

ANXIETY IN THE ELDERLY

Synergize

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Presenter disclosures



Faculty: Dallas Seitz

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- ▣ NONE

Objectives



1. Review the epidemiology of anxiety disorders in older adults.
2. Describe some presentations of anxiety disorders and tools for assessment.
3. Review evidence-based treatment options for anxiety disorders in older adults.

Anxiety Disorders

- *Generalized Anxiety Disorder
- Phobias
- Panic disorder
- Agoraphobia
- Post-traumatic stress disorder

- Obsessive Compulsive Disorder (now considered to be separate from anxiety disorders)
- Hoarding disorder (new in DSM 5 included with OCD)

Prevalence of Mental Disorders

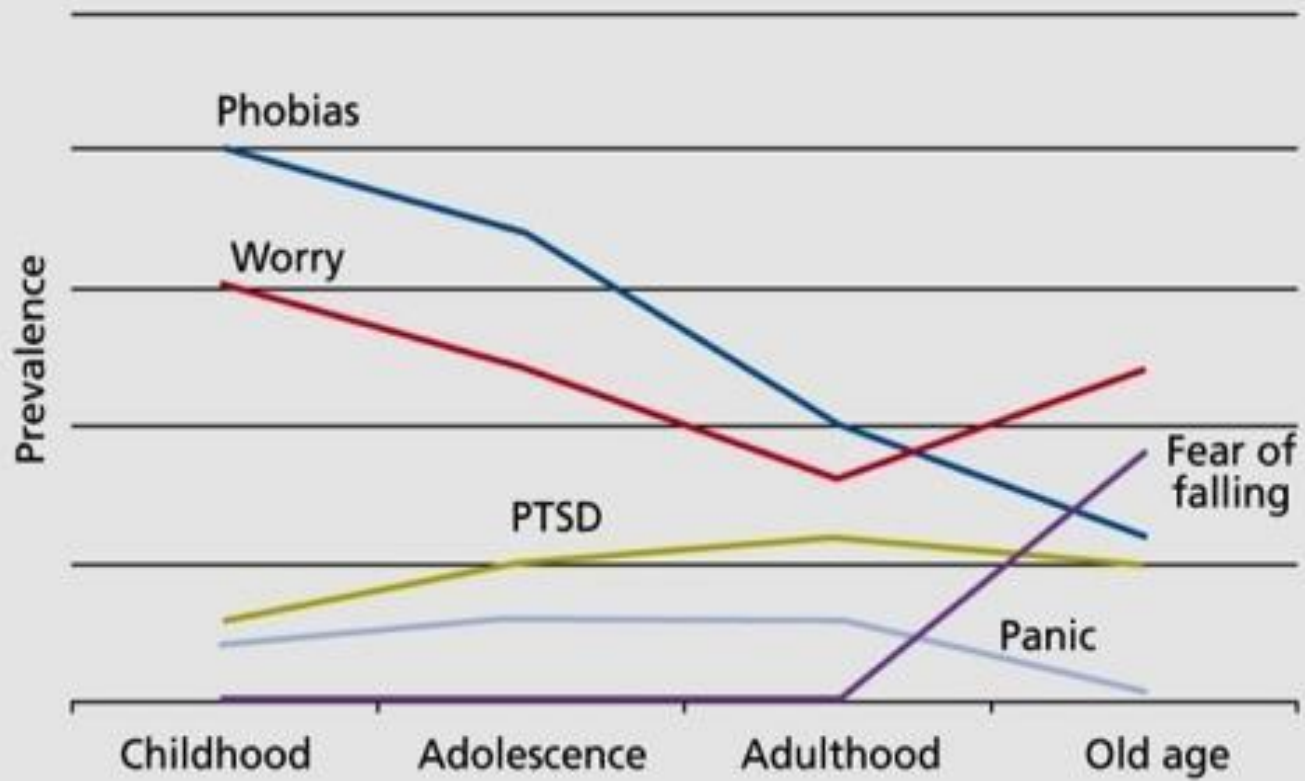
	ECA 12m n=5,702	NCS-R 12m n=1,461	ESA 12m N=2,798
5.0-7.0%	Any Anxiety d/o	Any Anxiety d/o	Any Anxiety d/o
4.0-4.9%	Phobia	Phobia	
3.0-3.9%			
2.0-2.9%		MDE Social phobia	Phobia Psychotropic dependency
1.0-1.9%	Dysthymia	GAD	GAD MDE
0-0.9%	Panic Manic Subst OC MDE Schz	Panic BAD Dysthymia Subst	Panic Manic Social phobia

Prevalence of Mood and Anxiety Disorders in Younger and Older Adults

	Any disorder	MDE	Anxiety
ECA, 1 year prevalence, n=5,702			
65+			
45-64	12.3%	0.7%	5.5%
25-44	13.3%	2.0%	6.5%
	17.3%	3.0%	8.3%
Edmonton, 6m prev., n=358			
65+	10.9%	1.2%	3.5%
All adults	17.1%	3.2%	6.5%
NCS-R, 1 year prev, n=1,461			
65+	8.5%	2.3%	7.0%
45-64	22.4%	6.5%	18.7%
CDC 2006, Current, n=?			
65+	“Freq Mental Distress” 6.5%	Based on PHQ: 5.0%	
55-64	11.1%	9.4%	

Prevalence estimates of late-life anxiety disorders from epidemiological studies

	Epidemiological studies in the elderly					NCS-R (adults)
	LASA	ECA	AMSTEL	NMHS	CCHS	
N	3,107		4,051	1,792	12,792	9,282
Age range	55-85	65+	65-84	65+	55+	18+
Prevalence						
Any anxiety disorder	10.2%	5.5%	N/A	4.4%	N/A	18.1%
Generalized anxiety disorder	7.3%	1.9%	3.2%	2.4%	N/A	3.1%
Phobic disorder	3.1%	4.8%	N/A	0.6% (social)	1.3% (social) 0.6% (agoraphobia)	8.7%
Panic disorder	1.0%	0.1%	N/A	0.8%	0.8%	2.7%
Obsessive-compulsive disorder	0.6%	0.8%	N/A	0.1%	N/A	1.0%
Posttraumatic stress disorder	N/A	N/A		1.0%	N/A	3.5%



