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# Mood and Anxiety Disorders

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# Disclosures



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Neither I nor my spouse/partner has a relevant financial relationship with a commercial interest to disclose.



# Agenda

- Epidemiology
- Clinical Relationships
- Treatment Guidelines
- Medication Examples



# Substance Use Disorders Increase Likelihood of Mood Disorders

Odds Ratios (95% CI) for having a mood disorder given a SUD vs not having that SUD.  
OR = 1 means no enrichment in mood disorder given the SUD.

	Any Substance Use Disorder	Any Alcohol Use Disorder	Any Drug Use Disorder
Any mood disorder			
Major Depression			
Dysthymia			
Mania			
Hypomania			

Grant BF, Stinson FS, Dawson DA, et al. Prevalence and co-occurrence of substance use disorders and independent mood and anxiety disorders: Results from the national epidemiologic survey on alcohol and related conditions. *Archives of General Psychiatry*. 2004;61(8):807-816.  
<https://doi.org/10.1001/archpsyc.61.8.807>



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Any mood disorder	2.8 (2.5-3.1)	2.6 (2.3-2.9)	4.9 (4.0-5.9)
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<b>Major Depression</b>	2.5 (2.2-2.9)	2.3 (2.0-2.6)	4.2 (3.4-5.2)
<b>Dysthymia</b>	2.2 (1.7-2.7)	1.7 (1.3-2.2)	5.3 (3.8-7.3)
<b>Mania</b>	3.9 (3.1-4.8)	3.5 (2.8-4.4)	7.4 (5.4-10.1)
<b>Hypomania</b>	3.6 (2.8-4.6)	3.5 (2.7-4.5)	4.1 (2.8-5.9)

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# Mood Disorders Enriched in Those Seeking SUD Care

Prevalence of having a mood disorder among those with a SUD, for all respondents vs those receiving care

	Alcohol UD	AUD seeking tx	Drug UD	DUD seeking tx
<b>Any mood disorder</b>	18.85%	40.69%	31.80%	60.31%
<b>Major Depression</b>	13.70%	32.75%	23.33%	44.26%
<b>Dysthymia</b>	2.93%	11.01%	8.37%	25.91%
<b>Mania</b>	4.66%	12.56%	9.99%	20.39%
<b>Hypomania</b>	3.30%	3.07%	4.30%	2.48%

Grant BF, Stinson FS, Dawson DA, et al. Prevalence and co-occurrence of substance use disorders and independent mood and anxiety disorders: Results from the national epidemiologic survey on alcohol and related conditions. *Archives of General Psychiatry*. 2004;61(8):807-816.  
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# Anxiety and SUDs

Anxiety Disorder	Alcohol Use Disorders <sup>b,c</sup>		Drug Use Disorders <sup>b,c</sup>	
	Alcohol Abuse	Alcohol Dependence	Drug Abuse	Drug Dependence
Specific Phobia	<b>1.2</b>	<b>2.7</b>	<b>1.6</b>	<b>3.8</b>
Social Phobia	1.2	<b>2.7</b>	1.7	<b>4.5</b>
Generalized Anxiety Disorder	1.1	<b>2.8</b>	2.0	<b>9.5</b>
Panic Disorder w/ Agoraphobia	1.0	<b>3.5</b>	<b>3.2</b>	<b>9.2</b>
Panic Disorder w/o Agoraphobia	1.2	<b>2.9</b>	1.4	<b>6.4</b>
Any Anxiety Disorder	<b>1.2</b>	<b>3.0</b>	<b>1.6</b>	<b>6.0</b>

<sup>a</sup> Results from analyses of the NESARC<sup>4,5</sup>

<sup>b</sup> Adjusted for demographic characteristics

<sup>c</sup> Significant ORs (99% confidence intervals) are bolded

Smith, J. P., & Book, S. W. (2008). Anxiety and Substance Use Disorders: A Review. *The Psychiatric Times*, 25(10), 19.

