Anxiety Disorders in the Elderly

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Self-Assessment Question 1

Which of the following should be considered in the differential diagnosis of anxiety symptoms in elderly patients?

A. Cardiopulmonary and other medical conditions
B. Medication side effects
C. Sedative hypnotic withdrawal
D. All of the above
E. None of the above

Self-Assessment Question 2

According to ECA data, which anxiety disorder is most prevalent in the elderly?

A. Obsessive compulsive disorder
B. Panic disorder
C. Phobias
D. PTSD
E. Social anxiety disorder

Self-Assessment Question 3

Which of the following may contribute to the low estimate of prevalence of anxiety disorders in the elderly?

A. Age-related degeneration of the locus ceruleus and amygdala
B. Selective increase in mortality among anxiety disorder patients
C. Lack of adequate studies addressing prevalence of anxiety disorders in the elderly
D. All of the above
E. None of the above

Self-Assessment Question 4
Which of the following contribute to the importance of identifying and treating Generalized Anxiety Disorder in the elderly?

A. It's prevalence may be as high as 7%
B. It is unlikely to remit without treatment
C. Effective pharmacotherapeutic treatment has been demonstrated.
D. All of the above
E. None of the above

Self-Assessment Question 5

Which of the following is true of late-life depression with comorbid anxiety as compared to “pure” depression?

A. Cardiovascular morbidity is no greater with comorbid anxiety.
B. Antidepressant treatment response is better when comorbid anxiety is present.
C. Comorbid anxiety increases the risk of suicide.
D. All of the above
E. None of the above

Major Points

- Anxiety symptoms and disorders are likely more prevalent and debilitating among elderly than has previously been believed.
- Differential dx of anxiety symptoms in the elderly must consider medical causes and address presence of depression.
- No medication is specifically FDA-indicated for treatment of anxiety in the elderly and studies of antianxiety treatments in the elderly are limited.
- Benzodiazepines in the elderly should be for short-term use due to multiple adverse effects.
- The effectiveness of citalopram in treating GAD in the elderly suggests that antidepressant therapy may have a useful role in treating this and other late life anxiety disorders.
- CBT and other psychotherapies have important roles in treating anxiety disorders in the elderly.

Anxiety: symptoms vs. disorders

- Anxiety as a symptom: Common
  - Most common descriptor terms for anxiety in elderly: anxious, worried, concerned
- Anxiety disorder: Less common. Includes...
  - Panic Disorder
  - Obsessive-Compulsive Disorder (OCD)
  - Generalized Anxiety Disorder
  - Post-traumatic Stress Disorder (PTSD)
  - Social Phobia
  - Specific Phobia

Anxiety symptoms: relationship to anxiety disorders

	Fear	Avoidance	Somatization	Anticipatory worry	Panic attacks
Panic Disorder	x	x	x	x	x
Social Phobia	x	x		x	
OCD	x	x			
GAD		+/-	x	x	
PTSD	x	x	x		