Shared and distinct clinical features of anxiety disorders

	Situational fear	Situational avoidance	Autonomic arousal	Anticipatory worry	Obsessions and compulsions	Panic attacks
Panic disorder	X	X	X	X		X
Social and specific phobia and agoraphobia	X	X	X	X		X
Obsessive-compulsive disorder	X	X		X	X	
Generalized anxiety disorder				X		
Posttraumatic stress disorder, acute stress disorder	X	X	X	X		

Course of Anxiety Disorders

- Course tends to be persistent in many individuals
 - ▣ 80% of phobic disorders persist after 3 years
 - ▣ 50% of GAD persists after 3 years
- Most commonly anxiety disorders continue as anxiety disorders, 25% will develop mood disorders

Risk Factors

- ☐ Female
- ☐ Chronic medical conditions
- ☐ Single, divorced, separated (vs. married)
- ☐ Lower education
- ☐ Poor perceived health
- ☐ Stressful life events
- ☐ Disability

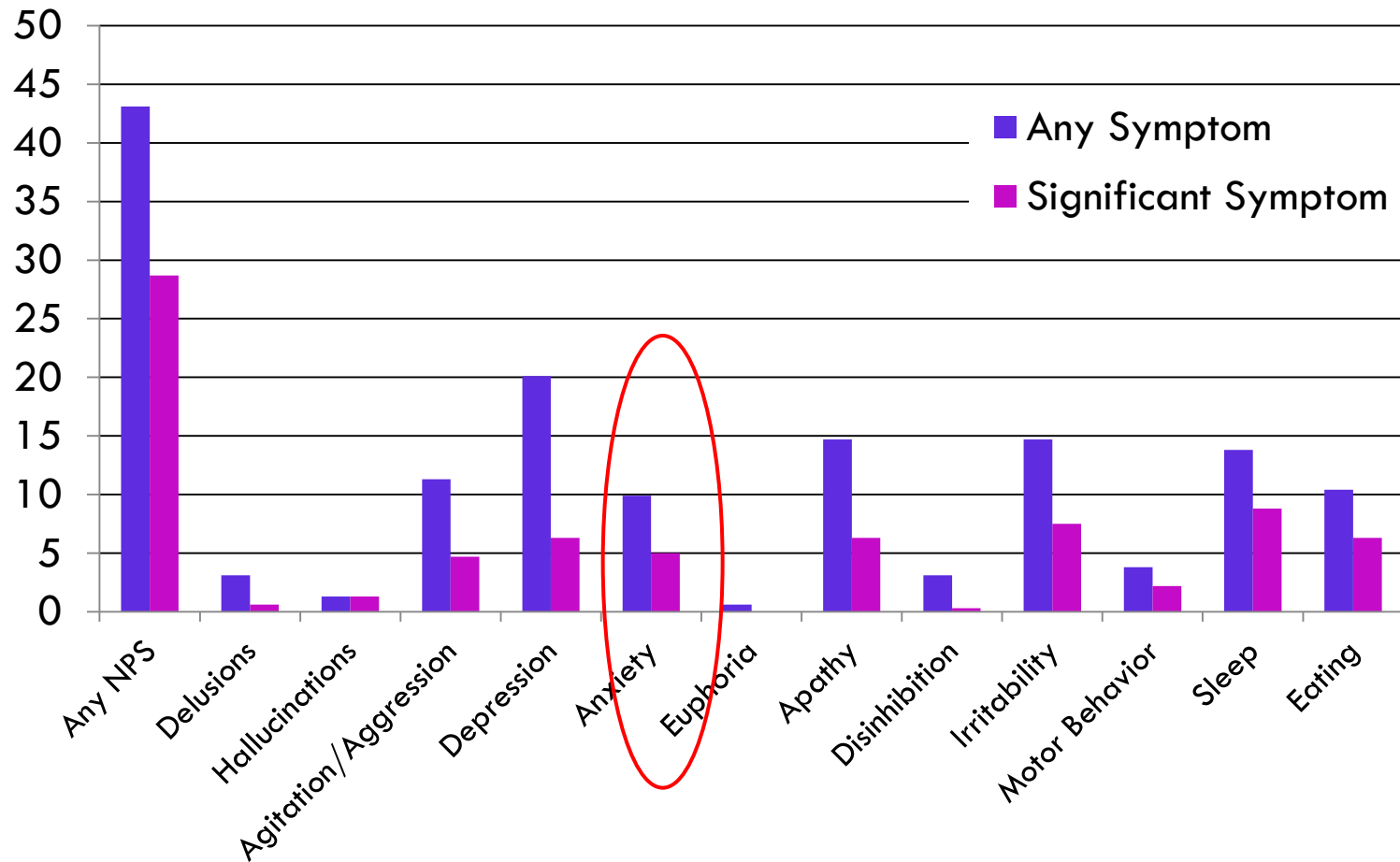
Psychiatric Comorbidity

- 20 to 40% of individuals with anxiety disorder will have comorbid depression
- 20 to 40% of older adults with depression will have comorbid anxiety
- MDD + GAD associated with worse outcomes than either alone
- Either can occur alone but more commonly long-standing GAD precedes MDD

Medical Conditions Associated with Anxiety

- **Cardiac**
 - ▣ **Coronary artery disease, angina, arrhythmias, non-specific chest pain**
- **Respiratory**
 - ▣ **COPD**
- **Vestibular disorders/vertigo**
- **Neurological conditions**
 - ▣ **Parkinson's disease (on-off phenomenon with anxiety)**
- **Pain syndromes**
- **Gastrointestinal symptoms (IBS)**
- **Endocrine**
 - ▣ **Diabetes, thyroid dysfunction**

