Assessment and Treatment of Anxiety Disorders

Misty L. Gonzalez

Clinical Associate Professor
School of Pharmacy

misgonz@siue.edu

Objectives

- Describe the utility of common rating scales in the treatment and management of anxiety
- Describe the clinical pearls of pharmacotherapy and non-medication adjuncts for patients to incorporate into their treatment regimen

Trish, a 48-year-old female dentist, presents to you for a hypertension and neck pain follow up. You ask her if her practice has been busy. She says she's had to take time off to help her kids with online schooling. She says it's exhausting and she worries about her children falling behind.

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Definition

- Anxiety is a feeling of fear or worries caused by their environment
- Each person can have a different range of worries and responses to anxiety
- Anxiety Disorders differ from everyday anxiety
  - More severe
  - Persistent
  - Interferes with a person's activities, and family and social relationships

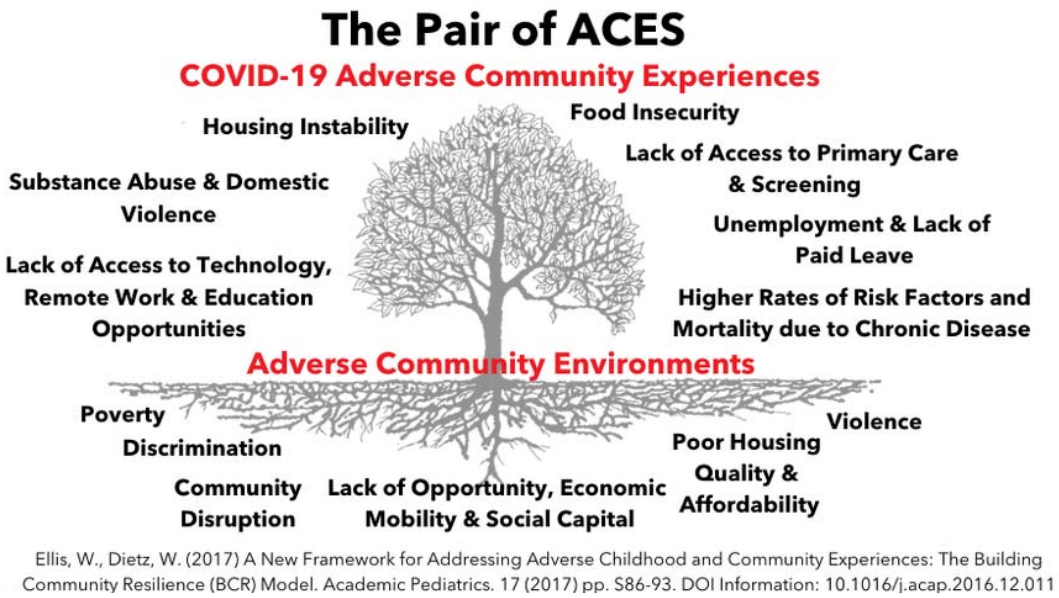
Common Types of Anxiety

Generalized: Excessive worrying about everyday life

Panic Disorder: Repeated sudden onset of feelings of terror

Post-traumatic: Avoidance, hypervigilance, re-experiencing

Social: Fear of being embarrassed, judged, or rejected



Ellis, W., Dietz, W. (2017) A New Framework for Addressing Adverse Childhood and Community Experiences: The Building Community Resilience (BCR) Model. Academic Pediatrics. 17 (2017) pp. S86-93. DOI Information: 10.1016/j.acap.2016.12.011

Risk factors

- Adverse Childhood Experiences (ACEs)
- Alcohol misuse
- Childhood anxiety
- Family/relationship instability
- Gender
- Medications and medical conditions
- Sensitivity
- Traumatic experiences

Anxiety and Medications & Health Conditions

Medications/Substances

- Antidepressants
- Bronchodilators
- Stimulants
  - ADHD
  - Caffeine
  - Decongestants
  - Nicotine
- Thyroid hormone
- Alcohol/sedative withdrawal

