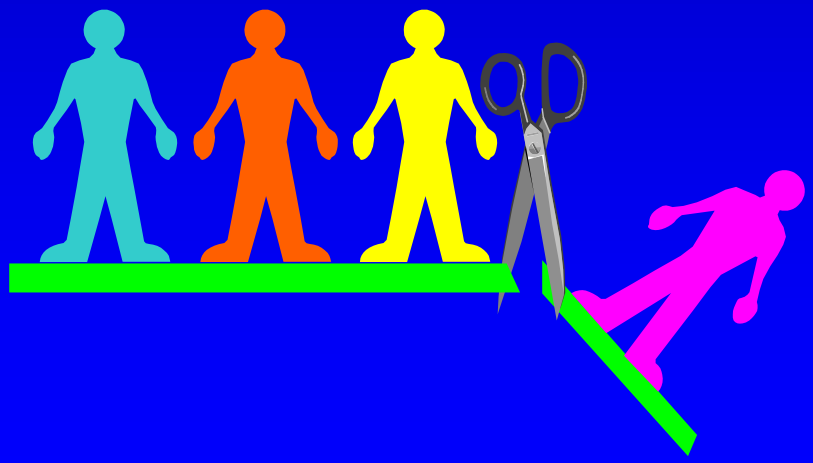
Roger G. Kathol, M.D.
University of Iowa

Depression or Anxiety

- 27 y/o female
- New onset dyspnea
- Excessive worry about heart disease
- Episodes of panic with ER visits
- Decreased energy
- Sleep disturbance
- Wishes she were dead



Unexplained Somatic Complaints



- 27 y/o female
- 6 visits in 6 months for minor problems
- Appears anxious
- Problems at home
- Cries in office
- Sleep disturbance, weight gain, sad

Prevalence of Mental Disorders

	Community	Primary Care	Gen. Hospital
MDD	2-6%	5-14%	>15%
Panic	0.5%	11%	4.5%
Somatization	0.1-0.5%	2.8-5%	2-9%
Substance Abuse	2.8%	10-30%	20-50%
Any Disorder	16%	21-26%	30-60%

Co-Occurrence of Depression and Anxiety

- 48/73 (66%) with MDD had GAD
- 28/37 (76%) with GAD had MDD

Olfson et al, SDDS Outcomes

- 70/144 with MDD had anxiety
- 66/140 with minor depression had anxiety

Sherbourne et al, 1996

Psychiatric Disorders in High Utilizers of General Medical Care

	Percent
• Depressive disorders	40
• Generalized anxiety disorders	22
• Somatization disorder	20
• Panic disorder	12
• Alcohol abuse	5
• Any	50

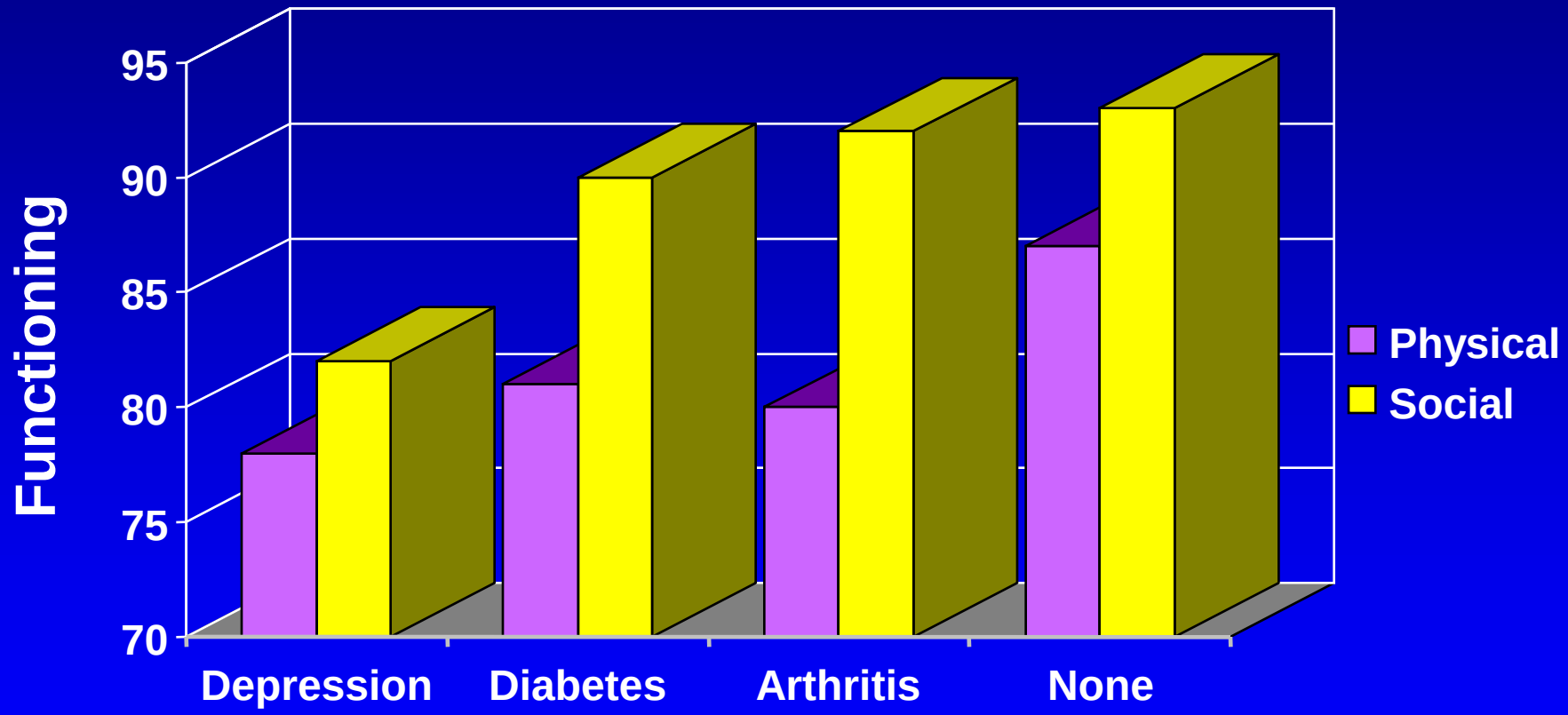
Katon et al, 1990

Impact of Mental Disorders: High Utilizers of General Medical Care

- The Top 10% Utilizers Account for:
  - 29% of all PC visits
  - 52% of all specialty visits
  - 40% of in-hospital days
  - 26% of all prescriptions

Katon et al, 1990

Impact of Depression on Functional Status



Wells et.al., 1989

Impact of Depression on Disability in Medical Patients

	Mean Disability Days /3 Months (± SD)
Asymptomtic	2 ± 11
Major depression	11 ± 29
Minor depression	6 ± 21
Dysthymia	3 ± 7

