

Prescribing Medications for Anxiety and Depression (without getting anxious and depressed)

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Disclosures

- None

Learning Objectives

- At the end of this session you will be able to:
 - Use first and second-line treatments for depression and anxiety, including medications for augmentation of partially effective meds.
 - Manage common side effects of medications for depression and anxiety.
 - Develop a differential diagnosis for reasons why treatments are not working as expected for anxiety and depression.



Psychopharmacology ATTACK!

- Lots of info in next 30 minutes!
- We will process more in the breakout session!



Session Structure

- First line treatments for anxiety and depression (15 minutes)
- Augmenting/second line treatments for anxiety and depression (10 minutes)
- Why is my patient not getting better? (5 minutes)

First Line Treatments for Depression and Anxiety



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- Mild-to-Moderate
 - Based on symptoms or PHQ-9/GAD-7 Score
 - PHQ-9 under 10 for Mild, under 20 for Moderate (15-19 Mod-Severe)
 - GAD-7 under 10 for Mild, under 15 for Moderate
 - Cognitive Behavioral Therapy is a good option
 - Medications often are not required for MILD anxiety or depression
- Moderate-to-Severe Medications:
 - SSRIs first line medication treatment
 - Try one at a good dose, give it at least 4-6 weeks
 - Partial response: increase dose and/or Augment
 - No response: go to 2nd SSRI

<https://aims.uw.edu/sites/default/files/Exampleprovidertool.pdf>

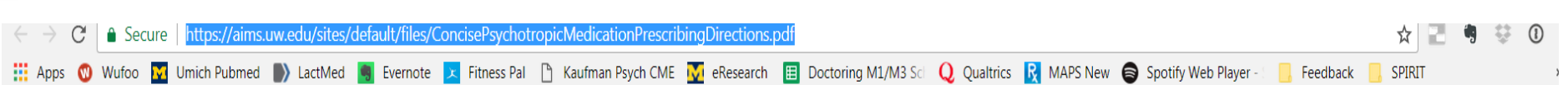
Spitzer RL, Kroenke K, Williams JB, Lowe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med. 2006; 166:1092-1097.

Anxiety and Depression First Line Treatment

- KEY RESOURCE:
 - University of Washington AIMS Center
 - <https://aims.uw.edu/sites/default/files/ConcisePsychotropicMedicationPrescribingDirections.pdf>
- Treat to Target!
 - Value of care management (collaborative care)
 - What is remission?
 - Many use PHQ9<5 for depression as remission.
 - Antidepressant that is partially effective (>25% but <75% reduction on PHQ9/GAD7 score), consider increasing dose or augmenting with another medication.
 - Antidepressant that has not been effective (<25% reduction on PHQ9/GAD7 score) after an adequate dose/time (usually 4-8 weeks), consider changing antidepressants.
 - Ask the patient



AIMS Primary Care Prescribing Information



AIMS CENTER

UNIVERSITY of WASHINGTON
Psychiatry & Behavioral Sciences

BRIEF MEDICATION PRESCRIBING DIRECTIONS

50 mg qday. **Max:** 200 mg qday. **Discontinuation:** Taper slowly to minimize withdrawal symptoms. **MONITORING:** Weight. Consider posttreatment BMP to rule out hyponatremia in older adults. **GENERAL INFORMATION: Mechanism of Action:** Selective serotonin reuptake inhibitor. **FDA Indications:** MDD, OCD, panic disorder, PTSD, social phobia, premenstrual dysphonic disorder. **Off-Label Indications:** Other anxiety **Pharmacokinetics:** $T_{1/2} = 26\text{hr}$. **Common Side effects:** Nausea (25%), insomnia (21%), diarrhea (20%), sexual side effects (14%), sweating (14%), dizziness (12%), fatigue (12%), somnolence (12%), dry mouth (7%), tremors (8%). **Warnings and Precautions:** Suicidality, manic switch, serotonin symptoms or NMS, abnormal bleeding, hyponatremia, discontinuation syndrome. **Contraindications:** Known hypersensitivity reaction to the product. Use of MAOI or within 14 days of stopping a MAOI or pimozide. **Black Box Warning:** Increased SI in patients < 25 y/o. **Pregnancy:** Category C. **Breastfeeding:** Safest, Use caution. **Significant drug-drug interactions:** Minimal; Check all drug-drug interactions **Generic available:** Yes, Moderate price

