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The Challenges of Polysubstance Use: Treatment and Management of Alcohol and Opioid Use Disorder Comorbidity

Sarah Sharfstein Kawasaki, MD
Penn State Health
December 2, 2021

Housekeeping

- You will be muted automatically upon entry. Please keep your phone line muted for the duration of the webinar.
- Webinar is being recorded and will be archived for future viewing at www.pcssNOW.org within 2 weeks.
- Submit questions in the Q&A box at the bottom of your screen.

Today's Presenter

Sarah S. Kawasaki, MD
Director of Addictions Services,
Pennsylvania Psychiatric Institute (PPI)
Assistant Professor of Psychiatry and
Internal Medicine, Penn State Hershey
Medical Center

Disclosures

- **I have nothing to disclose.**

The content of this activity may include discussion of off label or investigative drug uses. The faculty is aware that it is their responsibility to disclose this information.

Target Audience

- The overarching goal of PCSS is to train healthcare professionals in evidence-based practices for the prevention and treatment of opioid use disorders, particularly in prescribing medications, as well for the prevention and treatment of substance use disorders.

Educational Objectives: Co-morbid Opioid and Alcohol Use

- At the conclusion of this activity participants should be able to:

  - Understand the prevalence and health risks
  - Identify treatment implications
  - Examine the benefits of integrated care
  - Discuss strategies to support long-term recovery

Outline

1. Case
2. Neurobiology of AUD and OUD
3. Prevalence of OUD and AUD comorbidity
4. Medical considerations
5. Evidence-based management: OUD
6. Evidence-based management: AUD
7. Opioid agonist therapy and alcohol use, impact and evidence
8. Case follow-up
9. Summary

Case Discussion

63 yo man, with chronic DJD, CKD, CAD and a h/o OUD, on methadone treatment at 180mg daily, admits to drinking ten 12oz beers daily. He cites pain as the primary reason for drinking. Doesn't have etoh abstinence periods and denies a h/o withdrawal seizures.

For pain, he currently takes:

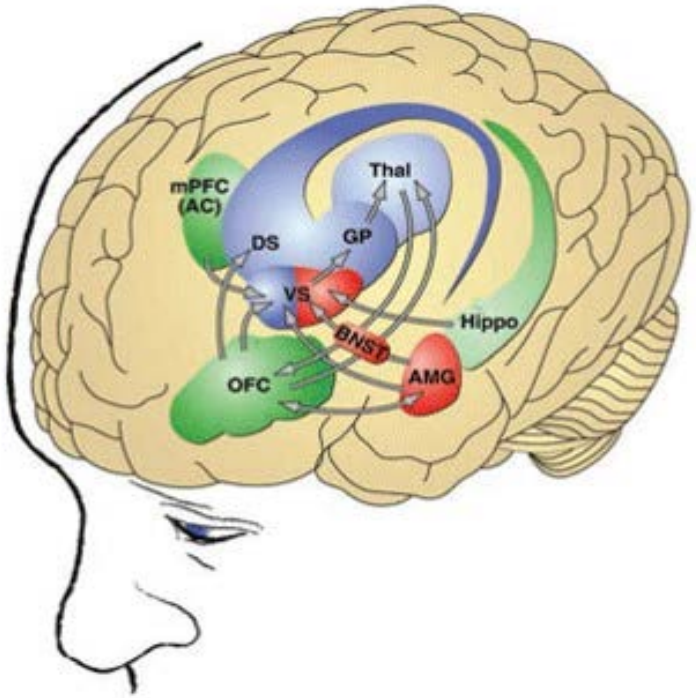
- pregabalin 200mg TID
- duloxetine 60mg daily
- tizanidine 4mg TID

Other medications:

- Lisinopril-HCTZ 20-25mg
- ASA 81mg
- metoprolol succinate, 25mg daily

How would you manage his alcohol use disorder?