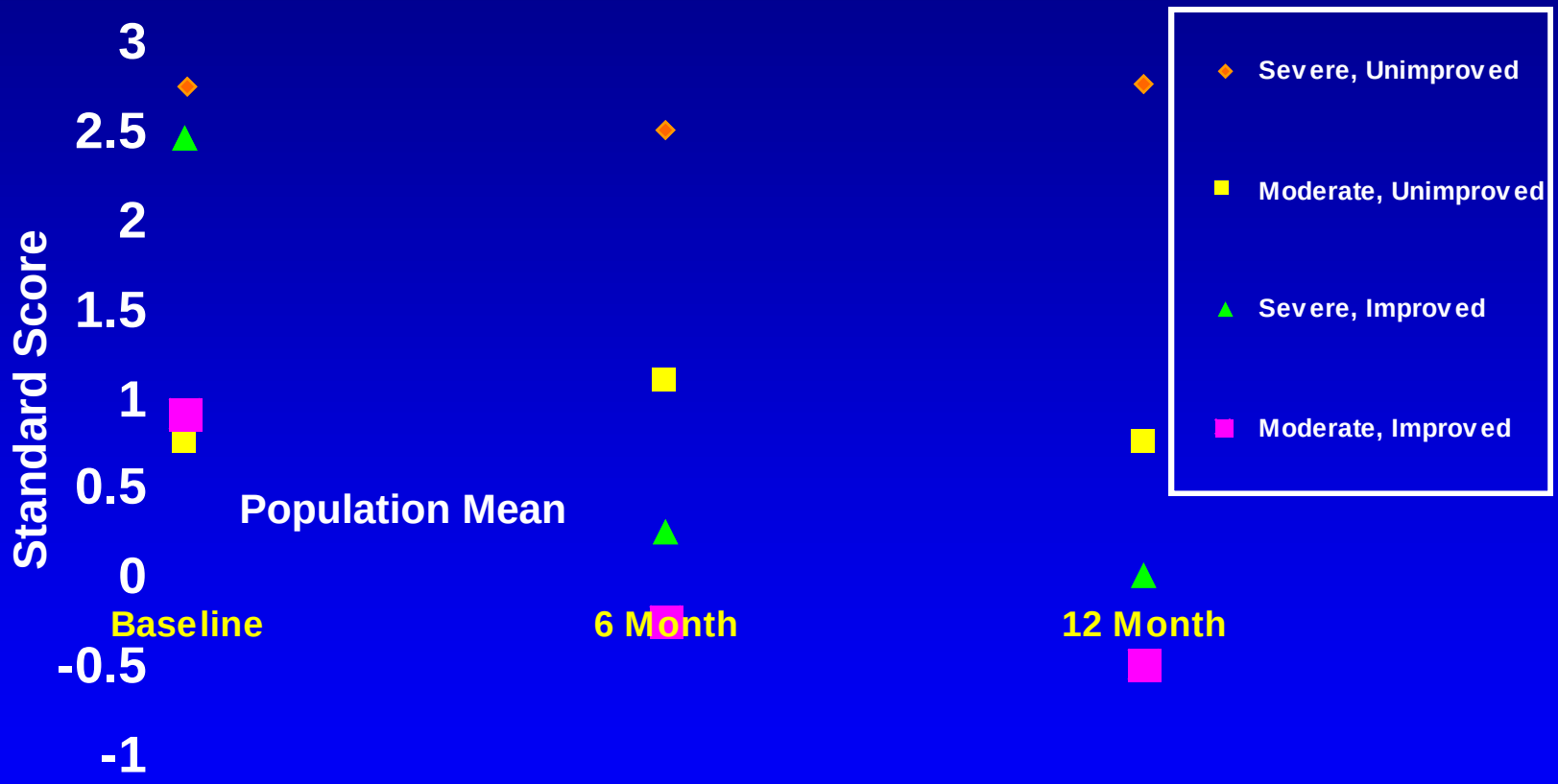
Broadhead et al, 1990

Health Service Utilization in Patients with Depression

- Emergency room visits--3 times control
- Medical Consultation--1.2 times control
- Outpatient visits--2 times control