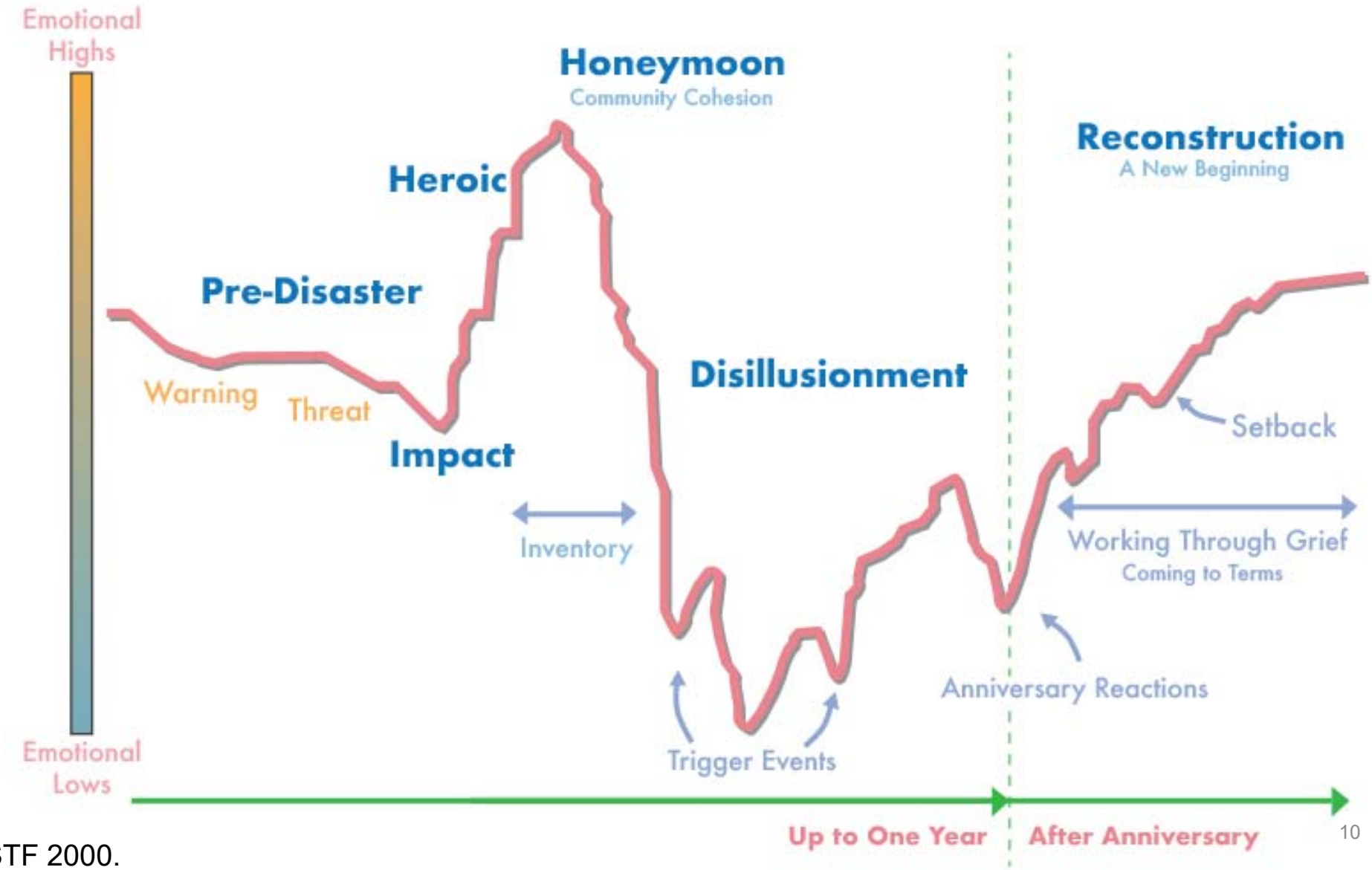
Health Conditions

- Cardiovascular
- Depression
- Hyperthyroidism
- Neurologic
- Oncologic
- Pain
- Respiratory
- Substance use disorders

Prevalence/COVID-19 estimated increase

- APA's "Stress in America" survey showed mental health symptoms have increased substantially:
  - 33% reported anxiety or depression symptoms (3-fold increase)
  - 30% reported COVID-19-related trauma and stress symptoms
  - 15 % reported increased substance use
  - **12% percent seriously considered suicide in the month before (2-fold increase)**
- 43% of respondents reported at least one adverse mental health symptom, a number that's about double pre-pandemic (previously 1 in 5)
- Nearly 1 in 4 adults, or 23 percent, reported drinking more alcohol to cope with their stress during the pandemic

JAMA Netw Open. 2021;4(2):e2037665.


Emotional Highs
Emotional Lows
Honeymoon
Community Cohesion
Heroic
Reconstruction
A New Beginning
Pre-Disaster
Warning
Threat
Impact
Disillusionment
Setback
Inventory
Working Through Grief
Coming to Terms
Anniversary Reactions
Trigger Events
Up to One Year
After Anniversary

USPSTF 2000.

Common Presentations

Appearance: Muscle tension, aches, racing heart, upset stomach, low energy, frequent illness, headaches

Behaviors: irritable, restless, nail biting, over/under eating poor concentration, sleep disturbance, ↑ alcohol, avoidance

Feelings: anxious, fatigued, hypervigilant, light-headed, unhappy, difficulty switching off mind, overwhelmed, exhausted

Thoughts: worries difficult to control, re-experiencing, pessimism, forgetfulness

NEW Screening Recommendations

- New recommendations from the Women's Preventive Services Initiative recommend **screening of women and adolescent girls aged 13 years and older at routine visits**.
- **During pregnancy and the postpartum period, anxiety disorders increase in both frequency and effects, including effects on the infant and family**.
- No definition of frequency has been given other than to screen those not screened "recently."
- USPSTF has no current recommendation for screening for anxiety disorders.
- At his time, I would recommend adding the anxiety screening at the same frequency as you have incorporated depression screening.

Ann Intern Med. 2021;4(2):e2037665.

What do we say next?

Trish, a 48-year-old female dentist, presents to you for a hypertension and neck pain follow up. You ask her if her practice has been busy. She says she's had to take time off to help her kids with online schooling. She says it's exhausting and she worries about her children falling behind.

