

Mind Matters ECHO

Module: Anxiety

Session 3: Effective Treatments for Anxiety:
Pharmacology

March 9, 2022



**Mount
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Partners**

Welcome!

- ▶ Pre-survey: bitly.com/anxietymeeting3
- ▶ Hub team introductions
- ▶ Disclosures
- ▶ Questions during presentations



Case Presentation



Dr. Jill Sisselman
Sisselman Medical Group

Patient Information

Demographic Information	<ul style="list-style-type: none">• 80 year old cis-female• Medicare• Lives alone• Retired
Medical History	<ul style="list-style-type: none">• Aortic aneurysm• HLD• HTN
Current Medications	<ul style="list-style-type: none">• Lexapro• Amlodipine• Valsartan• Baby aspirin• Lipitor• Primidone
Past Psychiatric Medications	<ul style="list-style-type: none">• None



Patient Information

Psychiatric and Social History

- Patient is stubborn and difficult to deal with; likes to “tell her story”

Family Psychiatric and Social History

- None reported

History of Trauma

- None reported



Patient Information

Current Psychiatric Diagnoses

- Anxiety

Symptoms of Depression

- None reported

Symptoms of Anxiety/Panic

- Constant worry
- Agitation
- Poor sleep
- Patient received a worrisome diagnosis, and has always been high anxiety, but able to keep it in check until now. Now always worried, cannot sleep, tearful.

Patient & Case Information

Current Treatment Plan for Psychiatric Conditions

- Lexapro

Areas of Support and Consultation Being Sought

- Strategies for engaging the patient and/or their caregivers family

Main Question

- Seeking others' takes on benzodiazepines vs SSRIs in particularly high anxiety and age