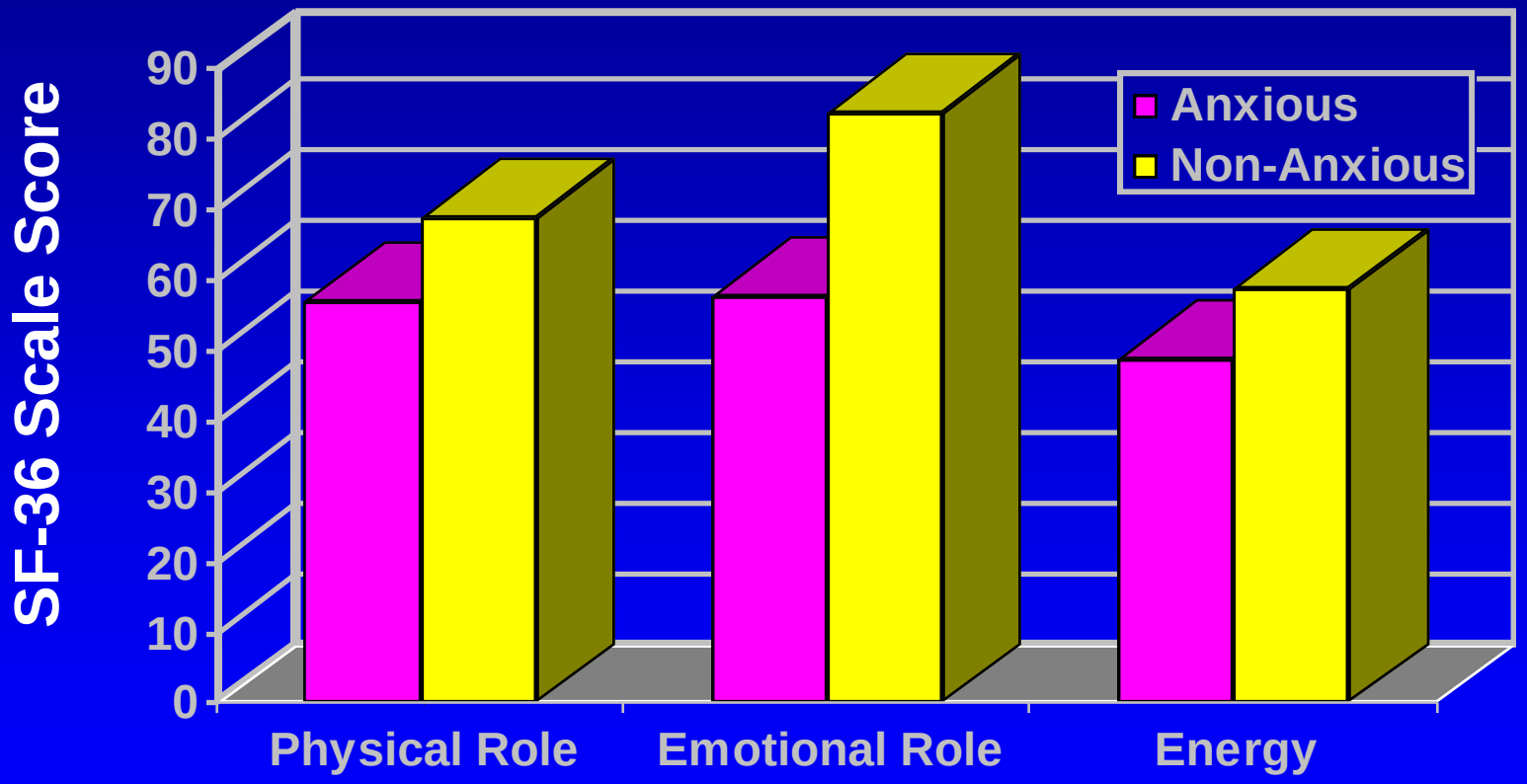
Regier et.al., 1988

Impact of Depression on Disability



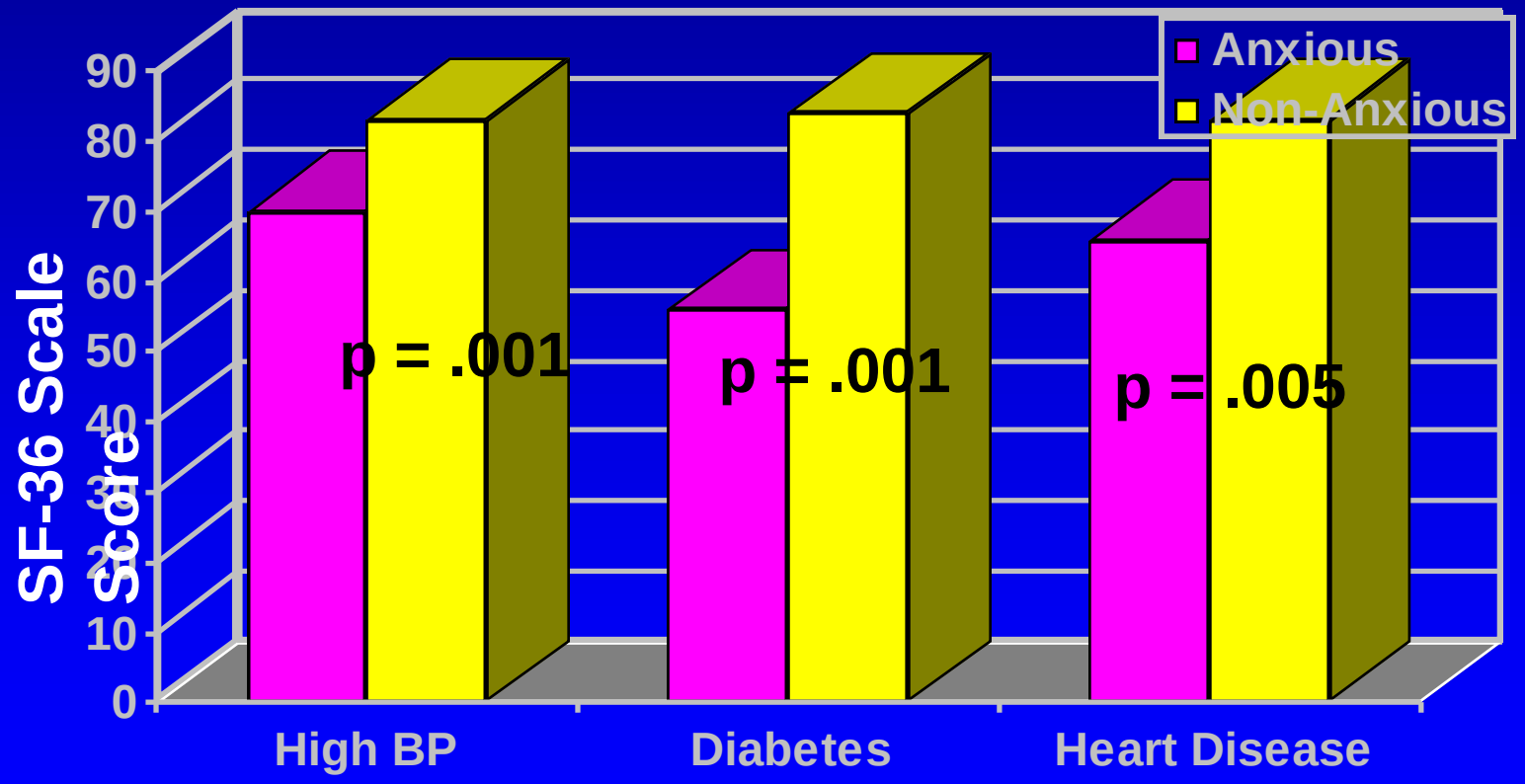
VonKorff et al, 1992

Impact of Anxiety on Quality of Life Measures in Primary Care



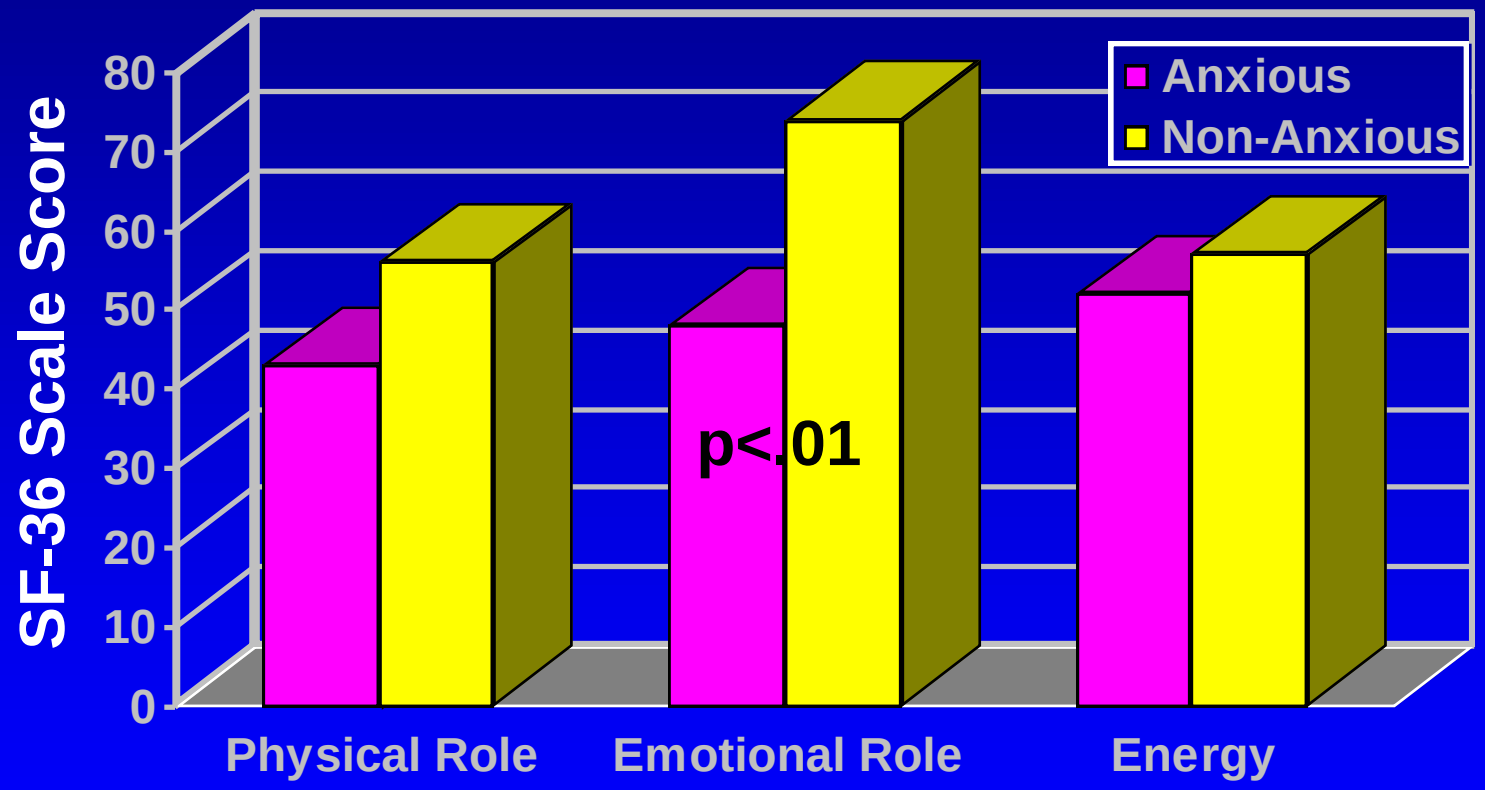
Sherbourne et al, 1996

Effect of Anxiety on Emotional Well-being in Other Medical Illnesses at 2 Years



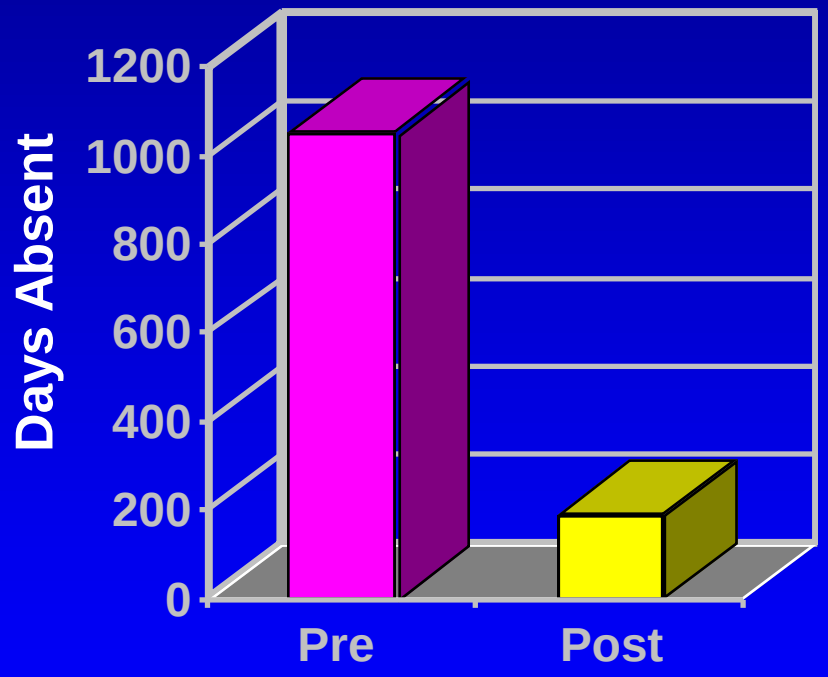
Sherbourne et al, 1996

Outcome of Anxiety on Depressed Patients at 2 Years



Sherbourne et al, 1996

Reduced Absenteeism after Treating Panic Disorder in Primary Care



- N = 30
- 94% lower service utilization
- ~30 days fewer sick days per year/patient

Salvador-Canulia et.al., 1995

Differential for Anxiety

- Normal Part of the Human Experience
  - Disappointment/Unexpected News
  - Stress
- Primary Anxiety Disorder
  - Generalized Anxiety Disorder
  - Panic Disorder
  - Obsessive Compulsive Disorder
  - Phobias
  - Post Traumatic Stress Disorder
- Secondary Anxiety Disorders
  - Substance Induced
  - Medical Illness

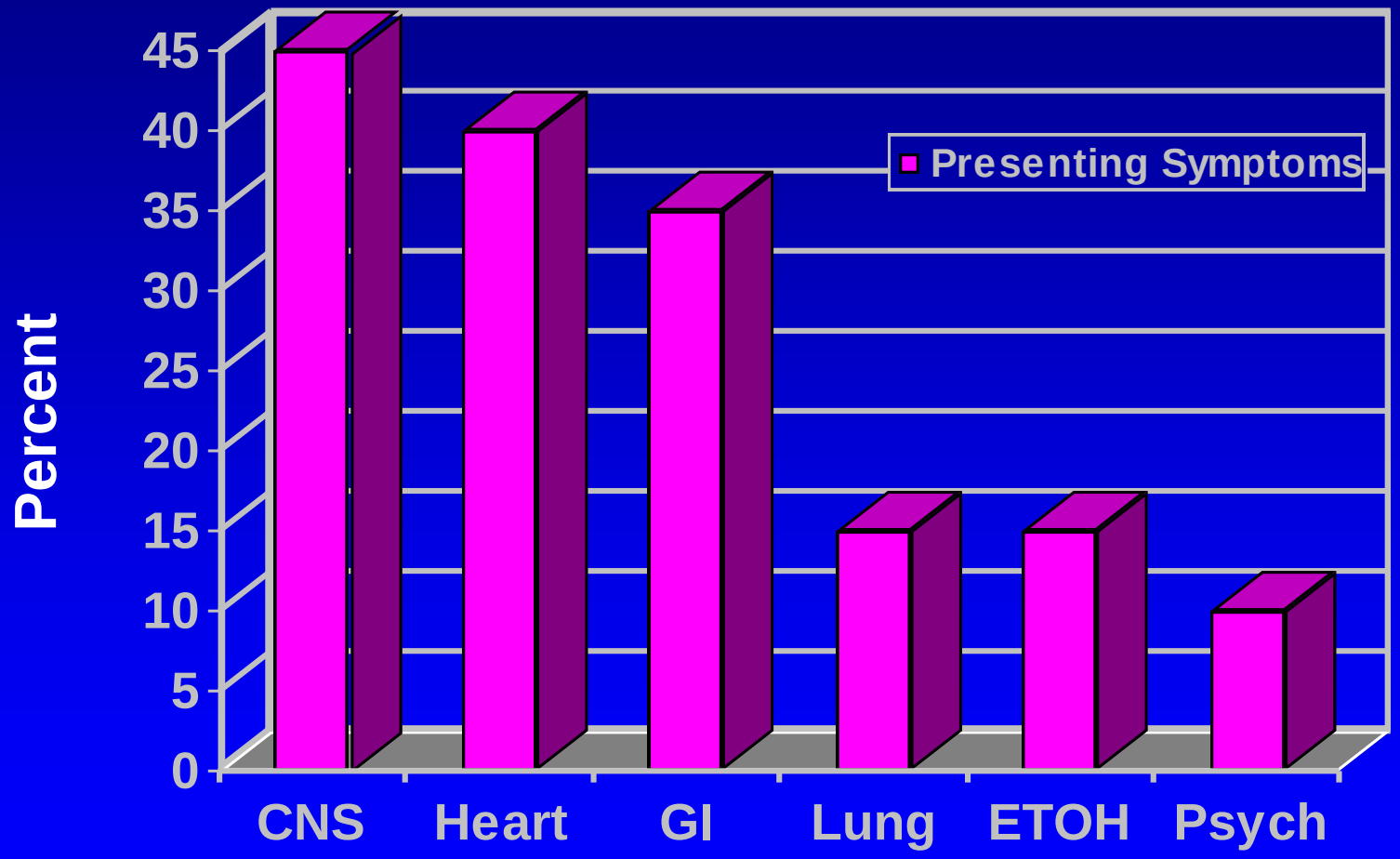
Panic Disorder

- Recurrent Panic Attacks
- At least 1 Panic Attack followed by 1 month or more of one of:
  - Anticipation of Attacks
  - Worry about Consequences
  - Behavior Change Because of Attacks
- Possible Agoraphobia
- Not Due to a physiologic cause

Symptoms of Anxiety of Panic Attacks

- Racing or Pounding Heart
- Chest Pains
- Dizziness, light-headedness
- Nausea
- Difficulty breathing
- Tingling or numbness in the hands
- Flushes or Chills
- Catastrophic cognitions
- Fear of losing control
- Fear of dying

Presenting Symptoms of Anxiety in Primary Care



--Katon et al, 1984

Generalized Anxiety Disorder

- Excessive worry for more than 6 months
- Trouble controlling worry
- At least 3 symptoms from worry (impaired)
  - On edge
  - Fatigue
  - Poor concentration
  - Irritable
  - Muscle tension
  - Poor Sleep
- Not related to physiologic cause

Basic Facts About Primary Anxiety Disorder

- Onset--teens to 20s
- Sex--female 2: male 1
- Course--waxes and wanes
- Family History--10 times control for anxiety in 1 degree female relatives; 3 times control for alcoholism in male relatives
- Treatment--responds to antianxiety agents or cognitive behavioral psychotherapy