Compton, W. M., Thomas, Y. F., Stinson, F. S., & Grant, B. F. (2007). Prevalence, Correlates, Disability, and Comorbidity of DSM-IV Drug Abuse and Dependence in the United States: Results From the National Epidemiologic Survey on Alcohol and Related Conditions. *Archives of General Psychiatry*, 64(5), 566–576. <https://doi.org/10.1001/archpsyc.64.5.566>

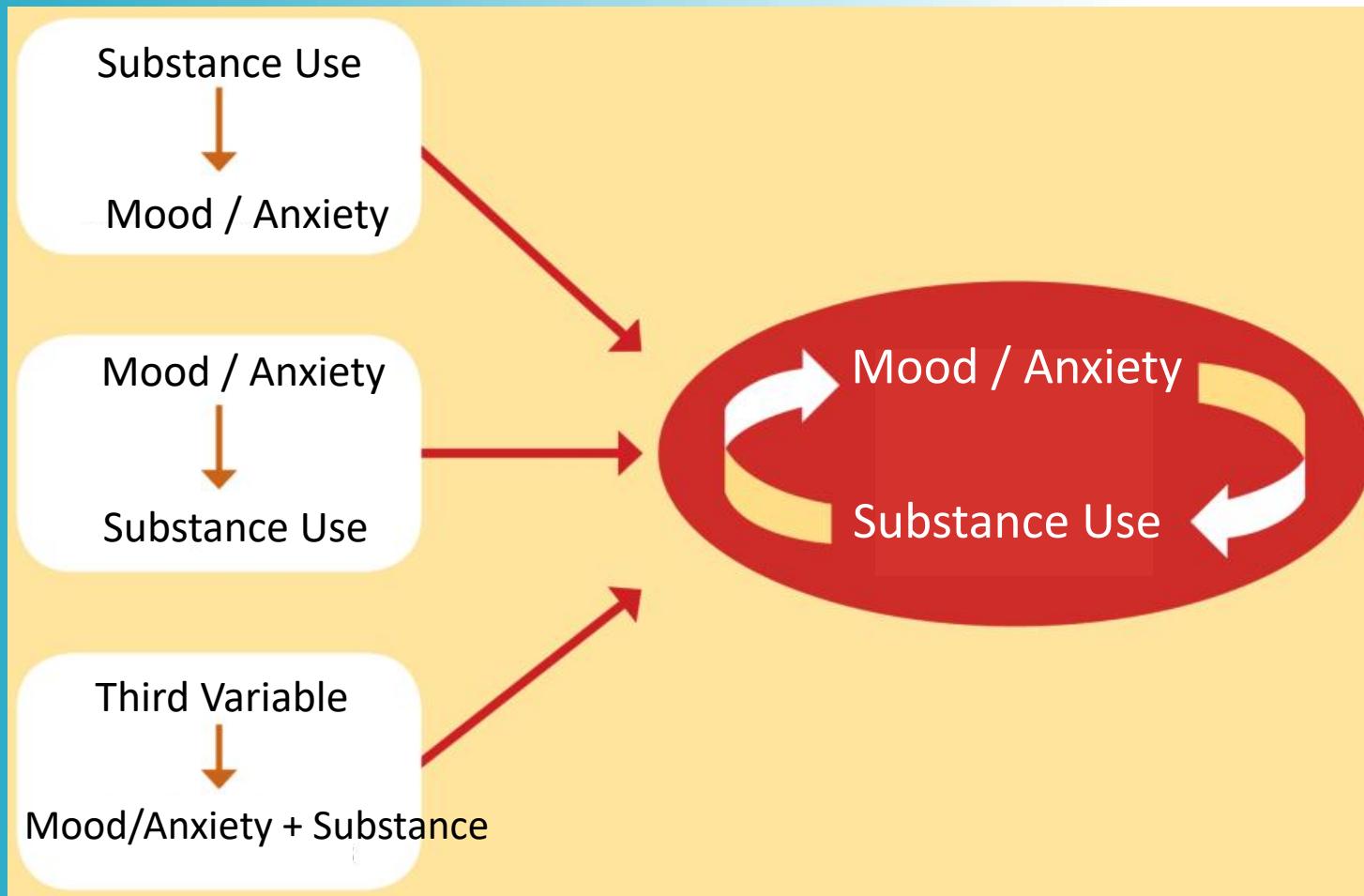


# Substance Use May Lurk Among Those Seeking Mental Health Care

- Systematic screeners: AUDIT-C, NIDA-1, TAPS
- Labs: Urine tox screens/Urine ethylglucuronide/Phosphatidylethanol (PETh)
- Attend to clues
  - Hx of substance use
  - Family history
  - Associated medical d/o's
  - Chronic pain
  - Multiple relationship problems
  - Multiple job changes
  - Legal issues