Increase to 150 mg bid if tolerated. **Wellbutrin-XL:** **Week 1:** Baseline blood pressure. Start: XL-150 mg qAM. **Week 2:** Increase to 300 mg qAM if tolerated. **Note:** Aplenzin has a different titration. **Typical target:** 300-450 mg/day. **Max:** 400-450 mg qday. **MONITORING:** Blood pressure. Consider posttreatment BMP to rule out hyponatremia in older adults. **GENERAL INFORMATION:** Wellbutrin has a novel mechanism of action (weak dopamine and NE reuptake inhibitor; stimulant like effect). **FDA Indications:** Depression, season affective disorder (prophylaxis), smoking cessation. **Off-Label Indications:** Second line RX for ADHD. **Pharmacokinetics:** $T_{1/2} = 21\text{hr}$. **Common Side effects:** Dry mouth (24%), tremor (21%), weight loss (19%), nausea (18%), insomnia (16%), dizziness (11%), abdominal pain (9%), agitation (9%), anxiety (6%), palpitation (6%), tinnitus (6%), myalgia (6%), excessive sweating (5%). **Warnings and Precautions:** Hypertension, altered appetite and weight, history of TBI, suicidality, agitation or

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- Higher than FDA-recommended may be needed
 - Maximum benefit up to 250 mg equivalents of imipramine in metanalysis¹
 - 250 mg of imipramine=300 mg of sertraline=250mg of fluvoxamine=50 mg of paroxetine or fluoxetine=83.25 mg of citalopram=41.75 mg of escitalopram
- Anxiety disorders – start really low dose
- Blunting of affect at higher doses
- Bruising (platelets have 5HT receptors!), hyponatremia in elderly
- STAR-D trial showed maximum benefit after TWELVE weeks!
- Celexa over 40 mg (20 mg for geriatrics)
 - VA demonstrated worse outcomes when celexa doses lowered²
 - UM study showing higher healthcare utilization and higher sedatives when dose changed³
 - Baseline EKG if going over these doses and recheck EKG, keep K/Mg stable

1. Jakubovski E et al. Systematic review and meta-analysis; Dose-response relationship of Selective Serotonin Reuptake Inhibitors in Major Depressive Disorder. *Am J Psych.* 2016 Feb 1; 173(2):174-183

2.. Rector et al. Outcomes of citalopram dosage risk mitigation in a veteran population. *Am J Psychiatry.* 2016 Sept 1;173(9):896-902.

3. Gerlach et al. Unintended Consequences of Adjusting Citalopram Prescriptions Following the 2011 FDA Warning. [Am J Geriatr Psychiatry.](#) 2017 Apr;25(4):407-414.

- Co-morbid pain and anxiety/depression – consider 1st line
- Cymbalta to 120 mg
 - Better outcomes with pain at 120 mg¹
- Effexor to 300 mg in XR, 375 in IR
 - Effexor does not hit NE until 150 mg and above (SSRI like before 150mg)
- Same time course as SSRIs
- May increase BP
- May be more effective for severe depression²

1. Ney JP et al. (2013), Comparative Efficacy of Oral Pharmaceuticals for the Treatment of Chronic Peripheral Neuropathic Pain: Meta-Analysis and Indirect Treatment Comparisons. *Pain Med* 2013;14: 706–719.
2. Bradley AJ, Lenox-Smith AJ. Does adding noradrenaline reuptake inhibition to selective serotonin reuptake inhibition improve efficacy in patients with depression? A systematic review of meta-analyses and large randomized pragmatic trials. *J Psychopharmacol.* 2013 Aug;27(8):740-58.