Post your response in the chat function ☺

Treat with Trauma-informed Approach

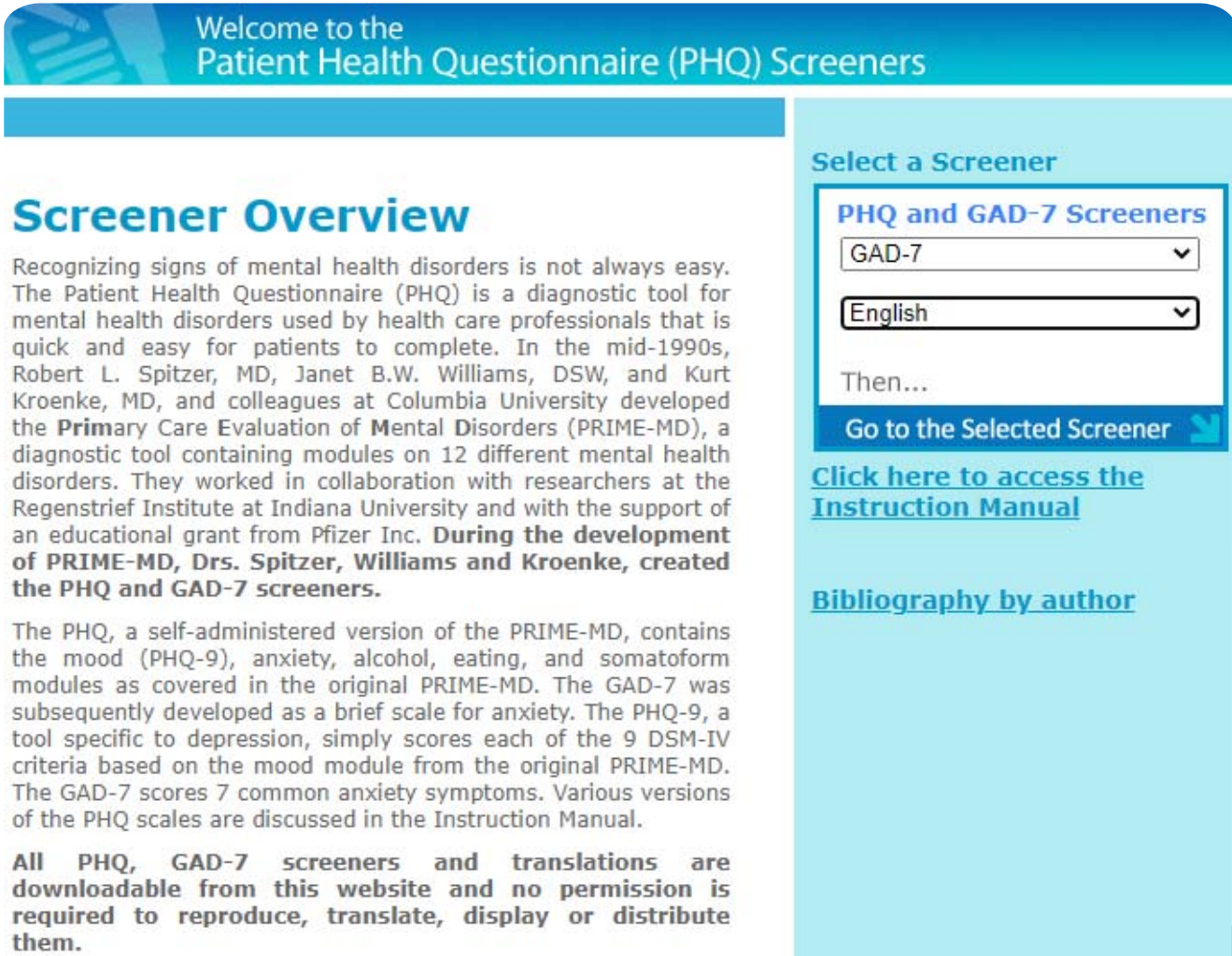
6 GUIDING PRINCIPLES TO A TRAUMA-INFORMED APPROACH

The CDC's Office of Public Health Preparedness and Response (OPHPR), in collaboration with SAMHSA's National Center for Trauma-Informed Care (NCTIC), developed and led a new training for OPHPR employees about the role of trauma-informed care during public health emergencies. The training aimed to increase responder awareness of the impact that trauma can have in the communities where they work. Participants learned SAMHSA'S six principles that guide a trauma-informed approach, including:

1. SAFETY
2. TRUSTWORTHINESS & TRANSPARENCY
3. PEER SUPPORT
4. COLLABORATION & MUTUALITY
5. EMPOWERMENT VOICE & CHOICE
6. CULTURAL, HISTORICAL, & GENDER ISSUES

Adopting a trauma-informed approach is not accomplished through any single particular technique or checklist. It requires constant attention, caring awareness, sensitivity, and possibly a cultural change at an organizational level. On-going internal organizational assessment and quality improvement, as well as engagement with community stakeholders, will help to imbed this approach which can be augmented with organizational development and practice improvement. The training provided by OPHPR and NCTIC was the first step for CDC to view emergency preparedness and response through a trauma-informed lens.

Screening & Assessment Tools



https://www.phqscreeners.com/select-screener

PHQ-4				
Over the last 2 weeks, how often have you been bothered by the following problems? *(Use "✔" to indicate your answer)*	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Little interest or pleasure in doing things	0	1	2	3
4. Feeling down, depressed, or hopeless	0	1	2	3

(For office coding: Total Score T____ = ____ + ____ + ____)

Screening

https://www.phqscreeners.com/select-screener

GAD-7

Over the last 2 weeks, how often have you been bothered by the following problems? *(Use "✔" to indicate your answer)*	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3

(For office coding: Total Score T____ = ____ + ____ + ____)

Screen & Assess

Scores of 5, 10, and 15 represent cutpoints for mild, moderate, and severe anxiety, respectively (range 0-21).