Neural Pathways of Addiction



Koob et al, 2008

Binge/intoxication:

- Ventral Striatum (VS), nucleus accumbens: *euphoria, reward*
- Dorsal Striatum (DS) *habits, perseveration*
- Global Pallidus (GP) *habits, perseveration*
- Thalamus (Thal) *habits, perseveration*

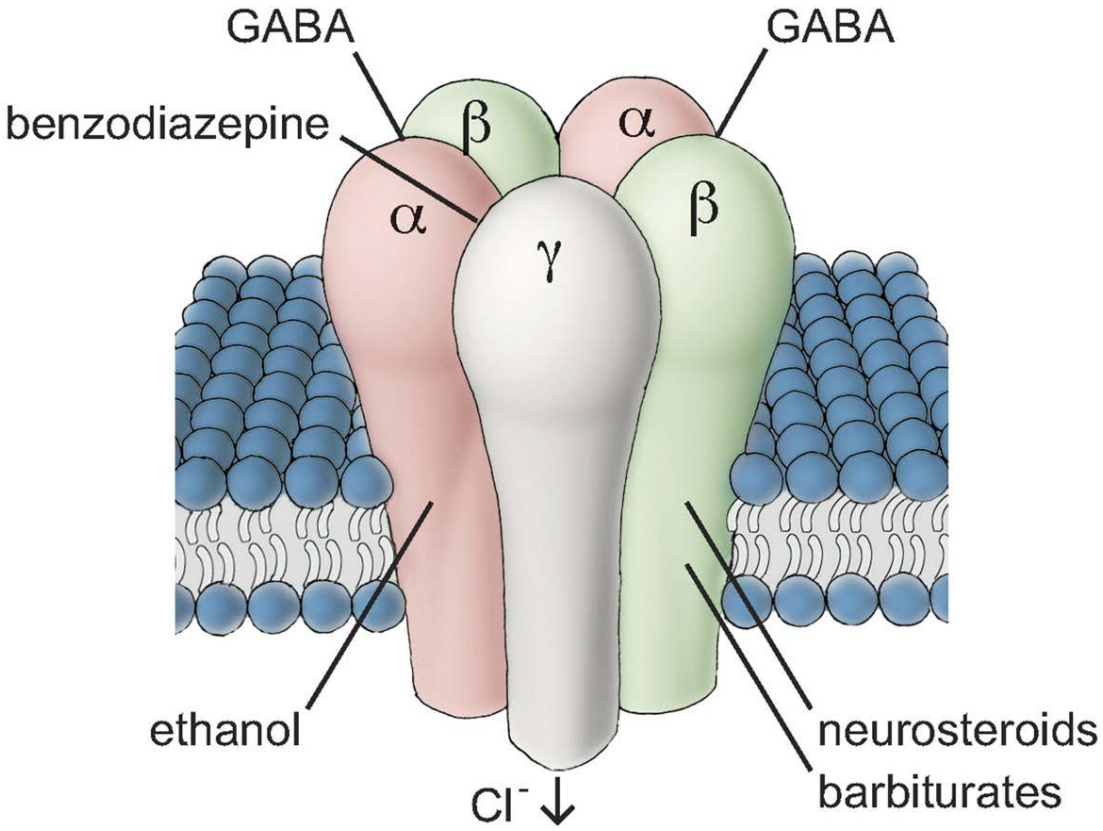
Withdrawal/Negative affect

- Amygdala (AMG), bed nucleus of the stria terminalis (BNST), "extended amygdala" *malaise, dysphoria, negative emotional states*
- Ventral Striatum (VS): *decreased reward*