Prevalence Anxiety in MCI

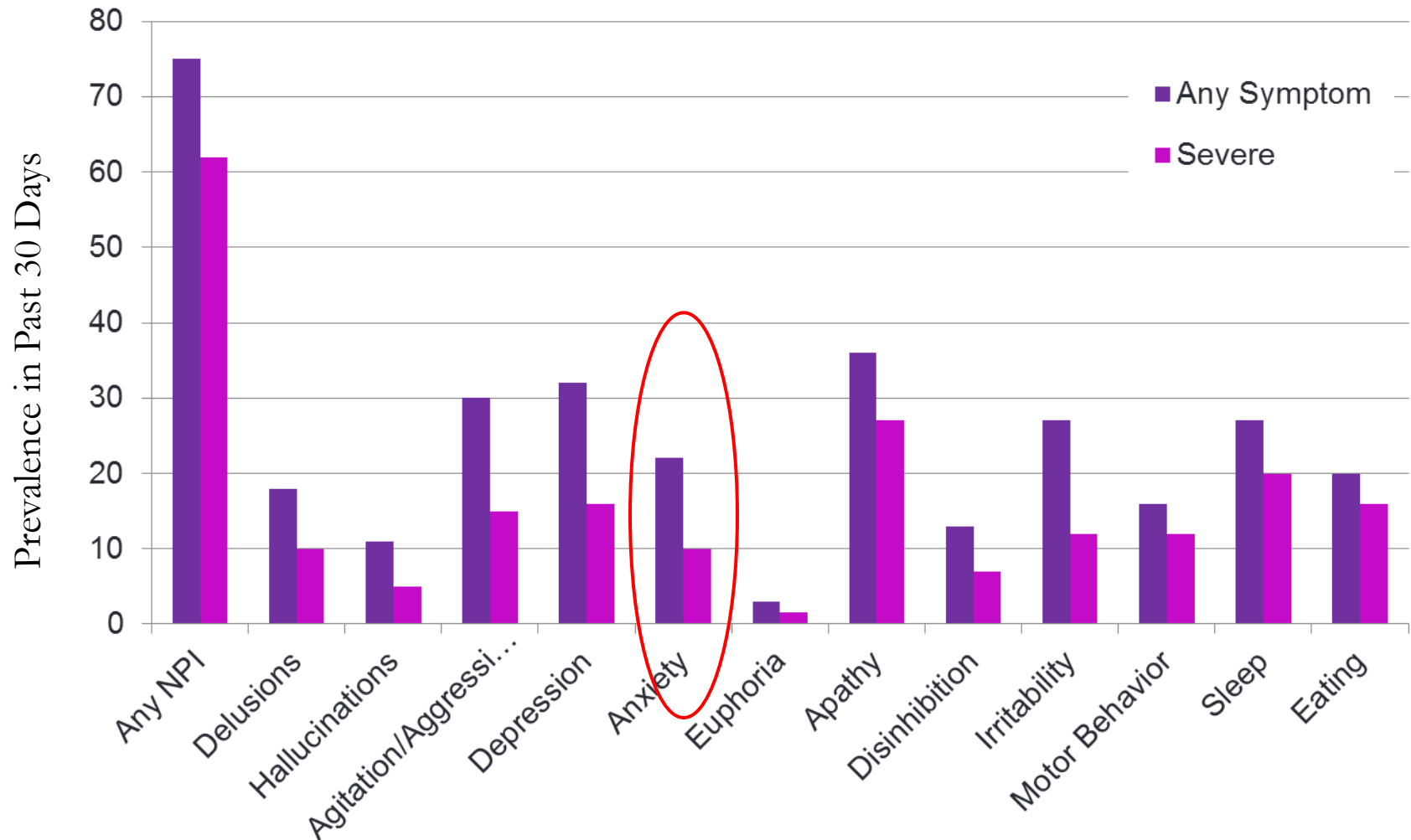


Anxiety in MCI and AD Conversion

- Each symptom of anxiety in MCI increases risk of AD conversion by $HR = 1.8^1$
 - ▣ Persistent worrying ($HR = 5.3$), decision making ($HR = 5.6$)
 - ▣ MCI Conversion over 3 years:
 - No anxiety: 40.9%
 - Anxiety: 83.3%

1. Palmer, Neurology, 2007
2. Palmer, J Alz Dis, 2010
3. Gabryelewicz, Int J Geriatr Psychiatry, 2007

Prevalence of Neuropsychiatric Symptoms in Alzheimer's Disease



Medications and Substances Associated with Anxiety

- ❑ Caffeine*
- ❑ Alcohol
- ❑ Sedative/BZD withdrawal
- ❑ Adrenergic medications (e.g B-agonists)
- ❑ Corticosteroids
- ❑ Thyroid hormones

Generalized Anxiety Disorder

- DSM 5 criteria
- Excessive anxiety and worry (apprehensive expectation), occurring for 6 months, about number of events
- Difficulty controlling worry
- Three or more associated symptoms:
 - ▣ Restlessness, “keyed up”
 - ▣ Easily fatigued
 - ▣ Difficulties with concentration
 - ▣ Irritability
 - ▣ Muscle tension
 - ▣ Sleep problems

AND I C REST

Table 1. Generalized anxiety disorder screening mnemonic

DSM-IV-TR CORRELATES	SUGGESTED SCREENING QUESTIONS
A A nxious, nervous, or worried on most days about a number of events or activities	Do you feel anxious, nervous, or worried most of the time? Do you worry about several things?
N N o control over the worry	Do you find it difficult to control the worry?
D D uration of 6 months	How long has this worrying been a problem for you?
I I rritability	Do you find that you are more irritable than usual? Do you find that you are more easily frustrated by others than usual?
C C oncentration impairment	Are you having any troubles with concentration? Do you find your mind going blank at times?
R R estlessness	Are you feeling restless, fidgety, or that you can't sit still?
E E nergy decreased	Are you feeling more tired than usual? Do you find that you are tiring more easily?
S S leep impairment	Are you having any difficulties in falling asleep or staying asleep?
T T ension in muscles	Do your muscles feel tense? Do you feel wound up like a spring?

Phobias

- All phobias:
 - ▣ Provoke fear out of proportion to actual threat
 - ▣ Avoidance of situations
- Social Phobia:
 - ▣ Fear of social situations that may be associated with scrutiny
- Specific Phobias (most common anxiety d/o)
 - ▣ elderly: being alone