https://www.phqscreeners.com/select-screener

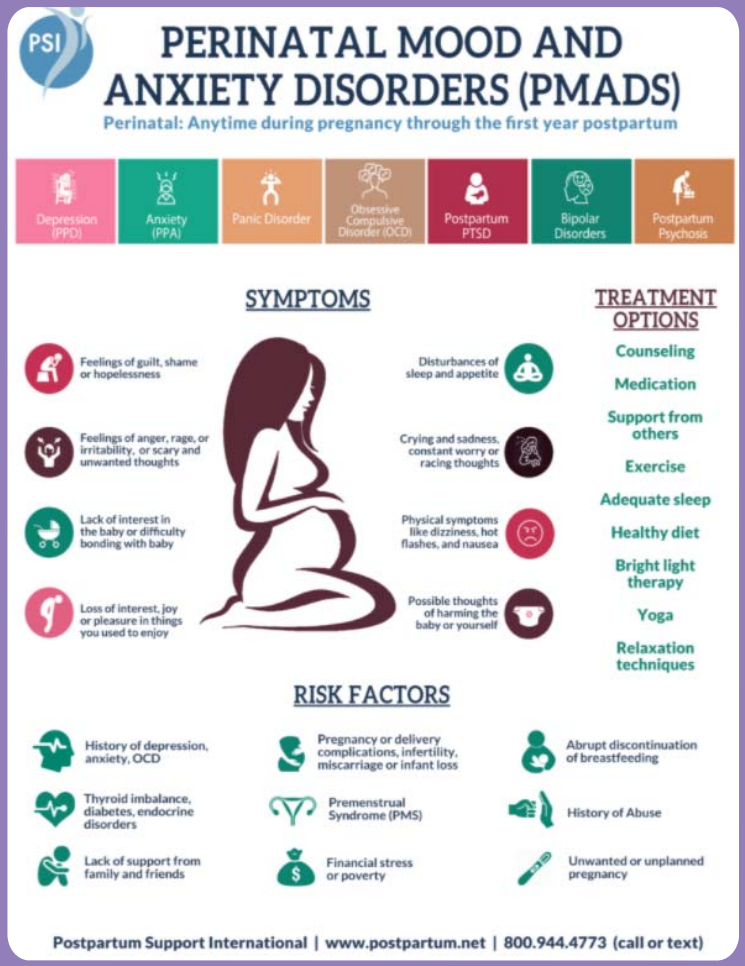
APA's PROMIS Emotional Distress–Anxiety

							Clinician Use
In the past SEVEN (7) DAYS....							**Item Score**
		Never	**Rarely**	**Sometimes**	**Often**	**Always**	
1.	I felt fearful.	❑ 1	❑ 2	❑ 3	❑ 4	❑ 5	
2.	I felt anxious.	❑ 1	❑ 2	❑ 3	❑ 4	❑ 5	
3.	I felt worried.	❑ 1	❑ 2	❑ 3	❑ 4	❑ 5	
4.	I found it hard to focus on anything other than my anxiety.	❑ 1	❑ 2	❑ 3	❑ 4	❑ 5	
5.	I felt nervous.	❑ 1	❑ 2	❑ 3	❑ 4	❑ 5	
6.	I felt uneasy.	❑ 1	❑ 2	❑ 3	❑ 4	❑ 5	
7.	I felt tense.	❑ 1	❑ 2	❑ 3	❑ 4	❑ 5	
						Total/Partial Raw Score:	
						Prorated Total Raw Score:	
						T-Score:	

Screen & Assess

https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/DSM/APA_DSM5_Level-2-Anxiety-Adult.pdf

Public education posters can help identify and target those most at risk



https://www.postpartum.net/resources/psi-brochure/

Edinburgh Perinatal/Postnatal Depression Scale (EPDS)

SCORING GUIDE

1. I have been able to laugh and see the funny side of things
   - **0** As much as I always could
   - **1** Not quite so much now
   - **2** Definitely not so much now
   - **3** Not at all
2. I have looked forward with enjoyment to things
   - **0** As much as I ever did
   - **1** Rather less than I used to
   - **2** Definitely less than I used to
   - **3** Hardly at all
3. I have blamed myself unnecessarily when things went wrong
   - **3** Yes, most of the time
   - **2** Yes, some of the time
   - **1** Not very often
   - **0** No, never
4. I have been anxious or worried for no good reason
   - **0** No, not at all
   - **1** Hardly ever
   - **2** Yes, sometimes
   - **3** Yes, very often
5. I have felt scared or panicky for no very good reason
   - **3** Yes, quite a lot
   - **2** Yes, sometimes
   - **1** No, not much
   - **0** No, not at all
6. Things have been getting on top of me
   - **3** Yes, most of the time I haven't been able to cope
   - **2** Yes, sometimes I haven't been coping as well as usual
   - **1** No, most of the time I have coped quite well
   - **0** No, I have been coping as well as ever
7. I have been so unhappy that I have had difficulty sleeping
   - **3** Yes, most of the time
   - **2** Yes, sometimes
   - **1** Not very often
   - **0** No, not at all
8. I have felt sad or miserable
   - **3** Yes, most of the time
   - **2** Yes, quite often
   - **1** Not very often
   - **0** No, not at all
9. I have been so unhappy that I have been crying
   - **3** Yes, most of the time
   - **2** Yes, quite often
   - **1** Only occasionally
   - **0** No, never
10. The thought of harming myself has occurred to me
    - **3** Yes, quite often
    - **2** Sometimes
    - **1** Hardly ever
    - **0** Never

Identify

Scores of 10 and greater indicative of possible anxiety disorder (range 0-30).

Br J Psychiatry. 1987; 150(6):782-786.

Specific Questionnaires for Anxiety

- **Generalized**: Excessive worrying about everyday life
  - Generalized Anxiety Disorder 7-item (GAD-7, PROMIS, HAM-A*)

- **Panic Disorder**: Repeated sudden onset of feelings of terror
  - Panic Disorder Severity Scale (PDSS)

- **Social**: Fear of being embarrassed, judged, or rejected
  - Social Phobia Inventory (SPIN)
  - Liebowitz Social Anxiety Scale (LSAS)

*Clinician-rated

Trish, 48 F Dentist with hypertension and pain

- Vitals: BP 144/92, HR 70, RR 20; Pain score 4/10
- Labs: WNL
- GAD-7: 12

Scores of 5, 10, and 15 represent cutpoints for mild, moderate, and severe anxiety, respectively (range 0-21).