Preoccupation/anticipation

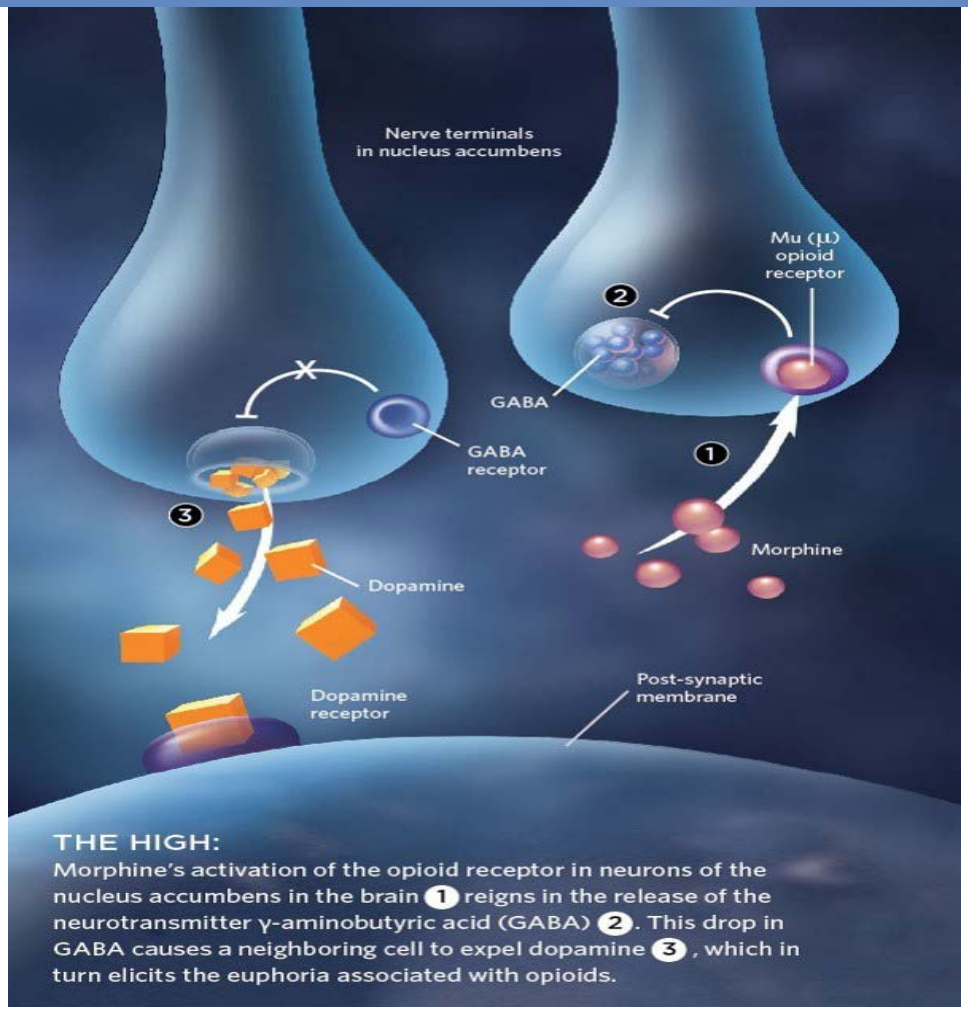
- Anterior cingulate (AC)
- Prefrontal cortex (mPFC), orbitofrontal cortex (OFC) *subjective effects of cravings, executive function*
- Basolateral nucleus of the amygdala *conditioned cues*
- Hippocampus (Hippo) *Conditioned contextual cues*

Alcohol: Mechanism of Action

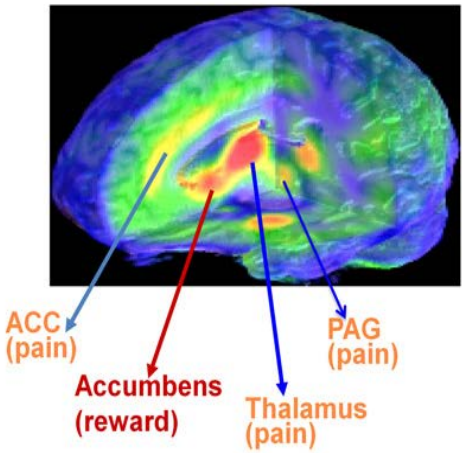


Opioids: Mechanism of Action

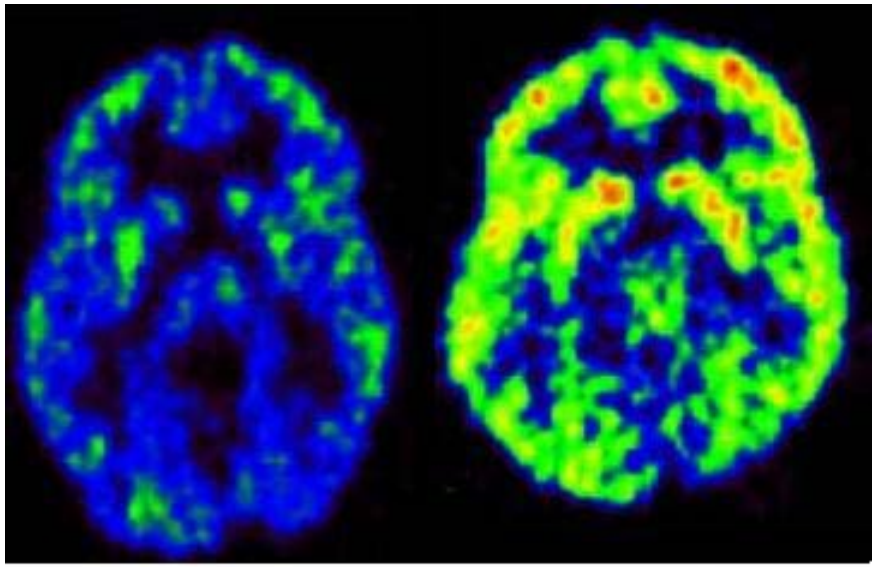
- Binds to the Mu opioid receptor
- Inhibits the release of GABA
- Lack of GABA receptor stimulation leads to release of dopamine from neighbor