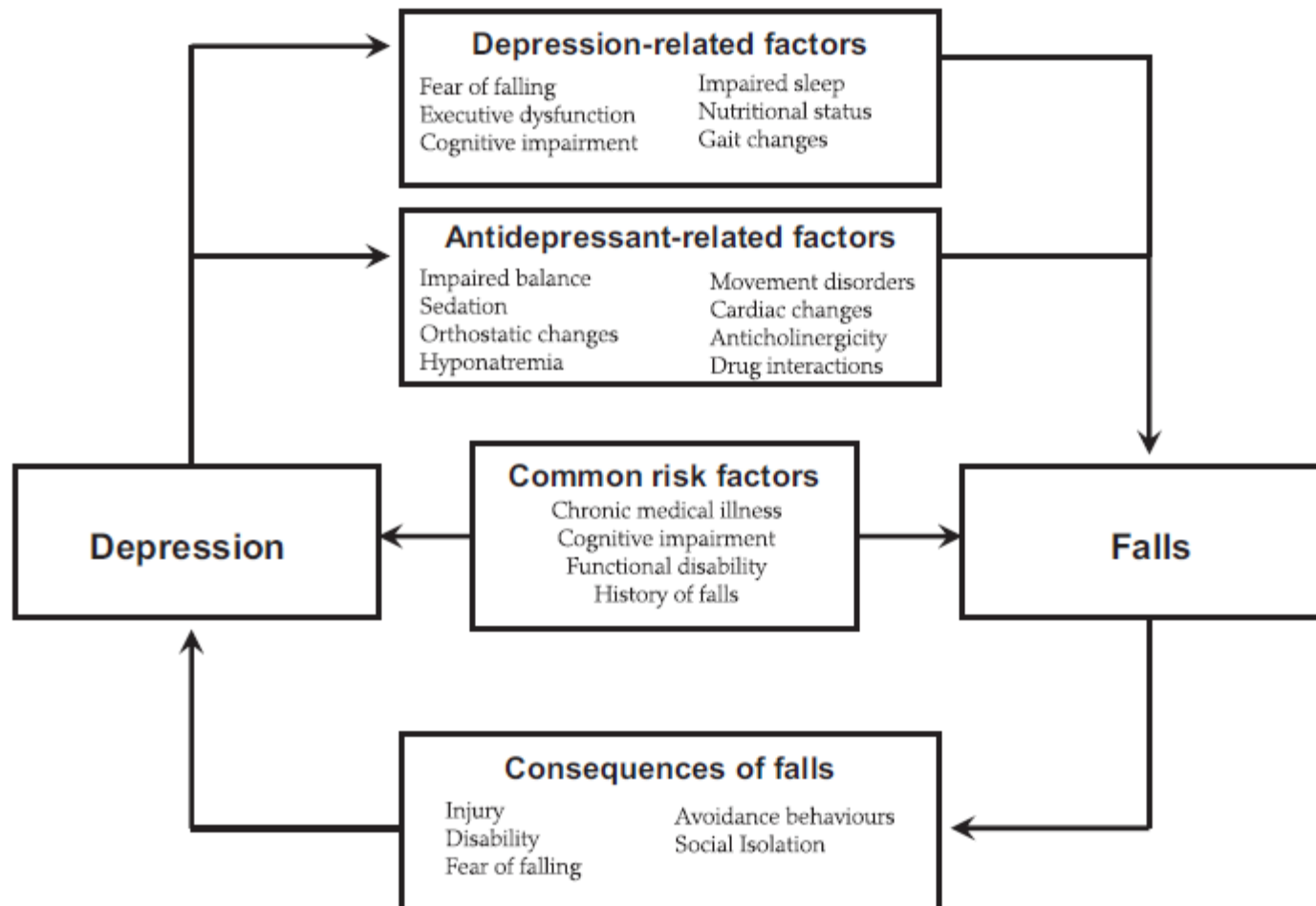
Panic Disorder

- Panic attacks, surge of symptoms often peaking within minutes (can last hours)
 - ▣ **Dizzy/unsteady/lightheaded**, palpitations, sweating, shaking, SOB, choking, chest pain, nausea, dizzy, chills/flushed, paresthesias
 - ▣ Worry about consequences of panic attacks
 - ▣ Behavioral change (avoidance)

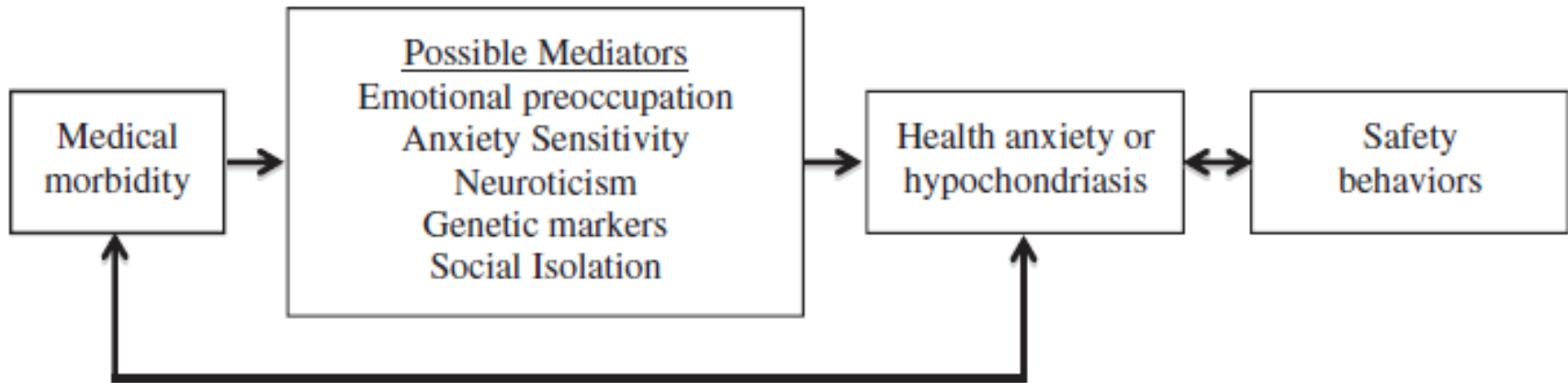
Agoraphobia

- Fear or avoidance of situation where escape may be difficult if panic attacks occur or embarrassing symptoms might occur
- Do not need panic-attacks (change in DSM 5)
- Fear of falling
 - 12 to 40% of community dwelling elderly without falls, 90% of individuals with falls
- Incontinence in elderly