Litten R, Bradley A, Moss H, et al. Alcohol biomarkers in applied settings: Recent advances and future research opportunities. *Alcohol Clin Exp Res.* 2010;34:955-967. <https://doi.org/10.1111/j.1530-0277.2010.01170.x>

# Complicated Causality



# The Traditional Approach: Ruling Out Substance-Induced Mood Disorder



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- Approach
  - Withhold mood disorder treatment and help patient abstain
  - After 1 month abstinence, rule out SIMD. Evaluate and treat mood disorder
- Pure SIMD is not common!
  - NESARC: <1% of individuals w mood d/o had SIMD



# Not Treating Mood Disorder Increases Risk of Relapse

- Inpatient detox
  - MDD at admission: shorter time to first drink (38d vs 125d) and shorter time to relapse (41d vs 150d)
  - Discharging with antidepressants reduces risk of relapse (20% abstinent at 1 yr with AD, vs 0% abstinent at 130d without AD)

Greenfield SF, Weiss RD, Muenz LR, et al. The effect of depression on return to drinking: A prospective study. *Archives of General Psychiatry*. 1998;55(3):259-265. <https://doi.org/10.1001/archpsyc.55.3.259>

Hasin D, Liu X, Nunes E, et al. Effects of major depression on remission and relapse of substance dependence. *Archives of General Psychiatry*. 2002;59(4):375-380. <https://doi.org/10.1001/archpsyc.59.4.375>



# Mood and Anxiety & SUD Treatment Guidelines

- None for populations with SUDs
- There exist studies examining treatments for mood disorders and SUDS.
- Few studies in patients with anxiety and SUDs
  - Fewer still re: pharmacotherapy

Watkins, K. E., Hunter, S. B., Burnam, M. A., Pincus, H. A., & Nicholson, G. (2005). Review of Treatment Recommendations for Persons With a Co-occurring Affective or Anxiety and Substance Use Disorder. *Psychiatric Services*, 56(8), 913–926. <https://doi.org/10.1176/appi.ps.56.8.913>



# Pharmacological Management

- Mirrors management for individual disorders.
- Considers using **treatment algorithms**
  - STAR\*D or STEP-BD trial
  - Psychopharmacology Algorithms Project: <https://psychopharm.mobi/>
  - CanMat Guidelines: <https://www.canmat.org/>

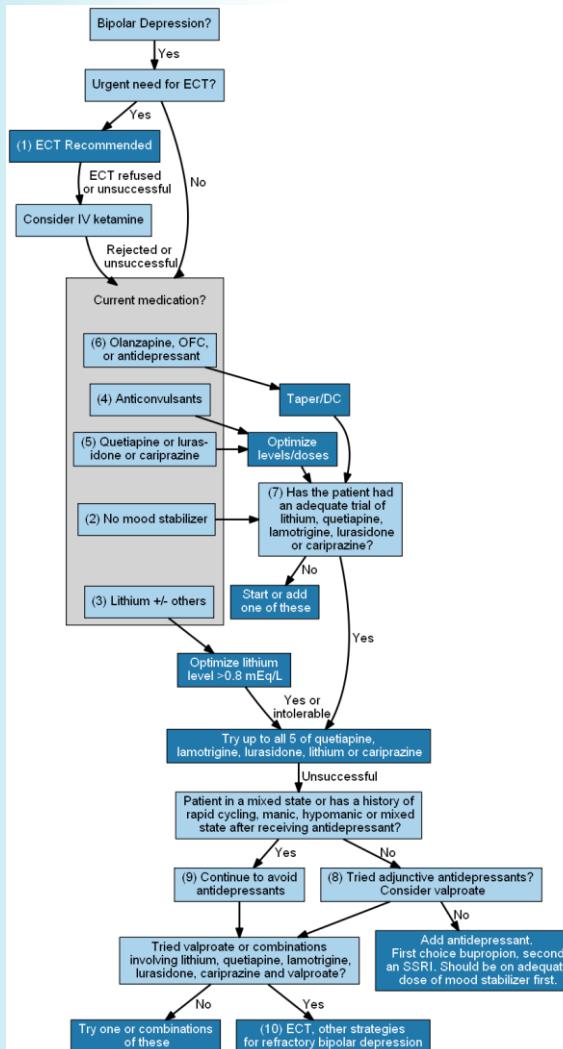
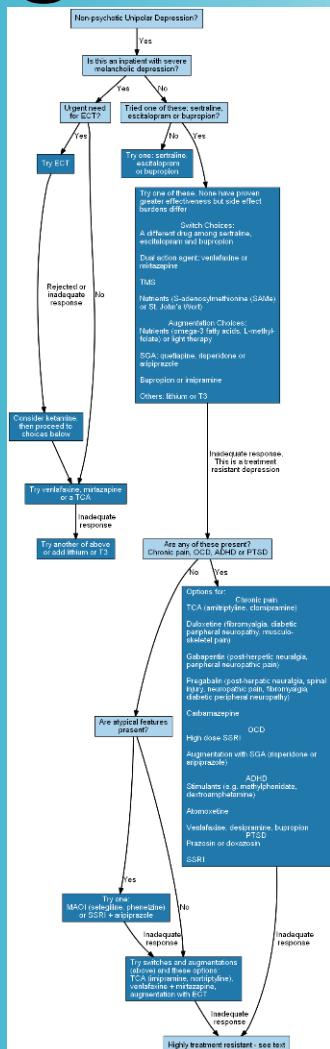
Warden D, Rush AJ, Trivedi MH, et al. The STAR\*D project results: A comprehensive review of findings. *Current Psychiatry Reports*. 2007;9(6):449-459. <https://doi.org/10.1007/s11920-007-0061-3>