Analgesic Mechanisms of Mu Opiate Drugs (Heroin, Vicodin, Morphine)



Slide courtesy of Nora Volkow,
Director of NIDA
ASAM Plenary 2016



Alcoholic

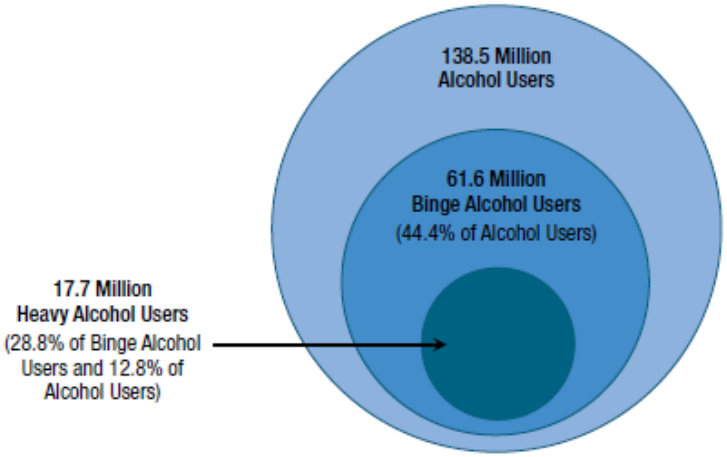
Darker Colouring indicates depressed brain activity

Normal

Healthy levels of brain activity

How bad is it?

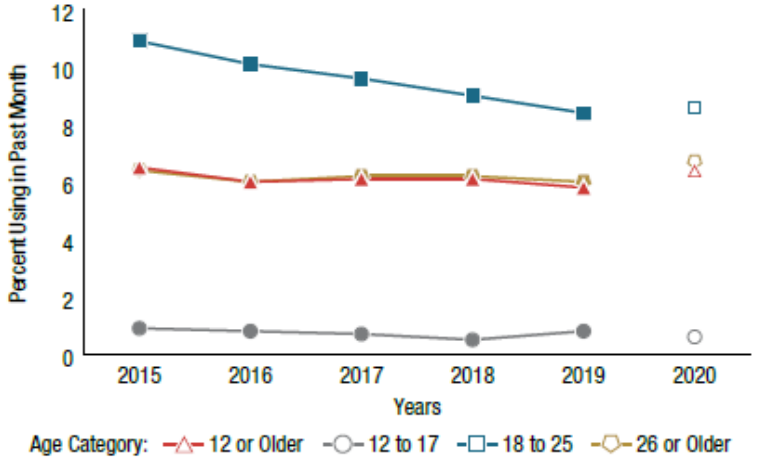
Figure 6. Current, Binge, and Heavy Alcohol Use: Among People Aged 12 or Older; 2020



Note: Binge Alcohol Use is defined as drinking five or more drinks (for males) or four or more drinks (for females) on the same occasion on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as binge drinking on the same occasion on 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.