Fear of Falling



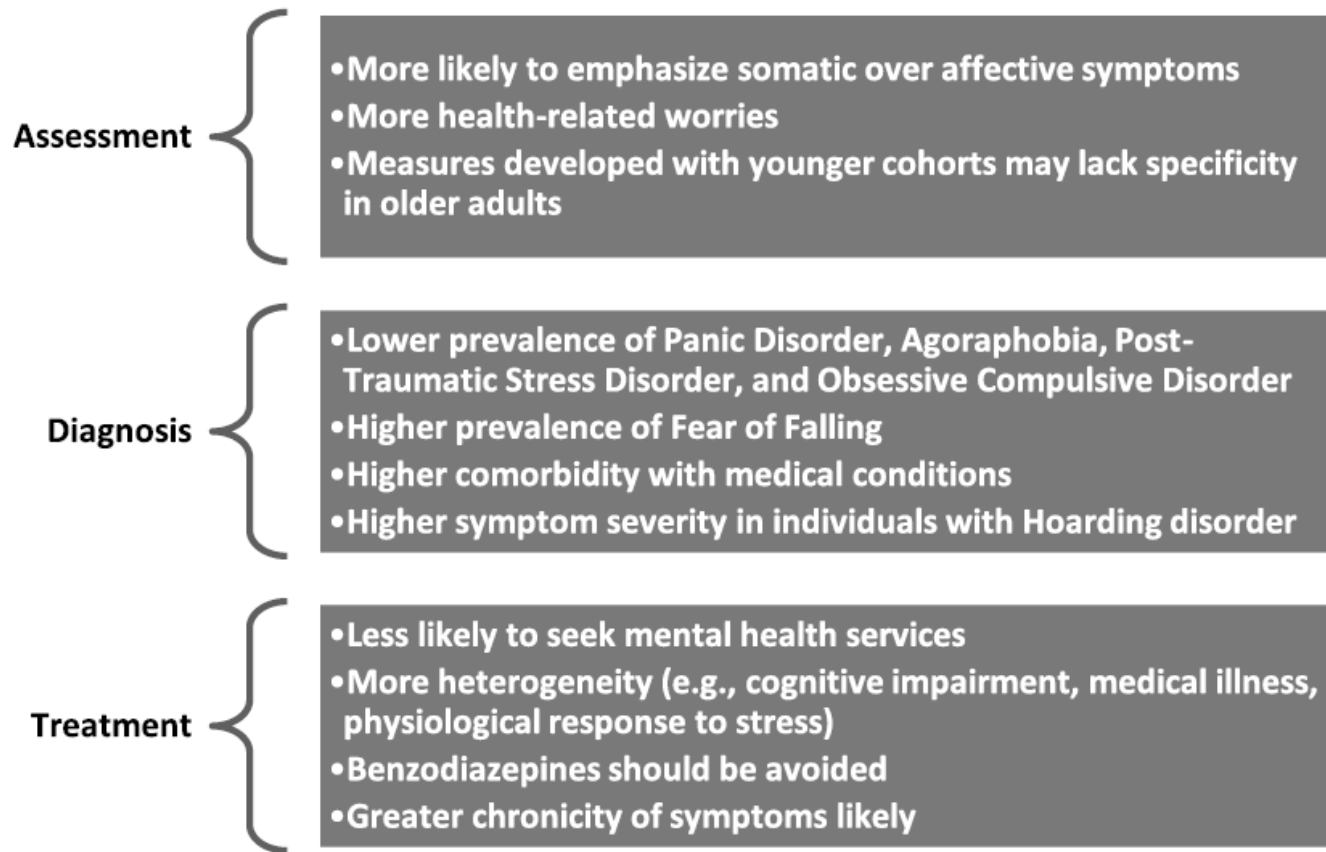
Health Anxiety



Screening Questions

Disorder (Symptom Summary)	Useful Screening Questions
Generalized anxiety disorder (diffuse constant anxiety and worry for >6 months)	<p>Are you a worrier?</p> <p>Do you worry too much about the "what ifs" in life?</p> <p>Is it hard to stop the worrying?</p> <p>Does worrying keep you from falling asleep or feeling rested at night?</p> <p>Does your worry cause headaches, body aches, or tension?</p>
Phobias	
Agoraphobia (fear of being trapped in a place from which escape might be difficult; anxiety might occur)	<p>Are you afraid of being alone and unable to get help?</p> <p>Do you avoid doing things such as leaving your home because of this fear?</p> <p>Does a fear of falling stop you from doing things?</p>
Social phobia (fear of social embarrassment)	<p>Do you worry in social situations that people will judge you negatively?</p> <p>Do you avoid social situations because of that fear?</p>
Specific phobia (fear of specific object or situation)	<p>Do you fear anything specifically, such as animals, storms, or heights?</p> <p>Do you avoid being in situations where you might encounter this?</p>
Panic disorder (episodic overwhelming anxiety and autonomic signs)	<p>Do you have sudden, overwhelming body anxiety, with shortness of breath, sweating, or tightness in your chest lasting several minutes?</p>
Post-traumatic stress disorder (traumatic event re-experienced, creating anxiety)	<p>Do you have anxiety related to a trauma, causing you to have nightmares or flashbacks?</p>
Obsessive-compulsive disorder (intrusive thoughts and repetitive behaviours)	<p>Do you ever have a thought* or image that goes around in your mind like a "broken record" and is difficult to stop?</p>

Anxiety in Older Adults



Anxiety Rating Scales

- Can be useful for patient education, helpful in measuring changes over time
- Use an anxiety specific measure!
 - Often people will score low on depression screening tool but can have high anxiety
 - Anxiety symptoms can change or improve independent of depression

Penn State Worry Questionnaire

	Not at all typical of me					Very typical of me				
1. If I do not have enough time to do everything, I do not worry about it.	1	2	3	4	5					
2. My worries overwhelm me.	1	2	3	4	5					
3. I do not tend to worry about things.	1	2	3	4	5					
4. Many situations make me worry.	1	2	3	4	5					
5. I know I should not worry about things, but I just cannot help it.	1	2	3	4	5					
6. When I am under pressure I worry a lot.	1	2	3	4	5					
7. I am always worrying about something.	1	2	3	4	5					
8. I find it easy to dismiss worrisome thoughts.	1	2	3	4	5					
9. As soon as I finish one task, I start to worry about everything else I have to do.	1	2	3	4	5					
10. I never worry about anything.	1	2	3	4	5					
11. When there is nothing more I can do about a concern, I do not worry about it any more.	1	2	3	4	5					
12. I have been a worrier all my life.	1	2	3	4	5					
13. I notice that I have been worrying about things.	1	2	3	4	5					
14. Once I start worrying, I cannot stop.	1	2	3	4	5					
15. I worry all the time.	1	2	3	4	5					
16. I worry about projects until they are all done.	1	2	3	4	5					