What do we say next?

GAD-7

Over the last 2 weeks, how often have you been bothered by the following problems? *(Use "✔" to indicate your answer)*	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	(1)	2	3
2. Not being able to stop or control worrying	0	1	(2)	3
3. Worrying too much about different things	0	1	(2)	3
4. Trouble relaxing	0	1	2	(3)
5. Being so restless that it is hard to sit still	(0)	1	2	3
6. Becoming easily annoyed or irritable	0	1	(2)	3
7. Feeling afraid as if something awful might happen	0	1	(2)	3

(For office coding: Total Score T____ = ____ + ____ + ____)

Treatment:

Non-Pharmacologic interventions

May include medications

General Assessments

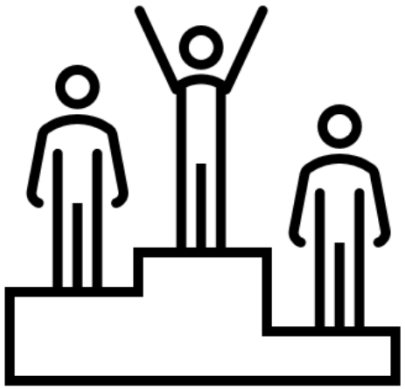
- Rule out medical causes and substance use
  - CBC, CMP, TSH, urine toxicology
- Inquire about sleep habits/hygiene, stimulant intake, exercise habits, medication adherence, medication side effects
- Patients monitored every 2 weeks until effect
- Allow 6-weeks for onset of anxiolytic effects of antidepressants
- General treatment duration of at least 1 year, *following treatment response*
- Discontinue treatment after at least 6 months stability of clinical improvement and asymptomatic status; taper gradually over months

Healthy Behaviors for Anxiety

- Exercise
- Relaxation training (handout)
- Enhancing sleep hygiene
- Decreasing use of caffeine, nicotine, stimulants, alcohol
- **Cognitive behavioral therapy**

Pharmacotherapy: First line Treatments

- Selective Serotonin Reuptake Inhibitors (SSRI)
- Serotonin Norepinephrine Reuptake Inhibitors (SNRI)
- Non-Pharmacologic strategies should also be utilized



Medication	Initial Dosing (Range)	Clinical Pearls
Citalopram	10 mg daily (10-60 mg/day)	Dose dependent QT prolongation: 20 mg = 8.5 ms 40 mg = 12.6 ms 60 mg = 18.5 ms
Escitalopram	10 mg daily (10-30 mg/day)	Dose dependent QT prolongation: 10 mg = 4.5 ms 20 mg = 6.6 ms 30 mg = 10.7 ms
Fluoxetine	20 mg daily (20-80 mg/day)	Long half-life allows self-taper on discontinuation and sustainable levels in non-adherent patients; stimulating
Paroxetine	10 mg daily (10-50 mg/day)	Serotonin withdrawal syndrome, teratogenic effects including cardiovascular defects, CR formulation better tolerated
Sertraline	25 mg daily (25-200 mg/day)	Documented safety post-MI (Sertraline Antidepressant Heart Attack Randomized Trial); Preferred in pregnancy and lactation due to low transfer propensity

SSRI common side effects: Potential activation (restlessness, jitteriness, nervousness), headache, nausea, diarrhea, dry mouth, increased sweating, fatigue, insomnia possible in first 2 weeks, longer-term sexual dysfunction (decreased libido, delayed ejaculation, anorgasmia) and increased appetite (weight gain).

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Medication	Initial Dosing (Range)	Clinical Pearls
Duloxetine	10 mg daily (20-120 mg/day)	May cause urinary hesitancy
Venlafaxine	37.5 mg daily (75-375 mg/day)	Norepinephrine activity at doses above 150 mg. Acts as SSRI at lower doses. ER formulation better tolerated.
Mirtazapine*	7.5 mg at bedtime (15-45-80 mg/day)	Has the greatest impact on increasing appetite; sedating.

SNRI side effects: Similar to those of SSRIs plus dose-related (modest) increases in blood pressure, tachycardia

*Mirtazapine is a tetracyclic antidepressant with net activity like a SNRI

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Trish, 48 F Dentist with hypertension and pain

- Vitals: BP 144/92, HR 70, RR 20
- Labs: WNL
- GAD-7: 12, moderate anxiety

Trish states she has no time for CBT and no quiet place at home for virtual therapy. She is open to pharmacotherapy.

- **What factors impact agent selection?**
- **Which agent do we choose?**
- **What side effects do we counsel about?**