Effective Treatments for Anxiety: Pharmacology

Mary Kate Christopher, MD

Assistant Professor

Psychiatry

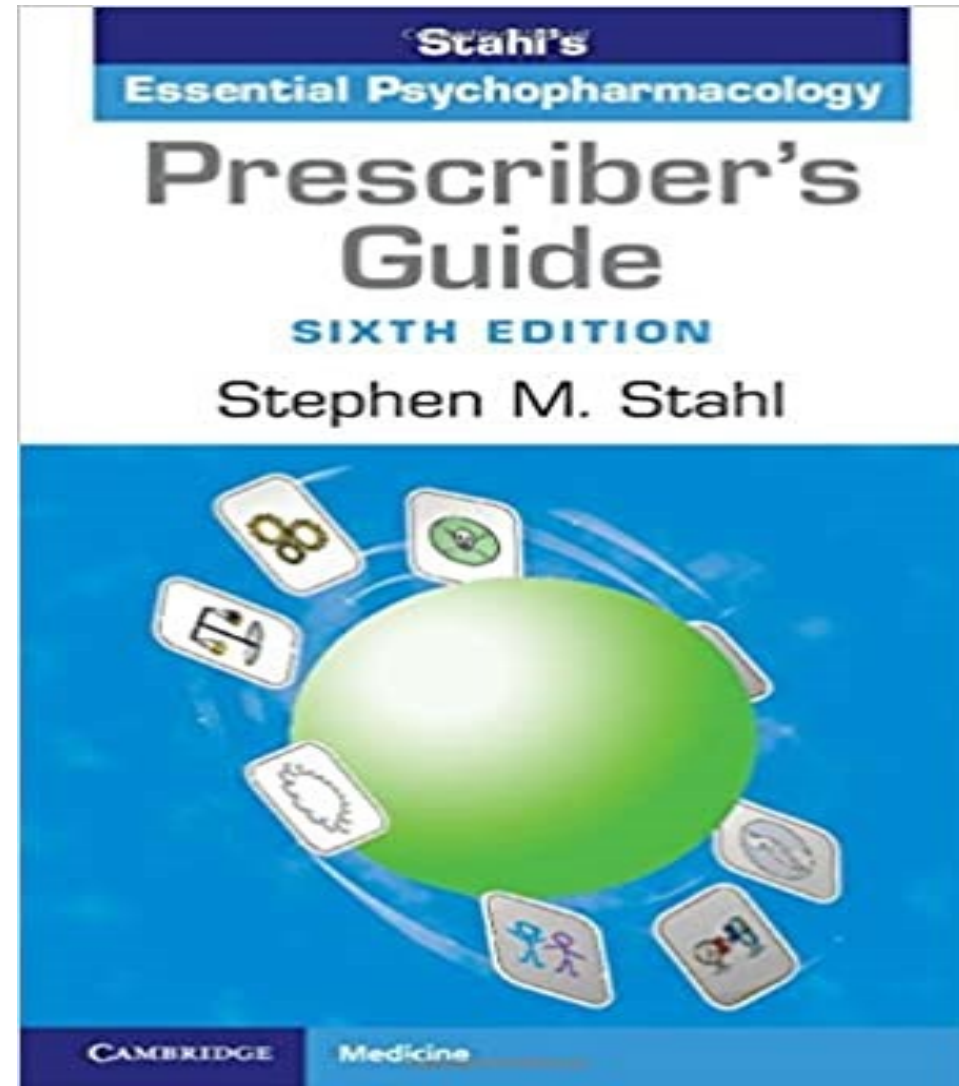
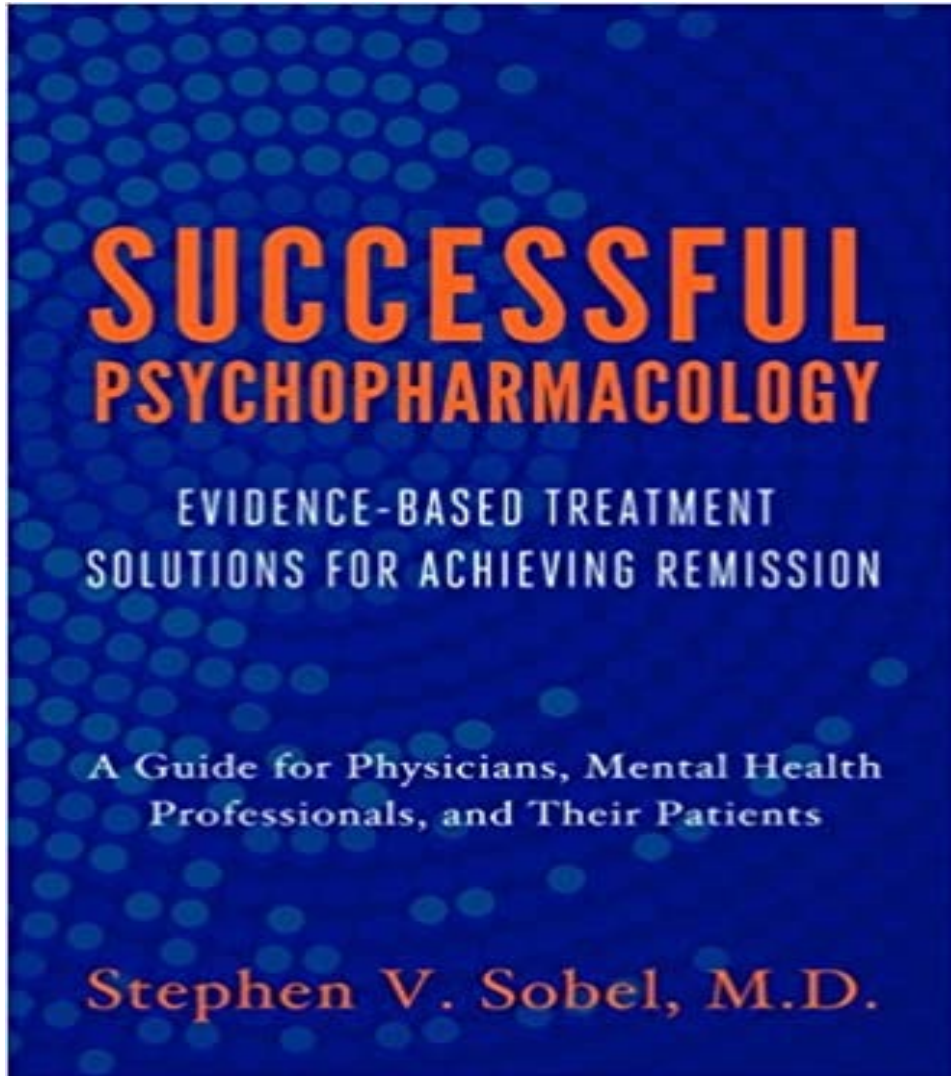
Icahn School of Medicine at Mount Sinai