Thase ME. STEP-BD and bipolar depression: What have we learned? *Current Psychiatry Reports* 2007;9(6):497-503. <https://doi.org/10.1007/s11920-007-0068-9>

Giakoumatis CI, & Osser D. The Psychopharmacology Algorithm Project at the Harvard South Shore Program: An update on Unipolar Nonpsychotic Depression. *Harvard Review of Psychiatry*. 2019;27(1):33-52. <https://doi.org/10.1097/HRP.0000000000000197>

Wang D, & Osser DN. The Psychopharmacology Algorithm Project at the Harvard South Shore Program: An update on bipolar depression. *Bipolar Disorders*. 2020;22(5):472-489. <https://doi.org/10.1111/bdi.12860>

# Pharmacological Management





# Anxiety Treatment Guidelines: For Non-SUD populations

American Academy of Family Medicine

## SORT: KEY RECOMMENDATIONS FOR PRACTICE

Clinical recommendation	Evidence rating	References
Physical activity is a cost-effective treatment for GAD and PD.	B	16, 17
Selective serotonin reuptake inhibitors are considered first-line therapy for GAD and PD.	B	19, 20, 22
To avoid relapse, medication should be continued for 12 months after symptoms improve before tapering.	C	11
When used in combination with antidepressants, benzodiazepines may speed recovery from anxiety-related symptoms but do not improve longer-term outcomes. Because benzodiazepines are associated with	B	11, 28-30

Psychotherapy can be as effective as medication for GAD and PD. Cognitive behavior therapy has the best level of evidence.

Successful treatment requires tailoring options to individuals and may often include a combination of modalities. C 11, 37, 42

GAD = generalized anxiety disorder; PD = panic disorder.

A = consistent, good-quality patient-oriented evidence; B = inconsistent or limited-quality patient-oriented evidence; C = consensus, disease-oriented evidence, usual practice, expert opinion, or case series. For information about the SORT evidence rating system, go to <http://www.aafp.org/afpsort>.

Locke, A. B., Kirst, N., & Shultz, C. G. (2015). Diagnosis and Management of Generalized Anxiety Disorder and Panic Disorder in Adults. *American Family Physician*, 91(9), 617–624.



# AAFP Medications for GAD/PD

## First line

Selective serotonin reuptake inhibitors

Escitalopram (Lexapro)

Fluoxetine (Prozac)

Fluvoxamine for PD

Paroxetine (Paxil)

Sertraline (Zoloft)

Serotonin-norepinephrine reuptake inhibitors

Duloxetine (Cymbalta) for GAD

Venlafaxine, extended release (Effexor XR)

Azapirone

Buspirone (Buspar) for GAD

## Second line

Tricyclic antidepressants

Amitriptyline†

Imipramine (Tofranil)‡

Nortriptyline (Pamelor)†

Antiepileptics

Pregabalin (Lyrica)† for GAD

Antipsychotics

Quetiapine (Seroquel)† for GAD

Hydroxyzine (Vistaril)