Mirtazapine

- Sedating
 - More sedating at lower dose (higher dose NE kicks in)
- Increased appetite
 - Weight gain will not be subtle unlike atypical antipsychotics

Buspirone

- Can augment SSRI for depression and anxiety
- If it works, it works!
- Does not work well for people who have BDZ exposure already¹

1. Chessick CA et al. Azapirones for generalized anxiety disorder. Cochrane Database of Systematic Reviews 2006, Issue 3

Trazodone

- Approved for depression (higher doses)
- Mostly used for sleep
- SE: sedation, orthostatic hypotension/dizziness, priapism
- PEARL: 150 mg often scored in half one side, in thirds on other side (makes flexible dosing easy)



trazodone tablet
150 mg



trazodone tablet
150 mg



trazodone tablet
150 mg



- Vilazodone
 - SSRI and 5HT1A partial agonist (Like Buspar and SSRI in one)
 - GI SE most common, headache
- Levomilnacipran
 - SNRI (enantiomer of milnacipran which is approved for fibromyalgia)
 - More heavy on norepinephrine, so more HR/BP/urinary hesitancy issues
- Vortioxetine
 - Trade name changed from Brintellix to Trintellix
 - SSRI, 5HT1A full agonist, 5HT3 antagonist
 - Increases dopamine, NE, Ach in prefrontal cortex
 - Could this be good for improved cognition in depression? 3 RCTs say so¹
 - Studied in geriatric patients and shows effect

1. McIntyre RS et al. The effects of vortioxetine on cognitive function in patients with major depressive disorder: A meta-analysis of three randomized controlled trials. *Int J Neuropsychopharmacol.* 2016 Aug 24. pii:pyw055.

Bupropion

- Great for low energy, smoking cessation, low concentration
- Off-label use for ADHD
- Does NOT help out generalized anxiety and may make anxiety worse
- THREE FORMULATIONS:
 - Immediate release (TID)
 - Sustained release (SR – BID)
 - Extended release (XR – qday)
 - When dosing TID or BID, do not dose too close to bed
 - BID= qam and qdinner (9AM, 5 PM)

Tricyclic Antidepressants

- Effective – dirtier drugs re: receptor affinities
- More SE than SSRI and SNRI
 - Dry mouth, sedation, constipation, urinary retention, blurry vision, orthostasis
- Lethal in overdose (as few as 10 day supply can be lethal)
- Benefit with chronic pain
- Nortriptyline often tolerated better than amitriptyline
- Lower doses for pain; higher doses for depression
- EKG at baseline and annually if over 65 yo, cardiac diseases
- Can test blood levels!



- We are in Ann Arbor after all!
- Carlat Report Psychiatry July/August 2013 still one of best resources
- Depression effective and safe: Rhodiola rosea (300-900 mg), SAMe (200-800 mg BID)
 - St. John's Wort as well, but interacts with SSRI/serotonin agents
 - 5-HTP may help but TID-QID
 - Methylfolate may help depression as adjunct
 - Fatty acids possible; 1-2 grams
- Kava helps anxiety but not safe (hepatotoxic)
- Valerian may help insomnia but poor studies

Augmenting Agents for Depression and Anxiety



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Benzodiazepines

- Lipophilic- diazepam, alprazolam
- Hydrophilic – lorazepam, clonazepam
- Oxazepam, temazepam, lorazepam safer in liver disease
- Risk Assessment for BDZ Abuse:
 - Higher risk if h/o alcohol use DO, FH of alcohol use DO
 - Risk of accidental OD with Opioids
- Red Flags
 - Unwilling to try other treatments
- Urine GCS will catch alcohol metabolites!
- BDZ in depression may help patient stick with other meds short term¹
 - Lower risk if using PRN; Some patients use as back-up coping mechanism
- UK NICE guidelines recommend 2-4 week treatment, not for mild GAD

1. Furukawa TA et al. Antidepressant plus benzodiazepines for major Depression. Cochrane Database of Systematic Reviews 2001, Issue 3.

- FDA approved for augmenting depression (as of 7/2017):
 - Aripiprazole
 - Brexpiprazole
 - Olanzapine
 - Quetiapine XR
- None FDA approved for augmenting anxiety
 - Off-label use for quetiapine doses from qhs to even TID dosing
 - May be similar to SSRI effect BUT HIGHER SE PROFILE!