Wednesday, March 9, 2022



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Resources



Reported Symptomatology:

Patient reports feeling anxious for the past few months with:

- Excessive worrying that is hard to control, irritability, poor concentration, restlessness, and fear that something awful might happen
- Poor sleep with difficulty falling asleep and frequent nighttime awakenings
- Panic attack last month. Since that time, worrying about having another panic attack
- GAD-7: 14/21; indicating moderate-severe level of anxiety

Consider Etiology

Review medication regimen

Review lab work:

- TSH/T4
 - Hyperthyroidism?
- CBC, Vit B12
 - Anemia?
- CMP
 - Electrolyte abnormalities?
 - Hypoglycemia?
 - Are kidney and liver function WNL?
- Lipid Panel + HbA1C
- Cardiac work-up
 - EKG. ?Cardiac enzymes. ?d-dimer.



Screen for Co-Morbidities

Substance Use

- Alcohol or benzodiazepine withdrawal?
- Stimulants? Cocaine? Caffeine?
- Marijuana

Depression

- 2/3 of patients with Generalized Anxiety Disorder also have Major Depressive Disorder
- PHQ-2, PHQ-9

Trauma

- PTSD?
- Childhood trauma?



CBT + Medication Therapy: 1+1 = 3

- The combination of psychotherapy and medication is **more effective** than treatment with either modality alone
- Offer referral information for Cognitive Behavioral Therapy if available

TIPS TO CONTROL ANXIETY

LIMIT ALCOHOL AND CAFFEINE

CAN AGGRAVATE ANXIETY AND PANIC ATTACKS



POSITIVE ATTITUDE

REPLACE NEGATIVE THOUGHTS WITH POSITIVE ONES



EXERCISE DAILY

HELP YOU TO FEEL GOOD AND MAINTAIN YOUR HEALTH



TAKE A TIME TO RELAX

PRACTICE YOGA, LISTEN MUSIC OR READ A BOOK



GET ENOUGH SLEEP

YOUR BODY NEED ADDITIONAL SLEEP AND REST



PROFFESIONAL HELP

DON'T BE WORRIED TO TALK TO A PHYSICIAN OR THERAPIST



Antidepressants for Anxiety Disorders

SSRIs

- **Zoloft**
- **Lexapro**
- Paxil
- Celexa
- Prozac
- Luvox

SNRIs

- Effexor XR
- **Cymbalta**
- Viibryd
- Pristiq

How to Choose the Right Medication?

Safety

- Drug-drug interactions
- Age
- Pregnant? Breast-feeding?

Efficacy

- Previously prescribed medications?
- Any family members prescribed antidepressants with good effect?

Tolerability

- Consider side effect profile and what patient might tolerate best

Availability

- Consider cost for patient

Common Questions and Concerns

How does this medication work?

What are the side effects?

- Notable side effects, **transient**:
 - GI issues, insomnia or sedation, headaches, dizziness, tremors; typically remit within 1-2 weeks.
- Notable side effects, **persistent**:
 - Sexual dysfunction, sweating; persistent
- **Serious side effects**:
 - Serotonin Syndrome, GI bleeding

Will I become addicted?

- No, not habit forming



Zoloft (sertraline)

Method of action: SSRI

FDA approved: Panic Disorder, PTSD, Social Anxiety Disorder, OCD; commonly used for GAD

Dose Range

- 50-200mg daily; start with 25mg daily for one-two week to minimize AE when starting on the medication then increase to 50mg daily

Advantages:

- Safest choice for pregnancy and breast-feeding
- Safe for patients with recent MI or angina



Zoloft (sertraline): Side Effects

Notable side effects

- GI issues, insomnia or sedation, headaches, dizziness, tremors; typically remit within 1-2 weeks
- Sexual dysfunction, sweating; persistent

Disadvantages

- Longer dose titration
- More GI side effects (diarrhea) when starting Zoloft as compared to other SSRIs

Lexapro (escitalopram)

Method of action: SSRI

FDA approved: GAD. Commonly used for all anxiety disorders.