## Third line

Monoamine oxidase inhibitors§

Isocarboxazid (Marplan)†

Phenelzine (Nardil)†

Tranylcypromine (Parnate)†

## Augmentation

Benzodiazepines||

Alprazolam (Xanax)¶

Clonazepam (Klonopin)\*\*

Diazepam (Valium) for GAD

Lorazepam (Ativan)‡

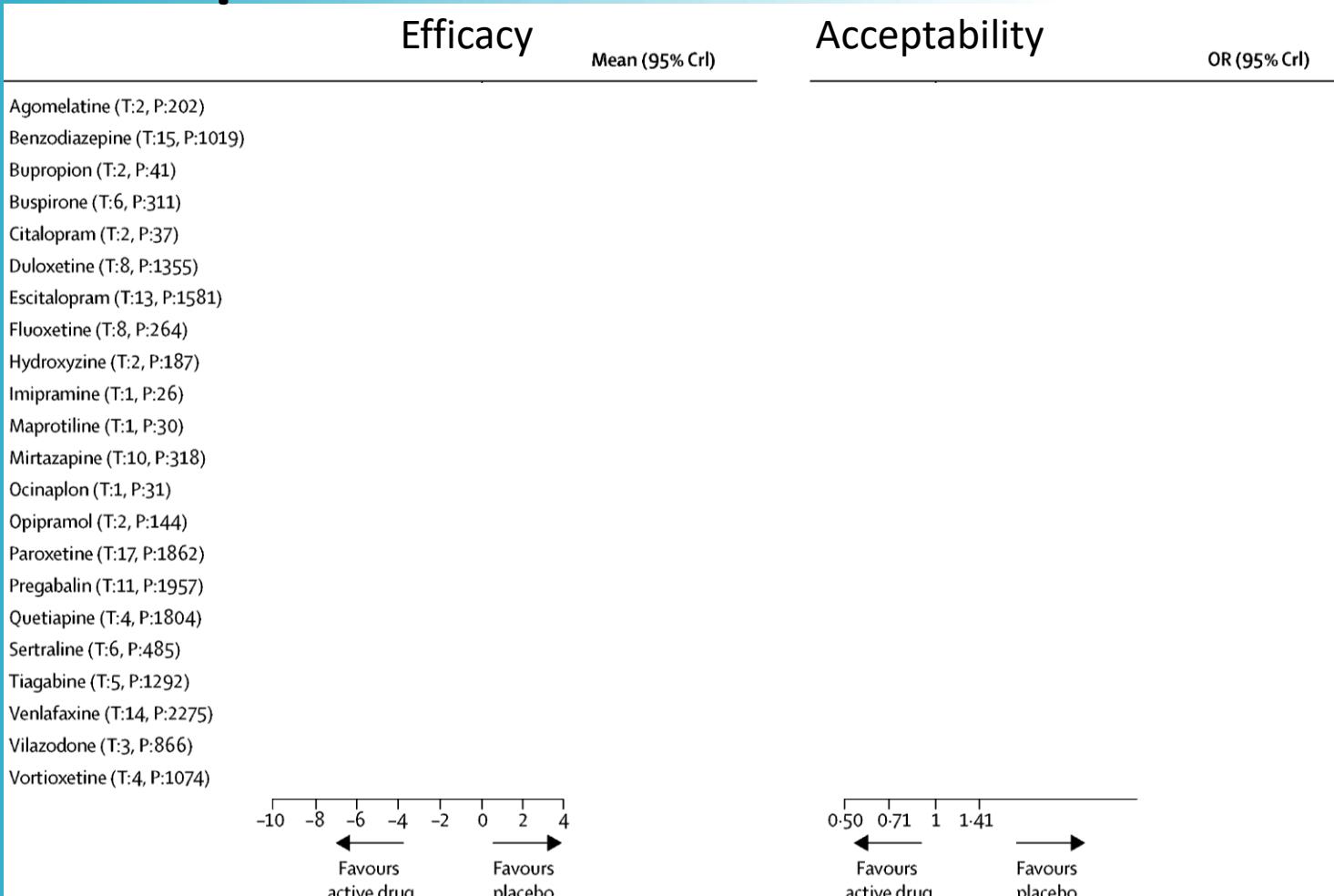
Locke, A. B., Kirst, N., & Shultz, C. G. (2015). Diagnosis and Management of Generalized Anxiety Disorder and Panic Disorder in Adults. *American Family Physician*, 91(9), 617–624.