Worry Cognitive Symptoms

Mild: 16-39

Moderate: 40 - 59

Severe: 60-80

Beck Anxiety Inventory

	Not At All	Mildly but it didn't bother me much.	Moderately - it wasn't pleasant at times	Severely – it bothered me a lot
Numbness or tingling	0	1	2	3
Feeling hot	0	1	2	3
Wobbliness in legs	0	1	2	3
Unable to relax	0	1	2	3
Fear of worst happening	0	1	2	3
Dizzy or lightheaded	0	1	2	3
Heart pounding/racing	0	1	2	3
Unsteady	0	1	2	3
Terrified or afraid	0	1	2	3
Nervous	0	1	2	3
Feeling of choking	0	1	2	3
Hands trembling	0	1	2	3
Shaky / unsteady	0	1	2	3
Fear of losing control	0	1	2	3
Difficulty in breathing	0	1	2	3
Fear of dying	0	1	2	3
Scared	0	1	2	3
Indigestion	0	1	2	3
Faint / lightheaded	0	1	2	3
Face flushed	0	1	2	3
Hot/cold sweats	0	1	2	3
Column Sum				

Panic-like symptoms

Mild: 0-21

Moderate: 22- 35

Severe: > 35

Geriatric Anxiety Inventory

1. I worry a lot of the time.
2. I find it difficult to make a decision.
3. I often feel jumpy.
4. I find it hard to relax.
5. I often cannot enjoy things because of my worries.
6. Little things bother me a lot.
7. I often feel like I have butterflies in my stomach.
8. I think of myself as a worrier.
9. I can't help worrying about even trivial things.
10. I often feel nervous.
11. My own thoughts often make me anxious.
12. I get an upset stomach due to my worrying.
13. I think of myself as a nervous person.
14. I always anticipate the worst will happen.
15. I often feel shaky inside.
16. I think that my worries interfere with my life.
17. My worries often overwhelm me.
18. I sometimes feel a great knot in my stomach.
19. I miss out on things because I worry too much.
20. I often feel upset.

Cut-off: ≥ 10

Sensitivity: 88%

Specificity: 99%

Treatments

- Psychotherapy
- Pharmacotherapy
- Medications are more effective than psychotherapy in acute treatment
- Combination of both medications and psychotherapy most effective overall
- Compliance with either treatment modality is a major treatment barrier

Psychoeducation

- ❑ Include both patient and family
- ❑ Importance of treating anxiety for quality of life
 - ▣ Link to problems caused by anxiety
- ❑ Review relationship between stress and health
- ❑ Encourage exercise



Psychotherapy Anxiety Disorders

- Cognitive Behavioral Therapy*
- Relaxation Therapy*
- Problem-Solving Therapy

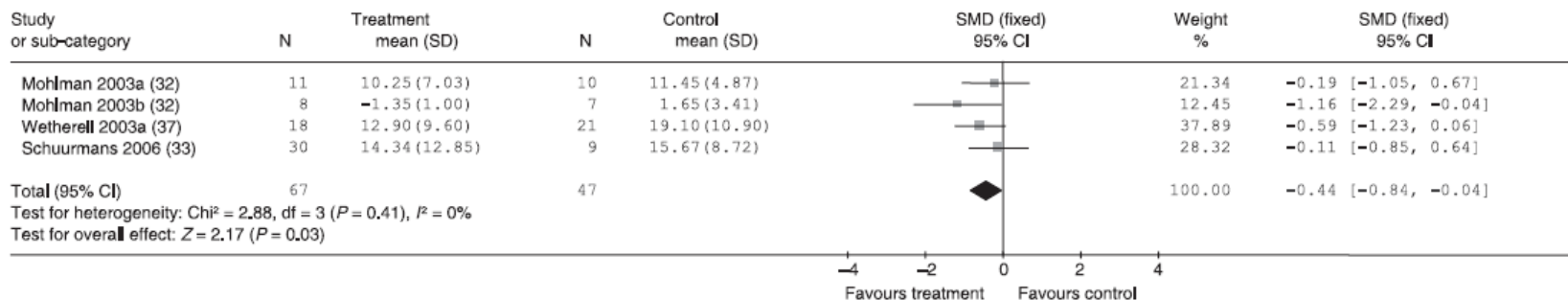
Cognitive Behavioral Therapy

- Cognitive Behavioral Therapy has the most consistent evidence for anxiety disorders in elderly
- Start with relaxation-based strategies first!
 - ▣ Probably most important component of CBT
 - ▣ Cognitive restructuring can be difficult with older adults

CBT for Generalized Anxiety

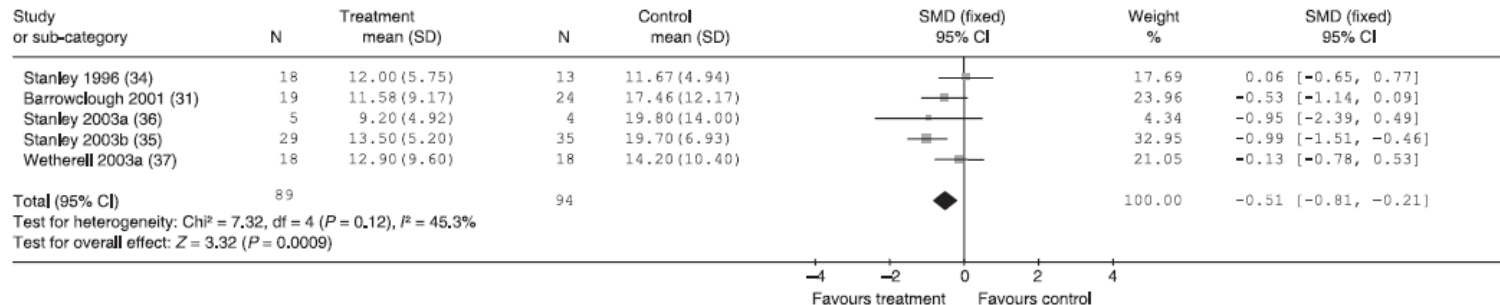
CBT vs. Wait List: Effect size: 0.44 (0.04 to 0.84)

Review: Cognitive behavioural therapy for anxiety disorders in later life
Comparison: 01 CBT versus waiting list
Outcome: 01 Effect on anxiety level



CBT vs. Active Control: Effect size: 0.51 (0.21 to 0.81)

Review: Cognitive behavioural therapy for anxiety disorders in later life
Comparison: 02 CBT versus active control condition
Outcome: 01 Effect on anxiety level