Trish, 48 F Dentist with hypertension and pain

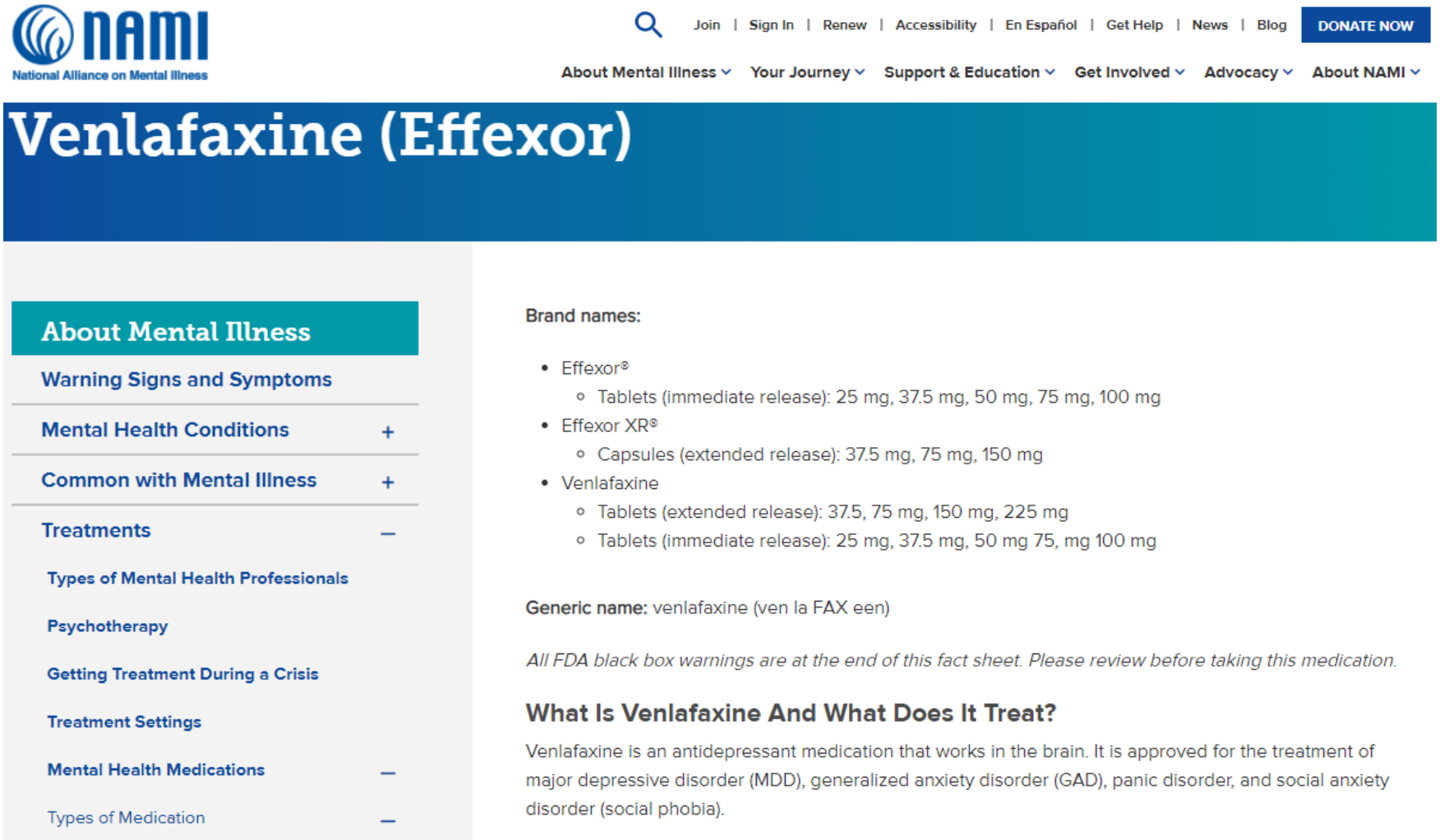
You start treatment with the SNRI venlafaxine XR. Because she could be sensitive to side effects, the drug was started with 37.5 mg/day for 3 days. Then, the dose was increased to 75 mg/day.

She reported mild nausea and fatigue; however, it was not clear whether this was due to the medication or to the illness.

After another two weeks, these adverse effects resolved, and the dose was increased to 225 mg/d. Symptoms of GAD were resolved almost completely after 7 weeks.

How long do we continue treatment?

Medication Education Handouts



https://www.nami.org/About-Mental-Illness/Treatments/Mental-Health-Medications/Types-of-Medication/Venlafaxine-(Effexor)#:~:text=Venlafaxine%20is%20an%20antidepressant%20medication,feeling%20sad%2C%20empty%2C%20or%20tearful

Sexual Dysfunction

Medication (propensity)

- Mirtazapine (2.3%)
- Escitalopram (3.4%)
- Duloxetine (4.3%)
- Fluoxetine (15.6%)
- Paroxetine (16.7%)
- Citalopram (20.3%)
- Venlafaxine (24.8%)
- Sertraline (27.4%)

Management Options

- Medication education
- Dose reduction
- Switch treatments
  - Mirtazapine
  - Vortioxetine
- Add phosphodiesterace-5 inhibitor (e.g. sildenafil)