Risk factors for anxiety disorders in late life

Beekman, *American Journal of Psychiatry* 2000

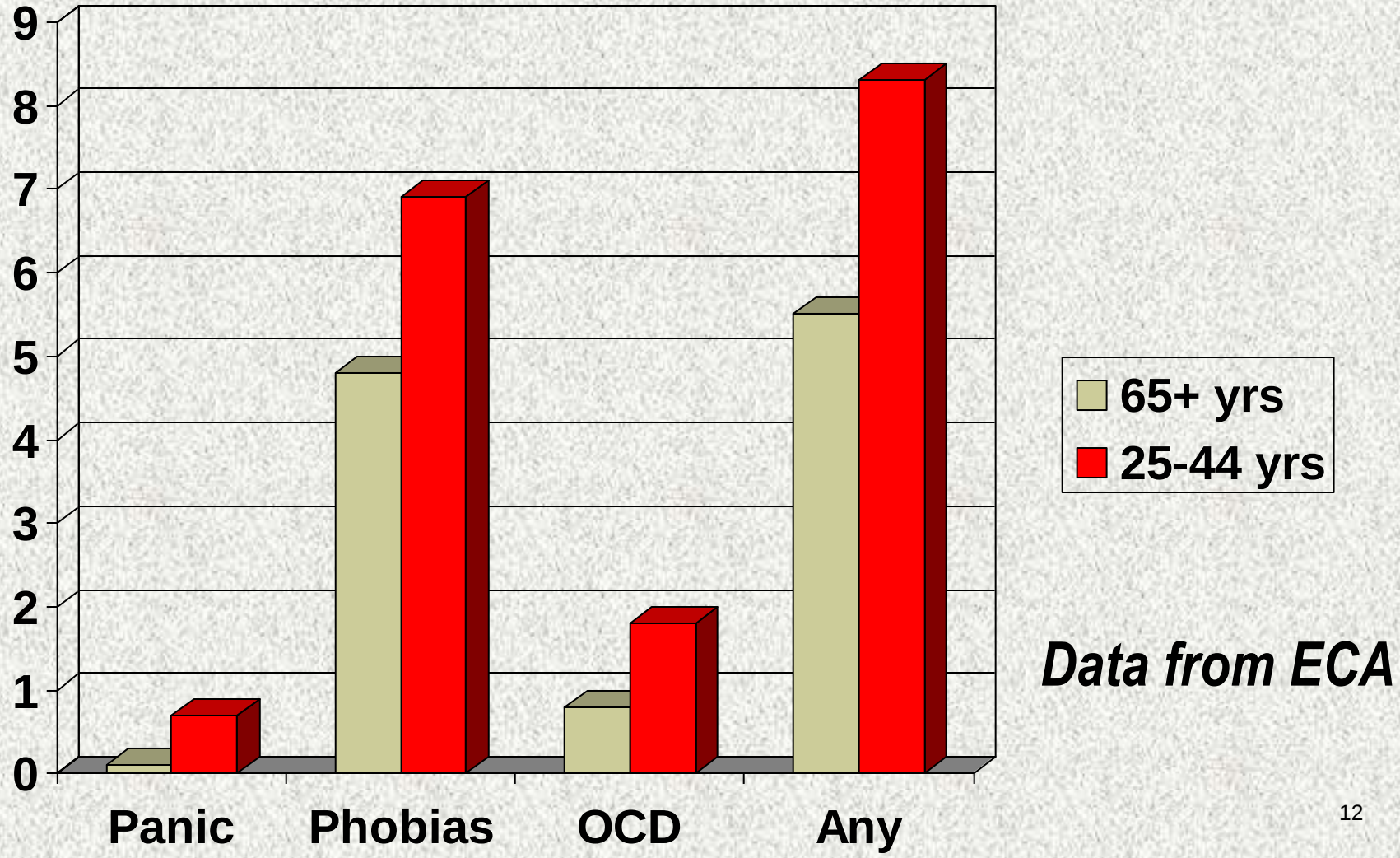
- chronic physical illness
- functional limitations
- lower education
- smaller social network
- external locus of control
- recent loss
- life event history: war
- lack of emotional support

Consequences of anxiety in late life

- Mortality (Geerlings, 2002)
  - increased suicidality (Allgulander, 1993)
  - increased cardiovascular events
- Disability (DeBeurs, 1999)
  - increased physical disability in subjects with high anxiety symptoms (Brenes, 2005)
- Cognition
  - Anxious elderly more likely to have impairments in memory, attention
  - Not clear whether anxiety treatment improves cognition in late life (Yesavage, 1983)

Prevalence of anxiety disorders – young vs. elderly

Flint, *American Journal of Psychiatry* 1994



Data from ECA

Prevalence of anxiety disorders in the elderly

Flint, *American Journal of Psychiatry* 1994

- **Panic: thought to be especially rare in elderly. Almost all cases (95%+) thought to be early onset (before age 40).**
- **Phobic disorders: most common for all ages, including elderly. Rates have varied substantially (100-fold) in different epi studies of elderly.**
- **GAD: not reported in ECA; other studies have found 2% prevalence when comorbid depression excluded.**
- **OCD: Rare in all studies of elderly (0 to 0.7% prevalence)**
- **PTSD: no published epidemiologic data in elderly.**

Are anxiety disorders rare in elderly?