# Efficacy and Acceptability of Medication Options



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# Combined Therapies

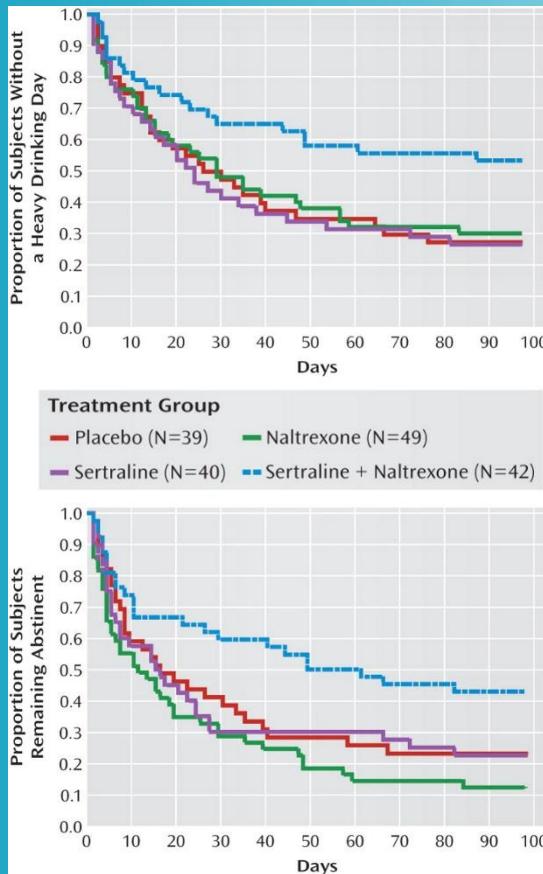
- Sertraline + CBT for relapse prevention and depression
  - Sertraline improved drinks/drinking day but not other drinking outcomes
  - Sertraline improved depression scores in women
- Integrated Group Therapy + pharmacotherapy
  - Reduced some Bipolar and SUD symptoms

Moak DH, Anton RF, Latham PK, et al. Sertraline and cognitive behavioral therapy for depressed alcoholics: Results of a placebo-controlled trial. *Journal of Clinical Psychopharmacology*. 2003;23(6):553-562. <https://doi.org/10.1097/01.jcp.0000095346.32154.41>

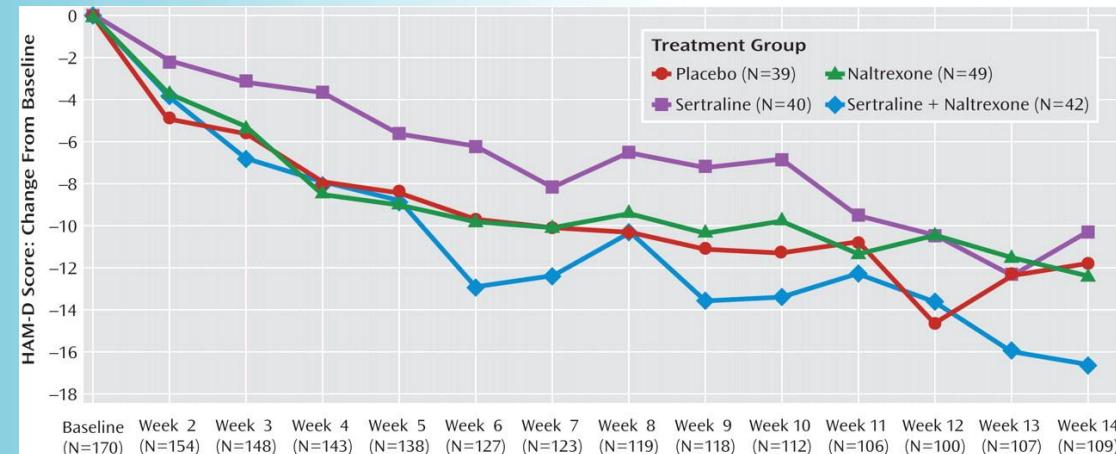
Weiss RD, Griffin ML, Jaffee WB, et al. A “community-friendly” version of Integrated Group Therapy for patients with bipolar disorder and substance dependence: A randomized controlled trial. *Drug and Alcohol Dependence*. 2009;104(3):212. <https://doi.org/10.1016/j.drugalcdep.2009.04.018>