Medical Illnesses Commonly Associated with Anxiety Symptoms

- Irritable Bowel Syndrome--30%
- Stimulant Use or Intoxication
- Hyperthyroidism--60%
- Alcohol or Drug Withdrawal
- Menopause
- Coronary Artery Disease--20-50%
- Chronic Obstructive Lung Disease--67%

Panic Disorder Patient with Irritable Bowel Syndrome

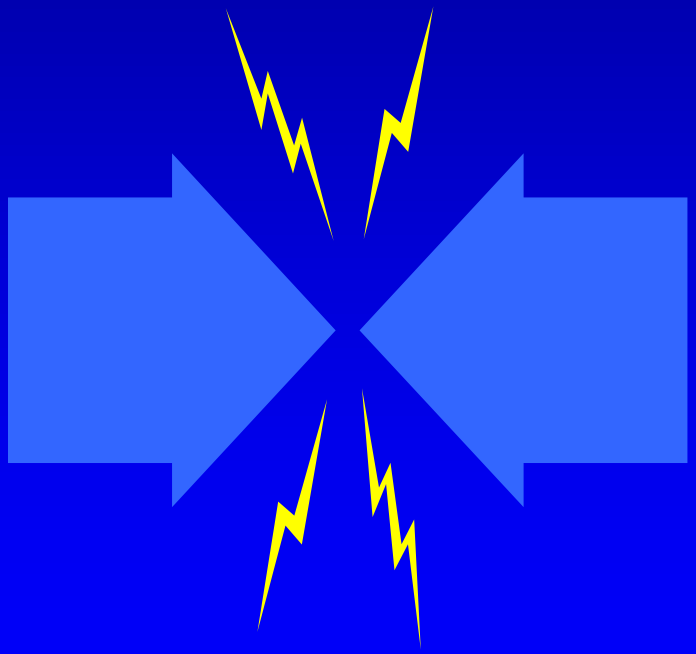
- 29 y/o male
- Crampy abdominal pain
- Bloating, diarrhea, gas, food intolerance
- Episodes of anxiety
- Numerous ineffective treatments

Anxiety in Gastroenterology

- Prevalence of Irritable Bowel Syndrome in the US--10-17%
- 29% of patients with IBS have anxiety
- 44% of patients with anxiety have IBS
- Both syndromes improve with treatment of anxiety

--Drossman et al, 1995; Lydiard et al, 1993

Anxiety in Patient with Heart Disease



- 42 y/o female
- Crushing chest pain
- Numerous ER visits
- 3 treadmills, 2 admissions for r/o
- 1 normal cardiac angiogram
- High strung
- Family Hx of anxiety

Anxiety in Cardiac Disease

- Anxiety with true ischemia--50%
- Anxiety with normal coronary arteries--60%
- Anxiety with chest pain--57%

--Beitman et al, 1987

Paroxysmal Atrial Tachycardia as Anxiety

- 59/107 misdiagnosed (32 panic, anxiety, stress)
- Delay in diagnosis--3 years, 4 months
- Resolution of anxiety symptoms--90% with Rx of PAT

--Lehmann, 1997

Determining the Etiology of Anxiety in the Medical Setting

- High index of suspicion
- Identify the Anxiety Syndrome
- Review whether it is typical of Primary Anxiety Disorder
- Complete a basic medical history and physical examination with testing if appropriate

Who Anxiety Patients See

	Initial	Follow-Up
Primary Care Physicians	35%	35%
Psychiatrists	20%	25%
Mental Health Specialists	20%	15%
Cardiologists	5%	10%
ENT Physicians	5%	3%

Katerdahl, 1995

Medical History

- Medications and Substances Used
- Personal or family history of heart disease
- History or symptoms of thyroid disease
- Smoking or lung disease history
- Menstrual status
- Abdominal symptoms

Medical Examination

- Pulse, skin texture
- Observation of the chest and auscultation of the lungs
- Auscultation of the heart
- Abdominal palpation

Medical Testing

- Thyroid Stimulating Hormone
- Electrocardiogram
- Drug Level/Screen
- Chest x-ray
- Others

Major Depressive Episode

- Five symptoms with one of the first two symptoms present, nearly daily, for at least 2 weeks
  - Depressed mood
  - Diminished interest or pleasure
  - Weight loss/gain
  - Insomnia/hypersomnia

Major Depressive Episode

- Symptoms of major depression
  - Psychomotor agitation/retardation
  - Fatigue (loss of energy)
  - Feelings of worthlessness (guilt)
  - Impaired concentration (indecisiveness)
  - Recurrent thoughts of death or suicide

Symptom Assessment in Medical Setting

- *Inclusive*--Take Symptoms at Face Value
- *Exclusive*--Exclude Symptoms Caused by Physical Disease
- *Substitutive*--Substitute with Psychological Symptoms
- *Presumptive*--Decrease Criteria Needed for Diagnosis (masked depression)
- *Gestalt* (guess)

Conditions Associated with Mood Symptoms

- Substance abuse
- Concurrent medications
- General medical disorders
- Other causal nonmood psychiatric disorders
- Grief reactions

Suicide Risk

- In Patients with the diagnosis of Cancer
  - Year 1 relative risk is 16 times the general population
  - Year 2 decreases to 7 times
  - Year 3-6 decreases to 2-3 times
  - By year 10, is less than half the general population
- AIDS patients: 7.4 times
- Psychiatrically ill patients: 25 times

Reasons for Suicide Attempts

- Depressed
- Psychotic
- Impulsive
- Philosophical

Approach to Suicidal Patients

- Ask about suicidal thoughts or do screen
- Evaluate for reason
- Treat Depression or Psychosis if present
- Impulsive--defuse crisis/withdraw patient
- Philosophical (Right to Die Issue)
  - Treat pain
  - Invoke help of relatives--social
  - Explore alternatives

Primary Major Depressive Disorder

- Age of onset--teens to mid 40s
- Sex--Female 2:Male 1
- Family History--increase in depression
- Treatment Response--50% intent to treat; 70% completer
- Course--intermittent with average duration 6 to 12 months
- Recurrence--50% one episode; 70% two episodes;' 90% three or more episodes

Goals in the Treatment of Anxiety and Depression

- Relieve symptoms rapidly
- Prevent anxiety and depression
- Eliminate anticipatory anxiety
- Eliminate avoidance behavior
- Control comorbid conditions
- Improve quality of life

Patient Education

- Anxiety and Depression are medical illnesses
- Recovery is the rule
- Treatments are effective
- Aim of treatment is complete symptom remission
- Risk of recurrence is significant
- Seek treatment early if anxiety or depression returns

Acute Treatment of Depression

- Patient education/reassurance
- Psychotherapy--4-8 weeks
- Medication--3-6 weeks
- ECT--1-3 weeks
- Light--Seasonal Affective Disorder

Three Phases of Treatment of Depression

- Acute treatment (6 to 12 weeks) aims at remission of symptoms
- Continuation treatment (4 to 9 months) aims at prevention of relapse
- Maintenance treatment aims at prevention of recurrence in patients with prior episodes

Acute Treatment of Anxiety

- Patient education/reassurance
- Cognitive Behavioral Psychotherapy (4-8 weeks)
- Medication (1 day to 6 weeks)
- Combined Medication and Psychotherapy

Treatment of Anxiety and Depression in the Medically Ill

- Watchful Waiting and Reassurance
- Exposure Techniques
- Pharmacotherapy
- Cognitive Therapy

Medical Circumstances Affecting Pharmacologic Intervention

- Medical etiology--treat medical illness
- Medication etiology--adjust/ discontinue medication
- Substance Abuse--avoid benzodiazepines (and other medications of potential abuse)