Relaxation Therapy Resources

CALM BREATHING



www.anxietybc.com

HOW TO DO PROGRESSIVE
MUSCLE RELAXATION

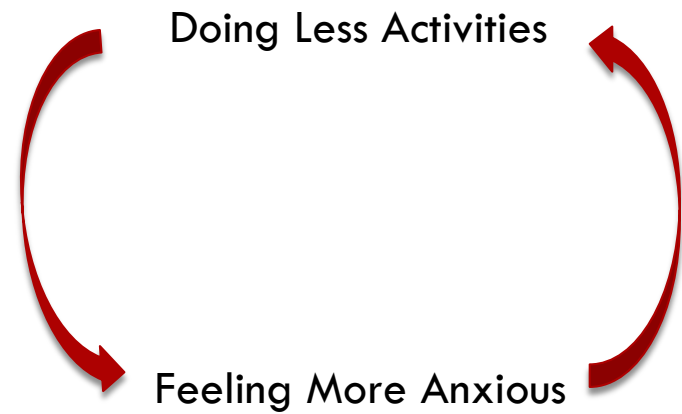
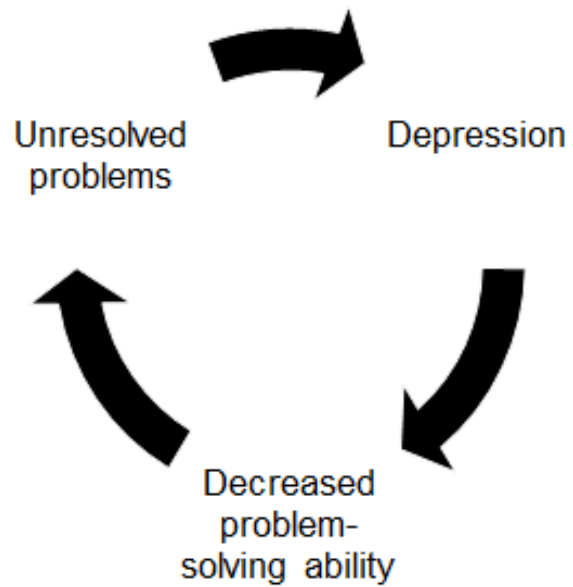


Self-Help for Anxiety Management (SAM) App



Problem Solving Therapy

- Work on solving real-life problems
- Depression and anxiety improves as problems are resolved, or attempts are made to address problems
- Learn strategies to solve problems outside of therapy
- Help to unwind the spiral of anxiety and problems
- Includes behavioral activation, pleasant event scheduling



Problem Solving Styles

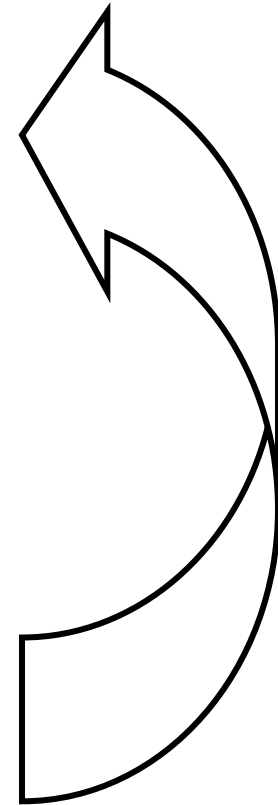
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- **Planful (Rational) Problem Solving***
 - Definition of problems
 - Generation of alternatives
 - Decision making
 - Solution implementation and verification
- **Impulsive/Careless**
 - Narrowed, hurried or incomplete problem solving
 - Few alternatives, often go with first
 - Scan solutions and consequences quickly, monitors outcomes carelessly
- **Passive/Avoidant – Coping Strategies in Anxious People**
 - Procrastination, passivity, inaction
 - Avoids or puts off problem solving

7 Steps to PST

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1. Problem Definition
2. Identification of Goal
3. Brainstorming Solutions
4. Weighing Pros and Cons of Solutions
5. Select a Solution
6. Implement Action Plan to Carry Out Solution
7. Verification of the Outcomes



Problem List

- “What kind of problems are you having now that led you to seek out help?”
- Use Problem List worksheet to help generate problems
- Good to have a variety of problems to work on

Problems with relationships	Problems with having a daily pleasant activity
Problems with work or volunteer activities	Problems with sexual activity or intimacy
Problems with money/finances	Problems with religious or moral values
Problems with living arrangements	Problems with self-image
Problems with transportation	Problems with aging
Problems with health	Problems with loneliness

Problem Solving Therapy

- PST problem areas for people with anxiety
 - ▣ Strategies for taking medications
 - ▣ Relaxation strategies
 - ▣ Behavioral activation/Pleasant events (reducing avoidance)
 - ▣ Exercise

Common Challenges and Strategies Used in PST

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Problem

- Overwhelmed emotionally with problems
- Low-motivation to follow through on action plan
- Negativity Bias, anticipating poor outcomes, catastrophizing

Potential Strategies

- □ Deep breathing, progressive muscle relaxation, meditation prior to action plans
- □ Imagery, Devil's Advocate, Reverse Role Plays, Rewards
- □ Weighing the evidence (thought records), Negative Thought Logs

Pharmacological treatments

General principles:

- Start lower (usually half of dose used in younger adults)
- Go slower (but go!)
- Aim to reach therapeutic dose in one month
- Monitor treatment response and do not continue ineffective medications
- *Anxiety disorders: often need to start at sub-therapeutic dose and even slower titration than in depression

Pharmacotherapy for GAD

□ SSRIs

- ▣ Citalopram, Escitalopram, Sertraline studied for geriatric GAD

- A/E Citalopram, escitalopram: sedation

□ SNRIs

- ▣ Duloxetine – improvements in anxiety and depression

- Nausea most common S/E: 30% vs. 7% placebo

- ▣ Venlafaxine

□ Other medications

- ▣ Mirtazapine (no studies in elderly with anxiety), TCAs, buspirone, benzodiazepines (avoid)