Atypical Antipsychotic Pearls

- High Metabolic Risk: Olanzapine, Clozapine
- Medium Metabolic Risk: Quetiapine, risperidone, asenapine, iloperidone
- Low Metabolic Risk: Aripiprazole, Brexpiprazole
- Lowest Metabolic Risk: Ziprasidone, Lurasidone
- Ziprasidone and Lurasidone need to be taken with food (300 cal)
- Augmenting doses are on lower end of spectrum; bipolar doses mid-range; schizophrenia doses highest



Atypical Antipsychotic Pearls

- Most Sedating: Quetiapine, Olanzapine, Clozapine
- Don't forget Akathesia (looking at you aripiprazole)
 - Reduce dose, add low dose BDZ or propranolol, switch agents
- METABOLIC MONITORING FOR ALL

Atypical Antipsychotic Metabolic Monitoring

Diabetes Care February 2004 vol. 27 no. 2 596-601

Consensus Development Conference on Antipsychotic Drugs and Obesity and Diabetes

Table 3—

Monitoring protocol for patients on SGAs*

	Baseline	4 weeks	8 weeks	12 weeks	Quarterly	Annually	Every 5 years
Personal/family history	X					X	
Weight (BMI)	X	X	X	X	X		
Waist circumference	X					X	
Blood pressure	X			X		X	
Fasting plasma glucose	X			X		X	
Fasting lipid profile	X			X			X

• *

↪* More frequent assessments may be warranted based on clinical status

Other Augmenting Agents

- Can mix and match MOST groups of antidepressants
 - SSRI/SNRI/TCA together to not make much sense (maybe low dose TCA)
 - We didn't discuss MAOIs – do NOT mix serotonin meds with MAOIs!
- Mirtazapine for depression/anxiety
- Bupropion for depression (can worsen anxiety)
- Buspirone for depression/anxiety
- Low dose stimulants for geriatric depression¹
 - 5-10 mg of methylphenidate; up to 40 mg
- Gabapentin for Anxiety (off label use)
- Hydroxyzine for PRN use anxiety
- Lithium for unipolar depression (per STAR*D)
- Cytomel (T3) for depression (per STAR*D)
- STAR-D: <https://www.nimh.nih.gov/funding/clinical-research/practical/stard/allmedicationlevels.shtml>

1. Lavretsky H et al. Citalopram, methylphenidate, or their combination in geriatric depression: A randomized, double-blind, placebo-controlled trial. Am J Psychiatry 2015 Jun;172(6):561-9

Why is My Patient Not Getting Better?



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Reasons for Treatment Failure

- Is the dose high enough?
- Has the treatment been long enough?
 - Instant gratification does not work with SSRI/SNRIs
- Do you have the correct diagnosis?
 - Could this be bipolar depression? Hypomania often undiagnosed and unrecognized. Bipolar depression notoriously difficult to treat.
 - What are the refractory symptoms?
 - Attention? Irritability? Consider co-morbid ADHD
 - Irritability? Mood Swings? “0 to 60 in seconds”? Consider Personality DO
 - Trauma? Irritability? Avoidances? Nightmares? Consider PTSD

Reasons for Treatment Failure

- Chronic Pain
- Is there a medical cause?
 - Thyroid? Brain tumor?
 - Revisit your review of systems
- Are they taking their meds?
- Are meds affordable? (Donut Hole, loss of insurance)
- Culture – is mental illness accepted?
 - LARGE placebo effect in psychiatric medications
 - If you undersell meds, they will not work as well



Tools to Help

- PHQ-9 (depression)
- GAD-7 (anxiety)
- Mood Disorder Questionnaire (bipolar– not good universal screen)
- CIDI (Structured bipolar screening)
- PC-PTSD (Primary Care PTSD screen)
- PCL-5 (PTSD symptom scale – LONG)
- Adult ADHD Self-Report Scale
- AUDIT and AUDIT-C (alcohol screening)
- DAST-10 and DAST-20 (Drug abuse screening)
- <https://www.integration.samhsa.gov/clinical-practice/screening-tools>



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- <https://www.integration.samhsa.gov/clinical-practice/screening-tools>



Thank you!



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