Medical Circumstances Affecting Pharmacologic Intervention

- Cardiac Disease--avoid tricyclics
- Respiratory Insufficiency--avoid benzodiazepines
- Liver Failure--avoid non-conjugated benzodiazepines

Efficacy of Medication and Cognitive Behavioral Therapy (CBT) for Anxiety and Depression

50 to 70%

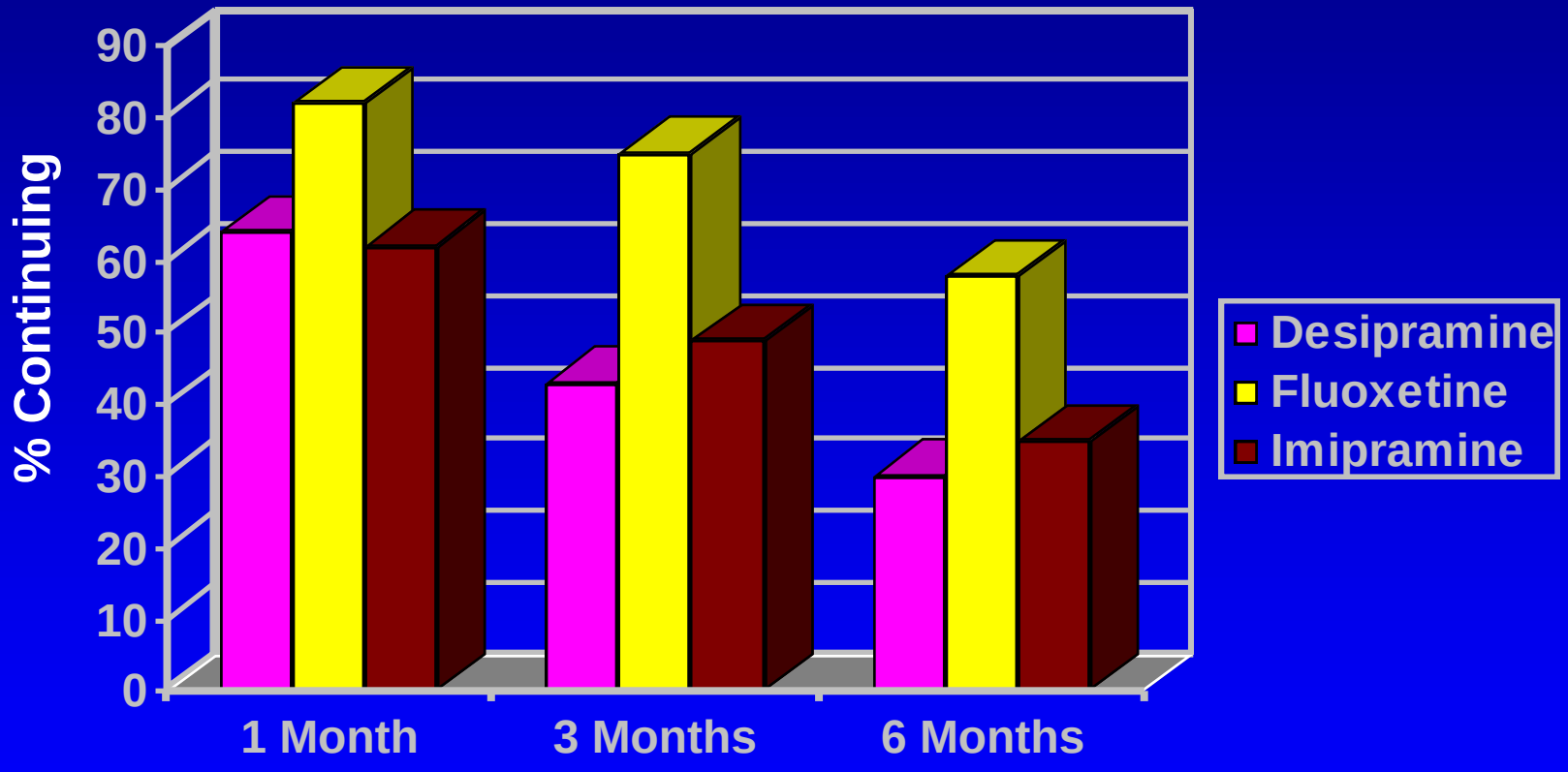
Medications that Work for Both Anxiety and Depression

- First line: SSRIs, alprazolam
- Second line: tricyclic antidepressants
- Third line: monoamine oxidase inhibitors

Other Medications

- Nefazodone, trazodone
- Venlafaxine
- Lithium
- Carbamazepine, Valproate

SSRI and Tricyclic Compliance



--Simon et.al., 1996

Medication for an Uncomplicated Depressed and Anxious Patient

- Celexa--20 mg
- Monitor at 7, 14, and 28 days
- Adjust dose (20-60 mg/day) at 14 or 28 days depending on symptoms
- Keep on dose for 6 to 12 months (1st episode) then taper over 1 month
- Continue at dose for life (multiple episodes)

Medication for an Uncomplicated Depressed and Anxious Patient

- Alprazolam--.25 mgTID X 3 days, .5mgTID X 3 days, then adjust related to symptoms
- Monitor at 7, 14, and 28 days
- Keep on dose for 6 to 12 months (1st episode) then taper over 3 months
- Change to SSRI or tricyclic (multiple episodes)