Dose Range

- 10-20mg daily; Start with 5mg daily for one-two weeks to minimize AE then titrate up.
- For geriatric patient population, dose should not exceed 10mg daily

Advantages:

- SSRI with least interaction with CYP450 system
 - Few drug-drug interactions; good for geriatric patient population
- Shorter titration to max therapeutic dose
- May be among best tolerated antidepressants



Lexapro (escitalopram): Side Effects

Common side effects:

- GI issues, insomnia or sedation, headaches, dizziness, tremors; remit within 1-2 weeks.
- Sexual dysfunction **(may be less than other SSRIs)**

Disadvantages:

- Sedating
- Possible increased risk of QTc prolongation

Celexa (citalopram)

Method of action: SSRI

FDA approved: only for depression

Dose Range:

- 20-40mg daily
- Geriatric patients: dose should not exceed 20mg daily

Advantages:

- Generally well-tolerated
- May have less sexual dysfunction than some other SSRIs

Celexa (citalopram): Side Effects

Notable side effects:

- GI issues, insomnia or sedation, headaches, dizziness, tremors; typically remit
- Sexual dysfunction
- Do NOT dose > 40mg; **increased risk of QTc prolongation**

Disadvantages:

- QTc prolongation
- Mild anti-histamine properties; can be sedating

Paxil (paroxetine)

Method of action: SSRI

FDA approved: GAD, PD, PTSD, SAD, OCD

Dose Range

–10-60mg; should be taken at night due to sedating effect.

Advantages:

- Some patients may experience relief of insomnia and/or anxiety quickly after initiation of treatment
- Available in CR formulation

Paxil (paroxetine): Side Effects

Common side effects:

- Sedation, weight gain. Can also cause **dry mouth, constipation**.
- GI issues, headaches, dizziness, tremors, sweating
- **Sexual dysfunction > than other SSRIs**

Disadvantages:

- **Category D in pregnancy;** increased risk of cardiovascular malformations
- Weight gain > than other SSRIs.
- Potent CYP450 2D6 inhibitor; drug-drug interactions
- More discontinuation effects than other SSRIs

Prozac (fluoxetine)

Method of action: SSRI

FDA approved: Panic Disorder, OCD

Dose Range: 20-80mg daily (usually best tolerated when taken in the morning)

Advantages:

- Long half life – can be prescribed as once per week dosing; good for patients who have issues with compliance.
- OCD
- Bulimia



Prozac (fluoxetine): Side Effects

Common side effects:

- GI issues, insomnia or sedation, headaches, dizziness, tremors; typically remit within 1-2 weeks
- Sexual dysfunction

Disadvantages:

- More “activating” than other SSRIs and can cause worsening anxiety when initiated.
- Interaction with CYP450 System; drug-drug interactions

Luvox (fluvoxamine)

Method of action: SSRI

FDA approved: OCD, SAD

Dose Range: 100-300mg; often given QHS due to sedation

Advantages:

- Early relief of insomnia and/or anxiety after initiation
- OCD
- Less weight gain

Luvox (fluvoxamine): Side Effects

Common side effects:

- GI issues, insomnia or sedation, headaches, dizziness, tremors; remit within 1-2 weeks.
- Sexual dysfunction

Disadvantages:

- Longer dose titration; may require BID dosing
- > GI side effects
- Potent inhibitor - CYP1A2 + CYP2C19. Moderate inhibitor of CYP2C9, CYP2D6, + CYP3A4; drug-drug interactions!

Cymbalta (duloxetine)

Method of action: SNRI

FDA approved: GAD

Dose Range

- 30-60mg daily

Advantages:

- Fibromyalgia
- Neuropathic pain
- Chronic musculoskeletal pain



Cymbalta (duloxetine): Side Effects

Notable Side Effects:

- Nausea, diarrhea, decreased appetite, dry mouth, constipation (dose dependent)
- Sexual dysfunction, sweating

Disadvantages:

- Can increase BP (less so than Effexor)
- Can cause urinary retention

Effexor (Venlafaxine)

Method of action: SNRI

FDA approved: GAD, SAD, PD

Dose Range:

- Extended Release: 150-225mg daily; less side effects with extended release formulation.