Source: SAMHSA, 2020 National Survey on Drug Use and Health, 2021

Figure 8. Past Month Heavy Alcohol Use: Among People Aged 12 or Older; 2015-2020



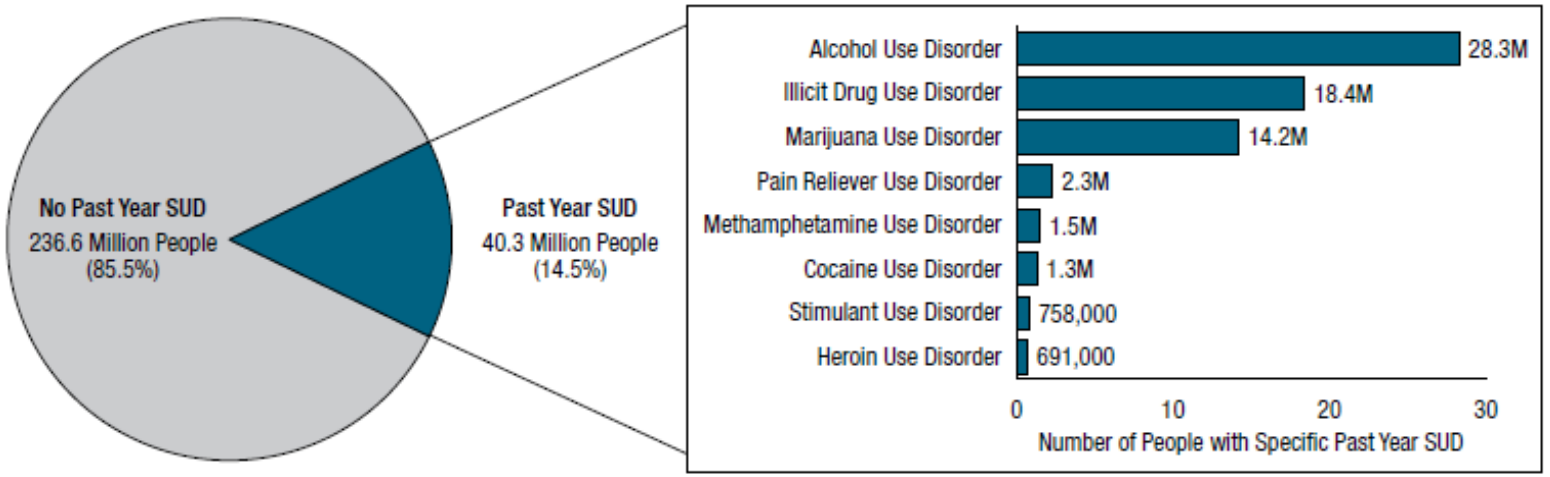
Note: There is no connecting line between 2019 and 2020 to indicate caution should be used when comparing estimates between 2020 and prior years because of methodological changes for 2020. Due to these changes, significance testing between 2020 and prior years was not performed.

Heavy etoh use: >5 drinks on >5/30 days

- Contributes to 5% of global disease burden
- 4th leading cause of preventable death in the US

How bad is it?

Figure 27. People Aged 12 or Older with a Past Year Substance Use Disorder (SUD); 2020



Note: The estimated numbers of people with substance use disorders are not mutually exclusive because people could have use disorders for more than one substance.

Source: SAMHSA, 2020 National Survey on Drug Use and Health, 2021

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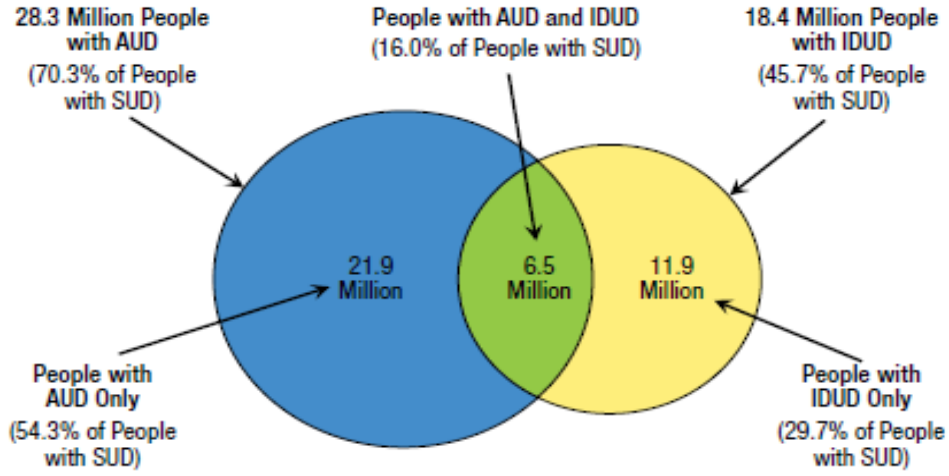
How bad is it?