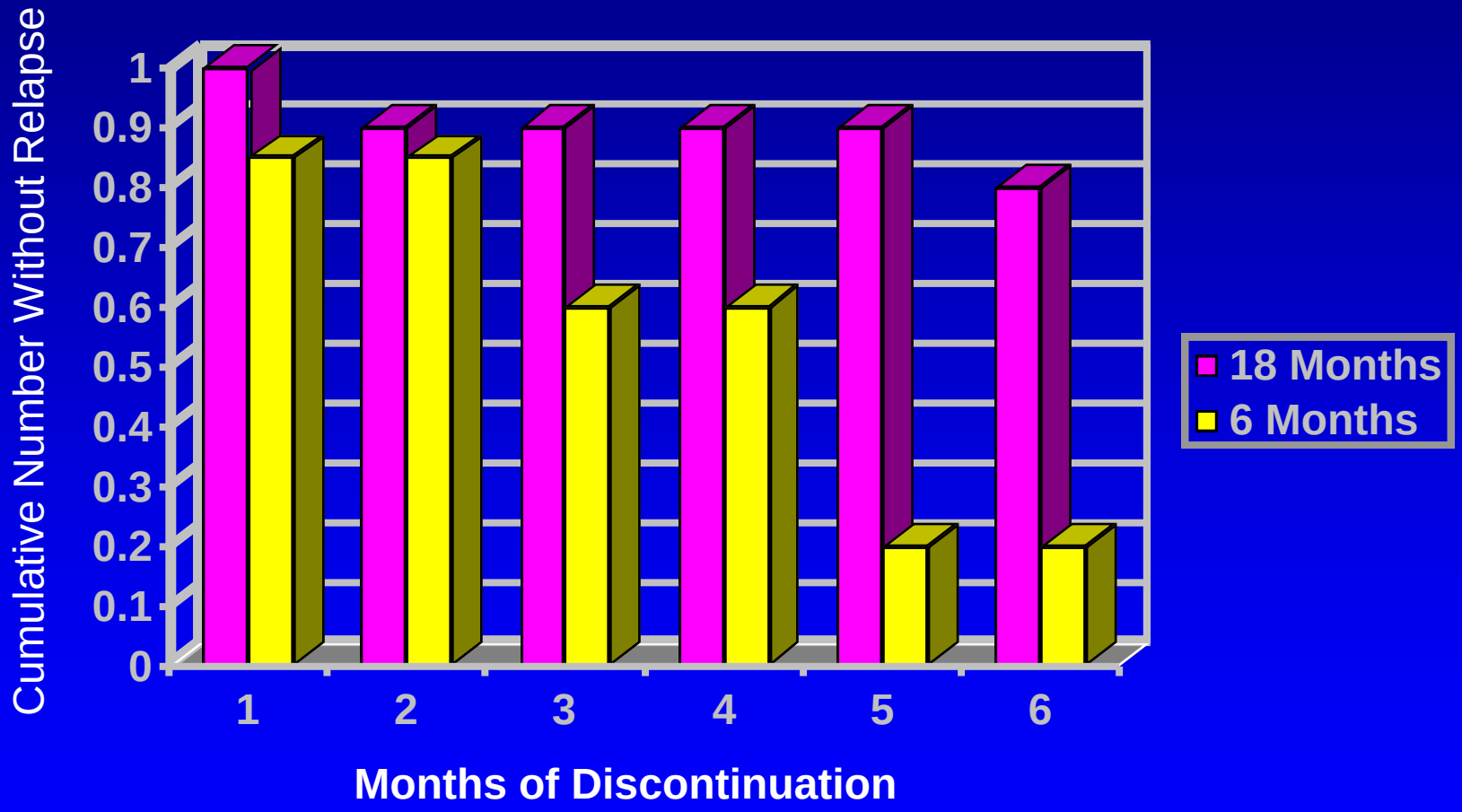
Benzodiazepine Withdrawal

- Prepare Patient
- Do it slowly
- Consider--relapse, rebound, withdrawal, pseudo-withdrawal
- Constant dose vs. constant percent

Medication for an Uncomplicated Depressed and Anxious Patient

- Alprazolam--.25mgTID X 3 days, .5mgTID X 3 days, then adjust for acute control
- Celexa--20mg
- Monitor at 7, 14, and 28 days
- Start taper of alprazolam at 21 to 28 days depending on symptoms
- Keep on Celexa for 6 to 12 months (1st episode) then taper over 1 month or continue at for life (multiple episodes)

Longer Treatment with Tricyclic: Less Relapse



--Mavissakalian and Perel, 1992

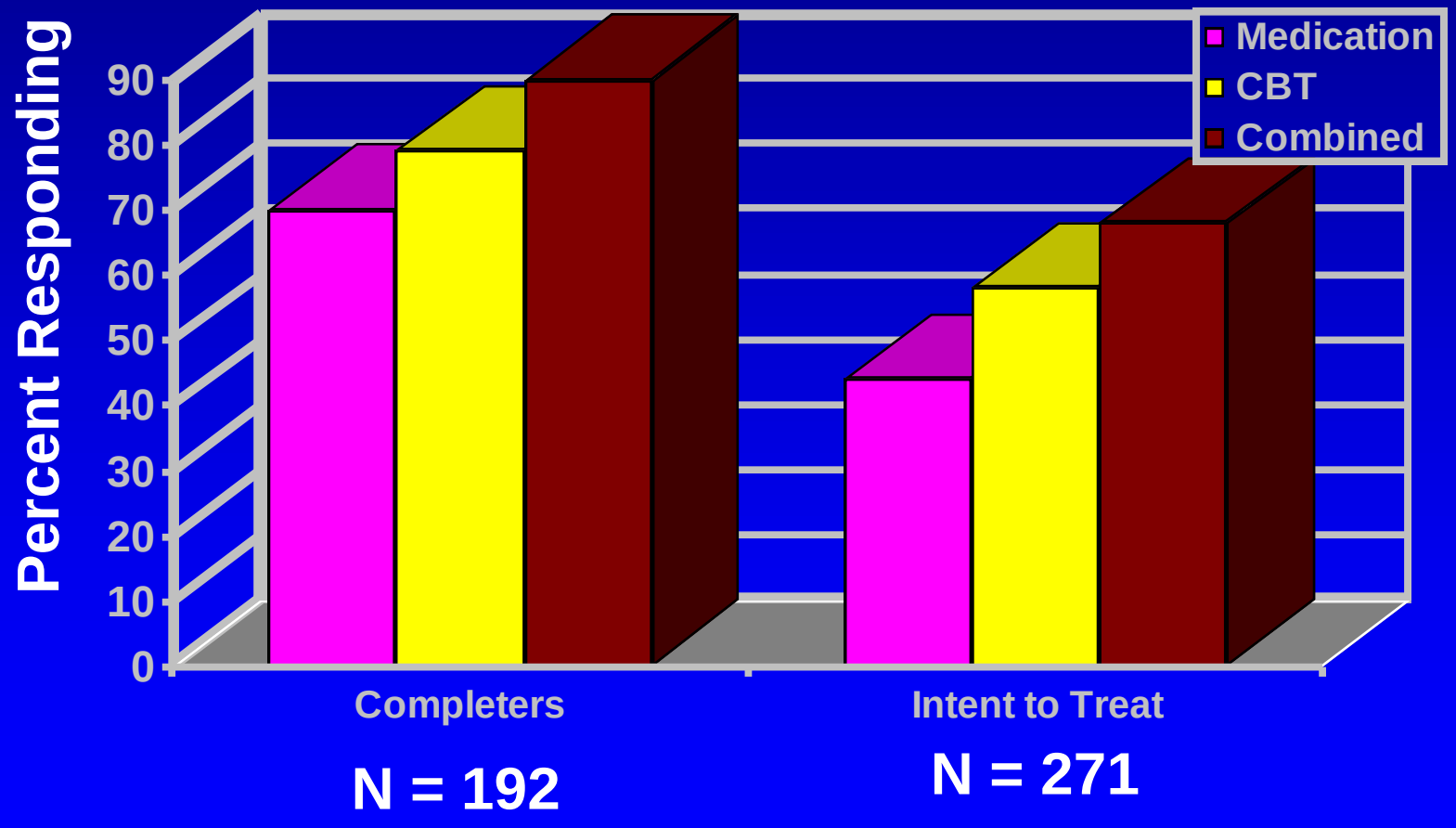
Effective Psychotherapy for Depression and Anxiety

- Cognitive Behavioral Psychotherapy
  - Time-limited (8 to 12 weeks)
  - Goal oriented (symptom resolution)
  - Requires specialized training

Efficacy of Cognitive Behavioral Therapy

Study	Follow up Interval	% Panic Free
Craske et al, 1991	24 mths	81
Beck et al, 1992	12 mths	87
Clark et al, 1994	15 mths	85
Cole et al, 1994	36 mths	81
Hulbert et al, 1994	12 mths	85

Efficacy of CBT
Multicenter Trial Interval Data



Medication Taper Success

- Otto et al, 1994 (N = 33)
  - Medications alone--25%; Medications plus CBT--76%
- Spiegel et al, 1994 (N = 21)
  - Medications alone--50%; Medications plus CBT--80%
- Hegel et al, 1994
  - Medications plus CBT--76%

Best Treatment for an Uncomplicated Depressed and Anxious Patient

- Alprazolam--.25mgTID X 3 days, .5mgTID X 3 days, then adjust for acute control
- Celexa--20mg
- CBT--12 to 16 sessions (over 3 to 4 months)
- Monitor at 7, 14, and 28 days
- Start taper of alprazolam at 21 to 28 days depending on symptoms
- Taper Celexa at 6 months