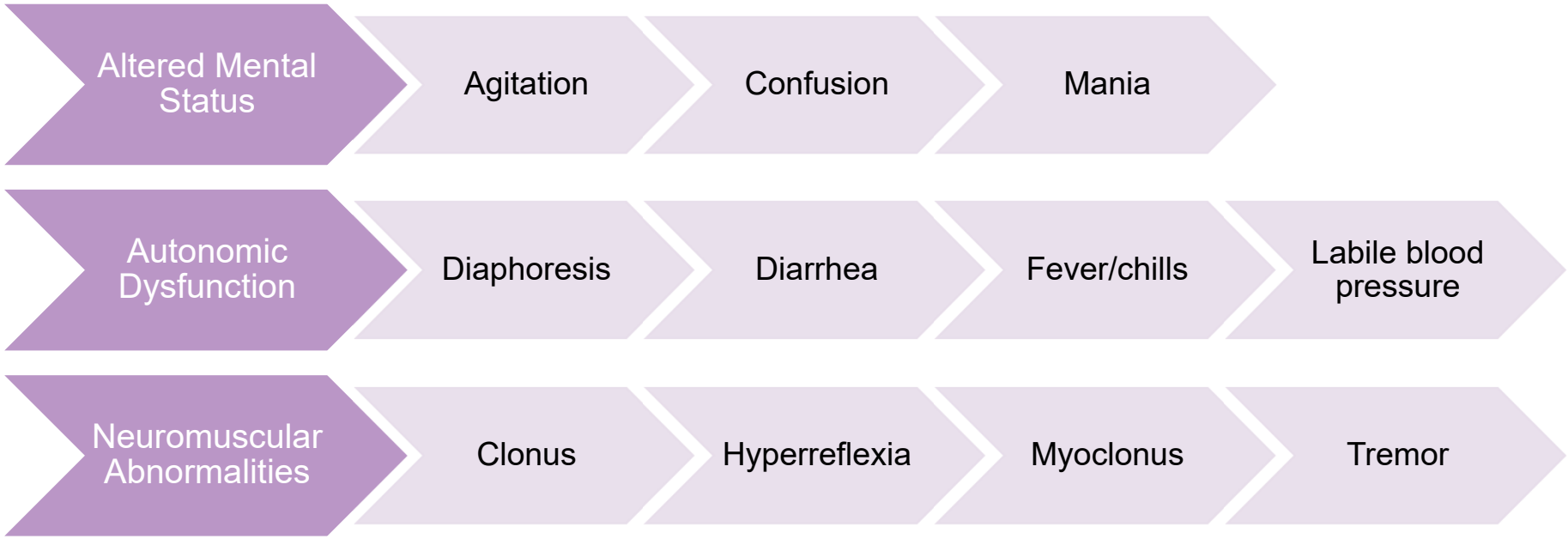
J Clin Psychopharmacol. 2009;29(3):259-266.
J Clin Med. 2019;8(10):1640.

Appetite Increase (weight gain)

- Increase appetite
  - Mirtazapine
  - Paroxetine
- Stimulating antidepressants associated with weight loss
  - Fluoxetine
  - SNRIs
- Absolute risk of weight gain is 8.1 per 100 person years, compared to 11.2 per 100 person years with antidepressant treatment
- Number needed to harm of 59

BMJ. 2018; 361:k2151.

Serotonin Syndrome



Serotonin Discontinuation Syndrome

- Dependent on the half-life of the antidepressant
- May include flu-like symptoms, nausea, lethargy, dizziness, ataxia, paresthesia or electric-shock sensations, anxiety, irritability, and sleep disturbance
- Clinicians may use the **FINISH** acronym to help recognize these symptoms
  - **F**lu-like symptoms
  - **I**nsomnia
  - **N**ausea
  - **I**mbalance
  - **S**ensory disturbances
  - **H**yperarousal

Trish, 48 F Dentist with hypertension and pain

- 6 weeks later…GAD-7: 5, mild anxiety
- Venlafaxine XR 225 mg/day

Scores of 5, 10, and 15 represent cutpoints for mild, moderate, and severe anxiety, respectively (range 0-21).

- **Is this an adequate response?**
- **What do we do?**
- **How long do we treat?**

Trish, 48 F Dentist with hypertension and pain

You advise Trish to continue on venlafaxine XR for at least 6 months.

Then you reduce the dose to 150 mg/day for 1 month, then to 75 mg/day for another month.

After 2 weeks on 37.5 mg/day, the medication is stopped.

Trish did not report relevant withdrawal symptoms and did not show reoccurrence of significant anxiety symptoms during a follow-up observation period of almost 1 year.

Augmentation options

- Benzodiazepines
- Buspirone
- Hydroxyzine
- Propranolol
- Gabapentin/Pregabalin

Commonly Prescribed Benzodiazepines

Medication	Half-life (hours)	Initial Dosing	Dose range
Alprazolam	14	0.25 to 0.5 mg up to four times daily	1 to 4 mg
Chlordiazepoxide	20	5 to 10 mg up to three times daily	15 to 40 mg
Clonazepam	50	0.5 to 1.0 mg up to twice daily	0.5 to 4.0 mg
Diazepam	40	2 to 5 mg up to three times daily	6 to 40 mg
Lorazepam	14	0.5 to 1.0 mg up to three times daily	1 to 6 mg

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Selected Adjuncts

Medication/Class	Initial Dosing (Range)	Clinical Pearls
Benzodiazepines	Variable (diazepam equivalents)	Rapid relief of anxiety; Dosed for a limited period (6-8weeks); Better role in panic disorder as scheduled treatment; Risk of rebound anxiety (e.g. alprazolam); significant adverse effect profiles (e.g. falls, accidents, confusion, memory difficulties, sedation, respiratory depression, lethality in overdose), potential for abuse
Buspirone	7.5 mg twice daily (15-60 mg/day)	2nd line, not acutely anxiolytic; needs 2-4 weeks of scheduled dosing for effect; useful as adjunct to antidepressant or in benzodiazepine naïve
Hydroxyzine	10 mg daily (10-30 mg/day)	2nd line; relatively rapid acting (onset 15-30 min); ¨Potential “hang-over” effects; alternative to benzodiazepines, anticholinergic effects
Propranolol	10 mg twice or 3x daily (30-120 mg/day)	Option for performance anxiety given 30-60 minutes before situation; alternative to benzodiazepines
Gabapentin		Option if not a candidate for antidepressant or benzodiazepine therapy; sedating, fall risk, rebound anxiety, potential for abuse
Pregabalin		Similar to above, more potent

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Strategies for Switching Antidepressants

Taper

Taper & washout, then initiate new antidepressant

- Safer from drug interactions and serotonin syndrome
- Increased risk of symptom relapse and discontinuation syndrome
- Not ideal