- Age-related degeneration in neuronal structures involved in anxiety – locus ceruleus, central nucleus of amygdala – may reduce panic response.
- Selective mortality due to anxiety (survivor effect).
- May not be rare (Sheikh, 2005):
  - **elderly might present with "atypical" symptoms.**
  - **elderly less likely to attribute their symptoms to anxiety.**
  - **GAD, most common anxiety disorder in late life, not always measured in epidemiological studies.**

More recent epidemiologic studies of late-life anxiety

- Manela, et al (1996): 15% prevalence in 65+
  - generalized anxiety 4.7%; phobic disorders 12%
  - social phobia 0.6% and panic 0.1%
  - utilized instrument developed for elderly
- Beekman et al (1998): 10% prevalence in 55+
  - generalized anxiety 7.3%; phobic disorders 3.1%
  - panic 1.0% and OCD 0.6%
- These studies find prevalence as high as (or, in case of GAD, higher than) in young adults.

GAD in elderly

- Prevalence as high as 7% in elderly (Beekman et al, 2000).
- Commonly begins in late-life
  - Median age of onset 58 (Lenze, 2005)
- Likely a mix of lifetime disorder ("as long as I can remember") and those with late-onset in context of chronic medical illness and other stressors.
- Long median episode length
  - 3 years (Lenze, 2005)
  - Suggests it is unlikely to remit absent treatment
- Thus, GAD is most relevant anxiety disorder in geriatrics.

Differential diagnosis of anxiety in elderly

- Medical conditions:
  - **COPD, Parkinson's, end-stage heart disease**
  - **In these cases, anxiety may be comorbid to medical disorder and worsen function**
- Medications
  - **Sympathomimetics**
  - **Steroids**
  - **Dopamine agonists**
  - **Theophylline**
- Benzodiazepine or other sedative withdrawal
  - **Can cause anxiety syndrome lasting several weeks**

Anxiety disorder prevalence in medically ill elderly

- Dementia: studies mixed, with some showing increased, and others decreased, anxiety disorder prevalence.
- Medical events: high rate of anxiety disorders post-stroke and post-transplant; high rate of agoraphobia, which may interfere with recovery from event.
- Chronic medical illness: increased anxiety disorder prevalence in diabetes, hyperthyroidism, heart disease, GI disorders, COPD (Brenes, 2003), Parkinson's disease.