Practical Considerations: To Treat

- Cost of Personally Treating Depression and Anxiety
  - Initiation of pharmacotherapy--2 hours and 30 minutes per efficacy-based treated patient (1/4 fewer medical patients seen)
  - Medication--$50/month for at least 9 to 12 months
  - CBT (if used)--$600-800 per patient

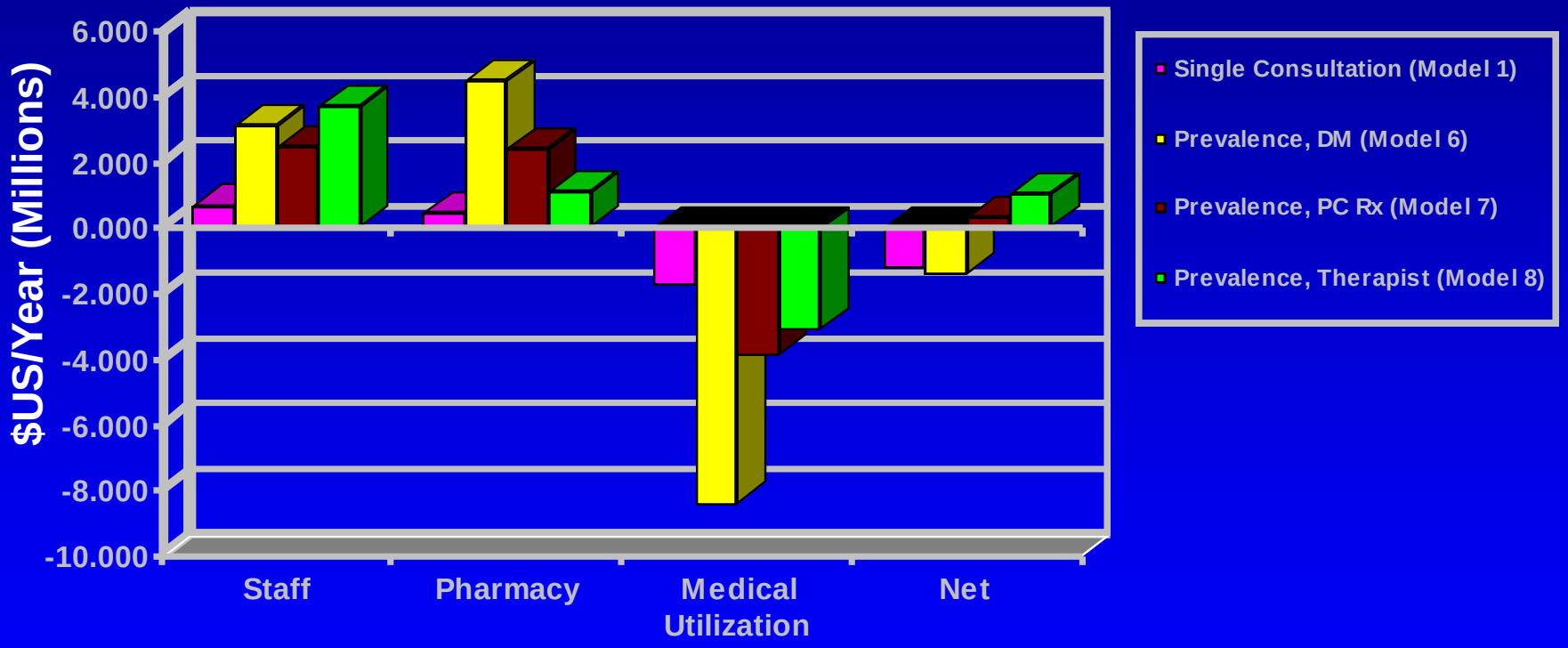
Practical Considerations: Or Not to Treat

- Annual Increase in Medical Service Utilization for Patients with Untreated Depression and Anxiety
  - Anxiety--20% ($500/patient)
  - Depression--40% ($1,000/patient)
  - Mixed--50% ($1,250/patient)

Economic Analysis
Estimated Annual Health Care Cost Based on the Literature

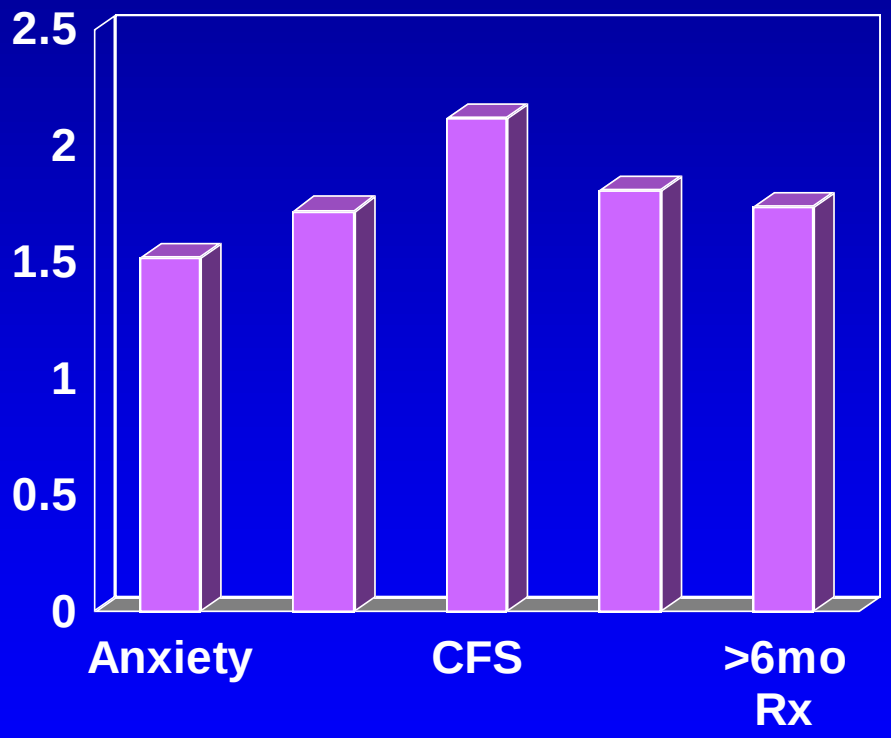
- Annual Health Care Cost Based on the Presence of Comorbid Psychiatric Illness
  - *No psychiatric illness*--$2,500/pt/year--Simon, 1995
  - *Distressed*--$2,600 (4% increase)--Caudill, 1991;Scott, 1996
  - *Depression*--$3,500 (40% increase)--Unutzer, 1997; Simon, 1995
  - *Anxiety*--$3,000 (20% increase)--Wells, 1994; Salvador-Carulla, 1995
  - *Somatization*--$3,750 (50% increase)--Smith, 1986 & 1995; Rost, 1994
  - *Substance Abuse*--$3,325 (33% increase)--Holder & Blose, 1992
  - *Mixed*--$3,750 (50% increase)--Mayou, 1988; Saravay, 1996

Cost of Integrated Psychiatric Consultation Compared to "Usual Care" for 100,000 Medical Outpatients



Antidepressant Rx: Medical Offset Effect

- N=1661pts starting SSRIs or TCAs
- 1991-1993
- Predictors of offset identified
- Mental health visit frequency, gender-no effect (Thompson et al AJP 1998; 155: 824-27)



Limited Access to Psychiatric Services

- Neither medical nor mental health managed care products consistently pay for psychiatric services in medical patients
- Patients donít show up in the Mental Health Setting
- Mental Health treatment contracts do not allow administration of evidence-based psychiatric care

Solutions

- Include psychiatric services in medical managed care and indemnity contracts
- Develop PMPM reimbursement schedule which allows evidence-based psychiatric services
- Move mental health services into the medical setting