Switch

Direct switch from one therapeutic antidepressant to another

- Increased risk for activation or serotonin syndrome
- Best for interchanging within the same class
- Commonly practiced in depression

Cross-taper

Cross-taper over 1-2 weeks by gradually introducing the new antidepressant while slowly discontinuing the first antidepressant

- Rate of taper of antidepressants depends on the half-life
- Generally effective and well tolerated

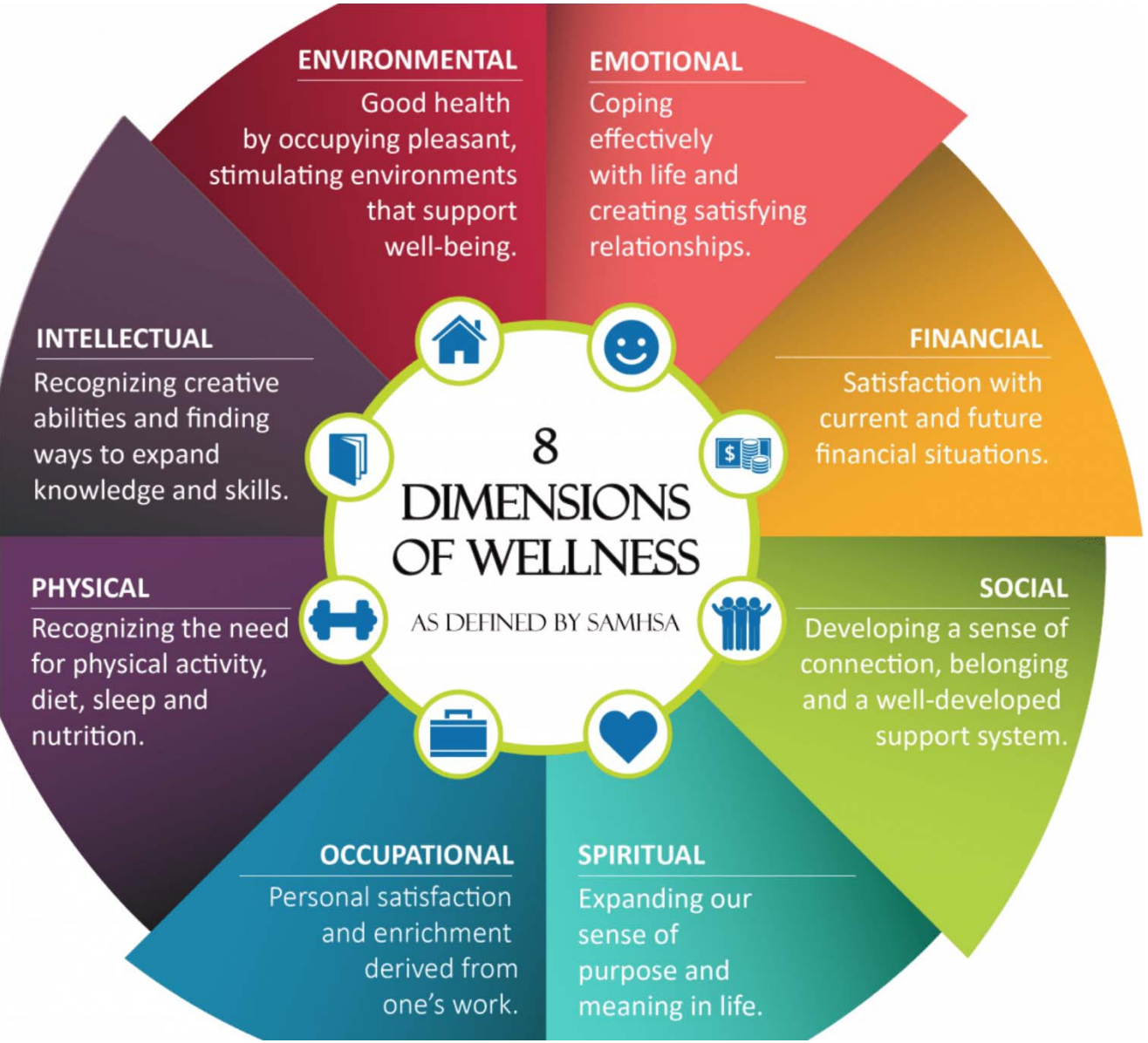
Aust Prescr 2016;39:76-83.

When to refer to psychiatry

- Patient is unresponsive to 2 adequate trials of first line options
  - Each trial is 4-6 weeks starting after therapeutic dose titration
- Comorbid substance use disorder, major depressive disorder, or personality disorder making diagnosis and treatment difficult
- Severe dysfunction or impairment
- Suicidality- Columbia Suicide Severity Rating Scale (C-SSRS)

Summary

- Anxiety disorders are increasing in prevalence
- Regular universal screening can help identify and facilitate diagnosis and treatment
- Psychotherapy +/- Antidepressants remain the standard of care
- Primary care providers have the opportunity to make a significant impact in patient care, quality of life, and mortality



What can we all do?

Supplemental Materials

Helpful References

- Keks N, Hope J, Keogh S. Switching and stopping antidepressants. Aust Prescr 2016;39:76-83.
- Postpartum Support International: https://www.postpartum.net/resources/psi-brochure/
- NAMI Medication Education: https://www.nami.org/About-Mental-Illness/Treatments/Mental-Health-Medications/Types-of-Medication

Links to Common Rating Scales

- PHQ Screeners
- EPDS Questionnaire
- PROMIS
- Panic and Agorophobia Scale
- Liebowitz Social Anxiety Scale (LSAS)
- Social Phobia Inventory (SPIN)

Supplemental Handout