Mixed anxiety-depression

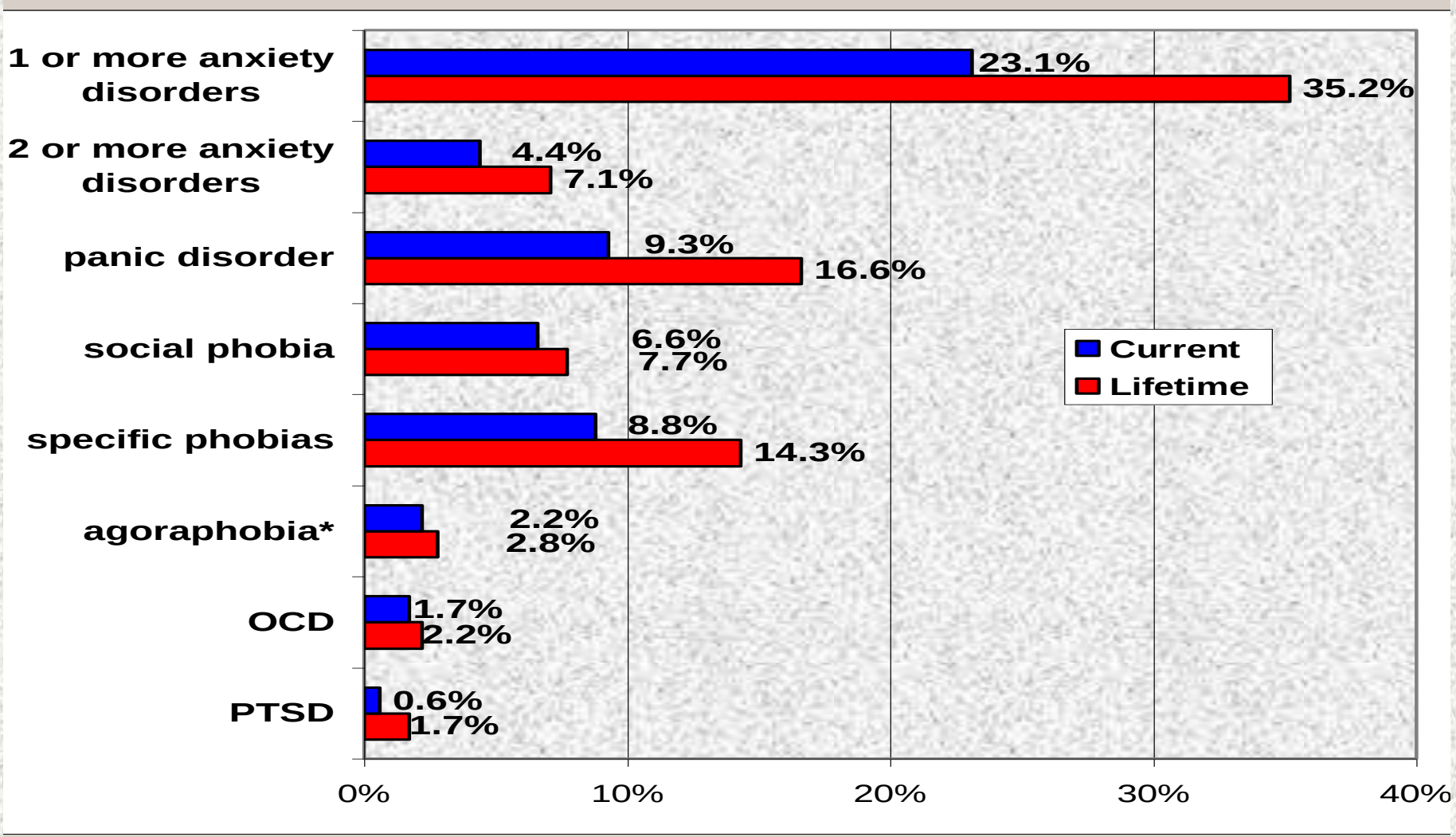
- Possibly the most common presentation in older patients
- Features of depression (sadness, decreased appetite, low energy etc.) coexist with anxiety (irritability, insomnia, muscle tension)
- Very little research on the actual diagnosis of MAD in elderly persons; much more known about anxiety symptoms in context of major depressive disorder

Anxiety disorder prevalence in depressed elderly

- Adults with major depressive disorder (MDD) have high comorbid anxiety disorder prevalence -- 33% (ECA data)
- Elderly with depressive disorders with similar high comorbidity:
- Beekman et al (2000): 47.5% of elderly with MDD had anxiety disorder.
- Lenze et al (2000): 23% of treatment-seeking depressed had current anxiety disorder, 35% had lifetime disorder.

Anxiety disorders in treatment-seeking depressed elderly

Lenze et al, *American Journal of Psychiatry* 2000



Late-life depression with comorbid anxiety: a more severe illness

- Higher cardiovascular events than “pure” depression
- Lower or delayed treatment response to antidepressants
  - Mulsant et al (1996): 14 weeks mean time to remission in depressed subjects with high symptomatic anxiety vs. 9 weeks with low anxiety.
- Higher suicide rate
  - Allgulander (1993): higher suicide rate in depressed women with comorbid anxiety.
  - Lenze (2000): higher % suicidal ideation in depressed with comorbid GAD.

Anxiety in the context of dementia

- Very common
- Typically expressed as motor restlessness, pacing, and “agitation”
- May be difficult to obtain details due to communication difficulties
- Nursing staff and caregivers needed to provide an accurate picture
- Treatment may include SSRIs, atypical antipsychotics.
- Benzodiazepines may help, but may worsen cognitive status

Pharmacotherapy for late-life anxiety disorders

- Evidence is thin; few controlled studies
- NO controlled studies of panic disorder, OCD, social phobia, or PTSD in elderly
  - Thus, treatment guidelines are similar to young adults with same conditions
  - Open-label studies in late life panic disorder suggest efficacy for SSRIs (Sheikh, 2004)

Pharmacotherapy for late-life anxiety disorders

- Older controlled studies of benzodiazepines for GAD or anxiety symptoms showed these to be efficacious and generally well-tolerated.
  - However, benzodiazepines are problematic
  - Clinical utility of buspirone has been disappointing; not widely used.