Advantages:

- Minimal drug-drug interactions
- ADHD

Effexor (Venlafaxine): Side Effects

Notable side effects:

- Headache, nervousness, insomnia, sedation, nausea, diarrhea, decreased appetite; typically remit
- Sexual dysfunction, sweating; persistent

Disadvantages:

- **Can increase BP (dose dependent)**
- Can be more activating than SSRIs
- Can cause more nausea and GI side effects on initiation than SSRIs
- Shorter half life (5 hours): more discontinuation effects when tapering off medication

Geriatric Patient Population



- Start LOW and go SLOW.
- SSRIs > SNRIs.
- Consider drug-drug interactions:
 - Antidepressants LEAST likely to interact with CYP450 system:
Lexapro
- QTc prolongation
 - Lexapro: do not dose > 10mg daily
 - Celexa: do not dose > 20mg daily
- SIADH; Hyponatremia
- Osteoporosis

Buspar (buspirone)

Method of action: partial serotonin agonist

- Can take up to 3-4 weeks to be effective

Dose Range

- 15-30mg BID; if too sedating, can give full dose at bedtime.

Advantages:

- No sexual side effects
- Less weight gain
- D/C well tolerated

*FDA approved for Generalized Anxiety Disorder.

*Can also be used to AUGMENT SSRIs or SNRIs for better therapeutic effect

Buspar (buspirone):

Notable Side effects

- Dizziness, headache, nervousness, sedation, nausea, restlessness; typically remit

Disadvantages:

- Partial agonist; can be less effective than SSRIs/SNRIS
- Delayed onset of action

Checking In with Our Patient



Do I have to be on this medication forever?

- Recommendation is one year

Will it be hard to come off the medication?

- Taper slowly to minimize discontinuation effects
- Monitor for recurrence of symptomatology – anxiety and depression

Can I also take my previously prescribed Xanax?

Adjunct: Benzodiazepines

Advantages

- Effective and have rapid onset

Notable Side Effects

- Sedation, fatigue, dizziness, ataxia, slurred speech, weakness, forgetfulness, confusion

Serious Side Effect

- Respiratory depression especially when taken with CNS depressants in overdose

Disadvantages

- Sedating, rebound anxiety, addiction potential

Geriatric patient population

- Increased risk for falls + fractures
- Paradoxical disinhibitory effect



Adjunct: Benzodiazepines

Valium (diazepam)

- Long half life; 20-100 hours

Klonopin (clonazepam)

- 18-50 hours

Ativan (lorazepam)

- 10-20 hours

Xanax (alprazolam)

- 6-12 hours

Adjunct: Neurontin (gabapentin)

Method of action: Voltage gated calcium channel blocker

FDA approved: None; use is off-label

Dose range: 300-1800mg daily (in 3 divided doses); Can also be used on a PRN basis 100-600mg

Advantages:

- Neuropathic pain
- Mild side effect profile + few drug-drug interactions
- Can be utilized for sleep

Disadvantages:

- Side Effects: Sedation, ataxia, tremor, GI issues



Adjunct: Atarax (hydroxyzine)

Method of action: Antihistamine

FDA approved: Anxiety

Dose range: 25-100mg up to 4x per day

Side Effects: Dry mouth, sedation, tremor

Advantages

- Sleep
- No abuse, dependence, withdrawal

Disadvantages

- Elderly; Should be avoided in dementia patients

Adjunct: Beta-Blockers

Atenolol: selective B-1 blocker

- Dose range: 25-50mg daily

Propranolol: non-selective b-blocker

- Dose range: 10-40mg up to 3x per day

Side effects

- Bradycardia, hypotension, fatigue, dizziness, vertigo, sexual dysfunction

Advantages

- Targets autonomic hyperactivity

Disadvantages

- Propranolol: Crosses blood brain barrier, may worsen depression
- Propranolol: Contraindicated in patients with asthma and severe COPD; can inhibit bronchodilation
- Certain SSRIs can increase levels of b-blockers due to 2D6 inhibition (Prozac)

Sleep Issues

PRN Atarax

- 25-100mg

PRN Trazodone

- 25-100mg

PRN Gabapentin

- 100-300mg

Prazosin for PTSD-related nightmares

- 1-15mg QHS; titrate dose up from 1mg by 1-2mg q7days.



Take Away Points

Rule out organic etiology

Screen for psychiatric co-morbidities

First line agents: SSRIs, SNRIs, Buspar

- Zoloft: Well-tolerated and effective
- Lexapro: Geriatric patients or patients on complex medication regimens
- Cymbalta: Patients with chronic pain, fibromyalgia, migraines

Adjuncts: Short-term to mitigate anxiety when starting on first line agents or long-term as augmenting agents

Sleep: PRN Trazodone, Atarax, Gabapentin

Length of treatment: One year then taper and monitor for recurrence



Questions?