# Synergistic Effect of Medications

Effects on Drinking

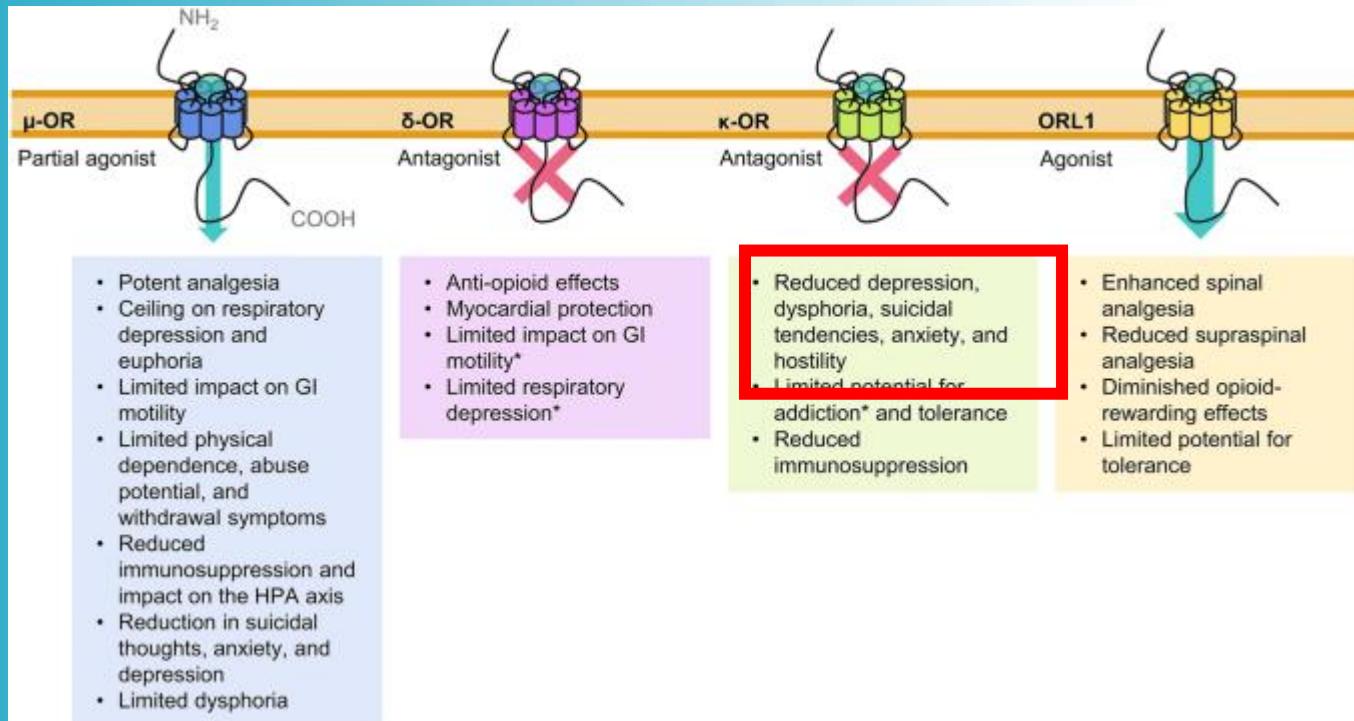


Effects on Depression



Pettinati HM, Oslin DW, Kampman KM, et al. A double-blind, placebo-controlled trial combining sertraline and naltrexone for treating co-occurring depression and alcohol dependence. *American Journal of Psychiatry*. 2010;167(6):668–675.  
<https://doi.org/10.1176/appi.ajp.2009.08060852>

# Buprenorphine: An “SUD Medication” That Impacts Mood



Serafini G, Adavastro G, Canepa G, et al. The Efficacy of Buprenorphine in Major Depression, Treatment-Resistant Depression and Suicidal Behavior: A Systematic Review. *International Journal of Molecular Sciences*. 2018;19(8):2410. doi:10.3390/ijms19082410



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# Take Home Points

- Mood disorders and Anxiety disorders are highly comorbid with SUD.
- Expect to treat both.
- There are few substance-specific guidelines so lean on guidelines for mood and anxiety disorders.