Benzodiazepine use in the elderly – pros and cons

- Elderly are biggest consumers of benzos in U.S.
- Pros:
  - Efficacious in rapid, short-term treatment of anxiety
  - Does not appear to interfere with antidepressant action
- Cons:
  - Cognitive impairment (short-term), cognitive decline (long-term)
  - Increased risk of falls and fractures
  - Sedation
  - No substantial safety benefit from using short-acting
- Recommendation: helpful, necessary at times, but best as short-term adjunct

Study of citalopram for late-life anxiety

- Only controlled trial of an antidepressant for late-life anxiety disorders.
- Inclusion criteria
  - Aged 60+
  - DSM-IV GAD, PTSD, or panic disorder (most had GAD)
  - Ham-A 17+ at baseline
- Citalopram vs placebo (n=34)
  - 10mg/d start, increased automatically to 20 after 1wk
  - Max 40mg/d depending on response
  - Followed response with Hamilton Anxiety Scale (Ham-A)
- Response rate 65% in citalopram, 24% placebo ($p < 0.02$)
- Responders to citalopram had improved QOL, sleep quality

Lenze, 2005; Blank, in press

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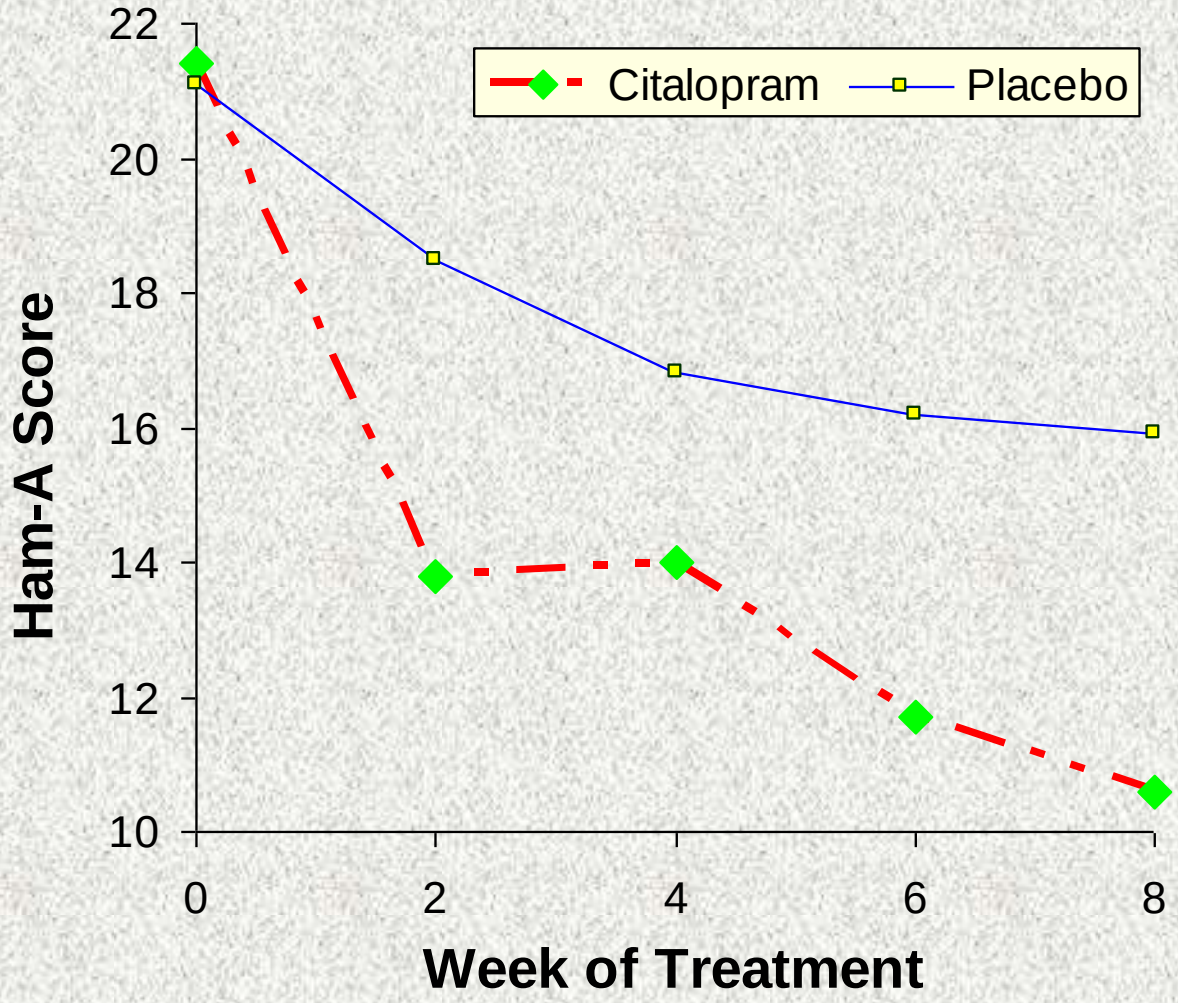