Antidepressant Medications

Generic Name	Trade Name	Starting dose mg/day	Average Dose	Maximum recommended dose (CPS)	Comments/Caution
SSRI					
* <u>Citalopram</u>	Celexa	10	10 – 20 mg	20 mg*	QTc prolongation with doses > 20 in the elderly
* <u>Escitalopram</u>	Cipralex	5	10-20	20 mg	QTc prolongation with doses greater than 10 mg in the elderly
<u>Sertraline</u>	Zoloft	25	50-150	200 mg	
Other Agents					
<u>Mirtazapine</u>	Remeron	15	30-45	45 mg	Most likely to cause sedation
* <u>Duloxetine</u>	Cymbalta	30	30 – 60	60 mg	Can be associated with drug-drug interactions
<u>Venlafaxine</u>	Effexor	37.5	75-225	*225	*For severe depression; May increase blood pressure

Pregabalin for GAD in Older Adults

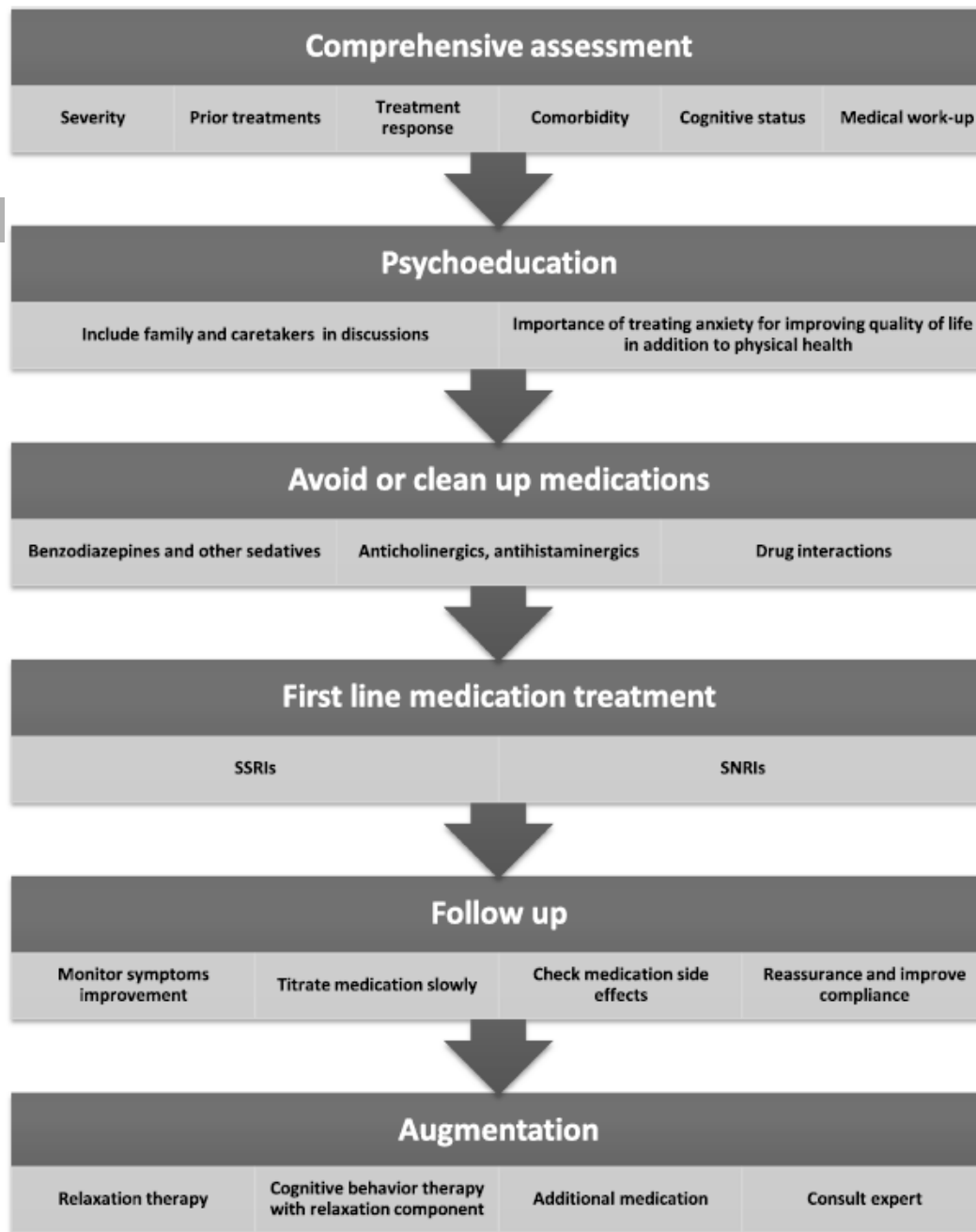
- 8 week RCT of pregabalin for GAD (N=273)
- Dose: 50 mg/day X 3 days, 100 mg X 2 days, then 150 mg
 - ▣ Dose further increased to 150 to 600 mg (BID/TID)
 - ▣ Mean dose: 270 mg daily
- Statistically significant, clinically modest benefit on anxiety
- Dizziness (20% vs. 11% PBO), Somnolence (13% vs. 7%) most common AE
- Clinically – low-doses (50 to 100mg) can be useful adjunct to SSRI/SNRI

Quetiapine XR for GAD

- 11 week RCT of Quetiapine XR (N=450)
- Dose: 50 mg initially → 150 mg in 2 weeks, further titrated to up to 300 mg daily
 - Mean dose 167 mg
- Response: 68.5% QTN vs 23.9% PBO
- Remission: 40.1% QTN vs 12.8% PBO
- Differences noted at week 1 onwards
- A/E: Somnolence 26% QTN vs. 8.4% PBO
- Efficacy and tolerability greater in <75 vs. >75 years

Clinical Tips

- Plan for course treatment to be longer-term
- Use rating scales to help detect early changes improvements
- Meet regularly (weekly/bi-weekly) for highly anxious individuals at beginning of therapy, have scheduled appointments
 - ▣ Reassurance when starting, changing medications
- Work on relaxation strategies, behavioral activation early on
- Taper benzodiazepines once symptoms are improving and other treatments started
 - ▣ Use motivational interviewing strategies to reduce BZD



Bower, Harvard Rev Psychiatry, 2015

Conclusions

- Anxiety disorders are common in older adults and underdiagnosed
- Assessment should include anxiety specific questions and tools
- Both psychotherapy and pharmacotherapy have a role in late-life anxiety disorders

Questions

Email: seitzd@providencecare.ca

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Resources

- ❑ www.anxietycanada.ca
- ❑ www.adaa.org
- ❑ <http://nihseniorhealth.gov/anxietydisorders>