Psychotherapy for late-life anxiety disorders

- Many elderly persons prefer psychotherapy to medication
  - Fears about medication side effects may or may not respond to psychoeducation
- CBT superior to wait list control or treatment as usual for GAD (Stanley, 1996; Stanley, 2003; Wetherell, 2003)
  - Likely CBT is most efficacious in those who can be adherent to homework (Wetherell, 2005)
  - Consider first-line for those who are cognitively intact, prefer psychotherapy to medication, and are motivated to complete CBT assignments

Psychotherapy for late-life anxiety disorders

- Guidelines similar to those in adults (Flint, 1998):
  - CBT for panic disorder, GAD, social phobia, OCD
  - Exposure therapy for OCD, agoraphobia
  - CBT and group therapy for PTSD
  - Well-received components of CBT for GAD include relaxation, scheduled worrying, psychoeducation (Wetherell et al, 2005)
- More research needed to determine most effective and satisfactory techniques in elderly

Summary

- Anxiety disorders more common in elderly than previously thought.
- More difficult to detect in elderly -- requires sensitivity to anxiety disorder presentations.
- Associated with physical illness, disability, depression; common behavioral feature of dementia.
- Increases disability and possibly cardiac events.
- Treatment: similar recommendations as in younger adults
- Research: sorely lacking.

Suggested Readings

- Beekman, Aartjan T. F; de Beurs, Edwin; van Balkom, Anton J. L. M; Deeg, Dorly J. H; van Dyck, Richard; van Tilburg, Willem. Anxiety and depression in later life: Co-occurrence and communality of risk factors. American Journal of Psychiatry. 157: 89-95, 2000
- Brenes, Gretchen A. Anxiety and Chronic Obstructive Pulmonary Disease: Prevalence, Impact, and Treatment. Psychosomatic Medicine 65: 963-970, 2003.
- Flint AJ. Epidemiology and comorbidity of anxiety disorders in the elderly. American Journal of Psychiatry. 151:640-9, 1994
- Lenze EJ. Mulsant BH. Shear MK. Houck P. Reynolds III CF. Anxiety symptoms in elderly patients with depression: what is the best approach to treatment? Drugs & Aging. 19:753-60, 2002
- Sheikh, Javaid I. Investigations of Anxiety in Older Adults: Recent Advances and Future Directions. Journal of Geriatric Psychiatry and Neurology 18:59-60, 2005.
- Wetherell, Julie Loebach; Hopko, Derek R; Diefenbach, Gretchen J; Averill, Patricia M; Beck, J. Gayle; Craske, Michelle G; Gatz, Margaret; Novy, Diane M; Stanley, Melinda A. Cognitive-Behavioral Therapy for Late-Life Generalized Anxiety Disorder: Who Gets Better? Behavior Therapy. 36: 147-156. 2005

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Self-Assessment Question Answers

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