Figure 28. Alcohol Use Disorder (AUD) and Illicit Drug Use Disorder (IDUD) in the Past Year: Among People Aged 12 or Older with a Past Year Substance Use Disorder (SUD); 2020



40.3 Million People Aged 12 or Older with Past Year SUD

Source: SAMHSA, 2020 National Survey on Drug Use and Health, 2021

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How bad is it?

Prevalence and patterns:

- National Survey of Drug Use and Health
  - 2006: all drinkers were >70% more likely to have used opioids.
  - 2014: >50% of 4 million people using prescription opioids were binge drinkers.
  - 2017, among 2 million Americans with OUD, 25% had comorbid AUD.

- Hood et al, 2020
  - Etoh use is common in patients with chronic pain.
  - Chronic pain patients with heavy drinking report greater pain levels.
  - KP surveyed 12K patients prescribed opioids:
    - 12% reported etoh use
    - 32% reported concurrent sedatives
    - 3% reported all three used

- Soyka et al, 2015
  - 30% of people on methadone treatment have problematic etoh use.
  - Health care costs are greater than OUD alone.

How bad is it?

Dangers:

- Mortality (Hood et al, 2020)
  - Increased risk of respiratory failure and death: CNS depressants
  - Linked to opioid overdoses
  - 130 people die daily from opioid overdoses and 20% involved alcohol
  - AUD diagnosis predicts higher risk of opioid overdose, accidents and injuries

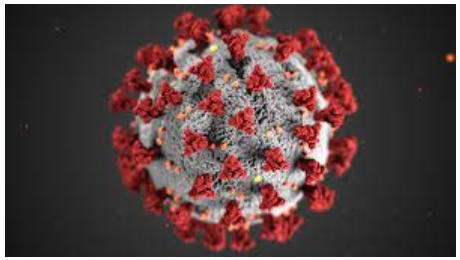
- Morbidity (Hood et al, 2020)
  - Etoh associated with 20% of opioid related hospitalizations in young adults
  - Concurrent use interferes with treatment for chronic pain.
  - Higher disease burden, higher rates of multiple medical comorbidities
  - HCV risk much higher; cirrhosis risk much higher (Murrill et al 2002)
  - BZD use concurrently with opioids and etoh is also a problem
  - Higher psychiatric disorder comorbidity: including suicidality
    - (Lloyd et al 2007)

How bad is it?

Methadone treatment and etoh use:

- Zador et al, 2000: number and causes of death at an MMT in Australia
  - Drug related death was 44%, etoh use 3rd most common after benzos and other opioids
- New York longitudinal study looking at active and discharged methadone patients: excessive etoh use was 35% cause of death for active participants (Joseph et al, 1985)
- Methadone initiation is a time of increased risk of mortality, especially with concurrent etoh use

SUD and COVID-19



https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

12 Month-ending Provisional Number of Drug Overdose Deaths

Based on data available for analysis on: 10/3/2021

Figure 1a. 12 Month-ending Provisional Counts of Drug Overdose Deaths: United States

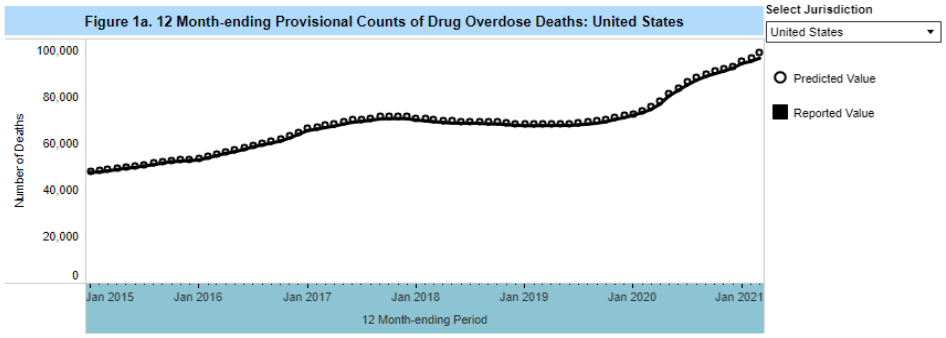
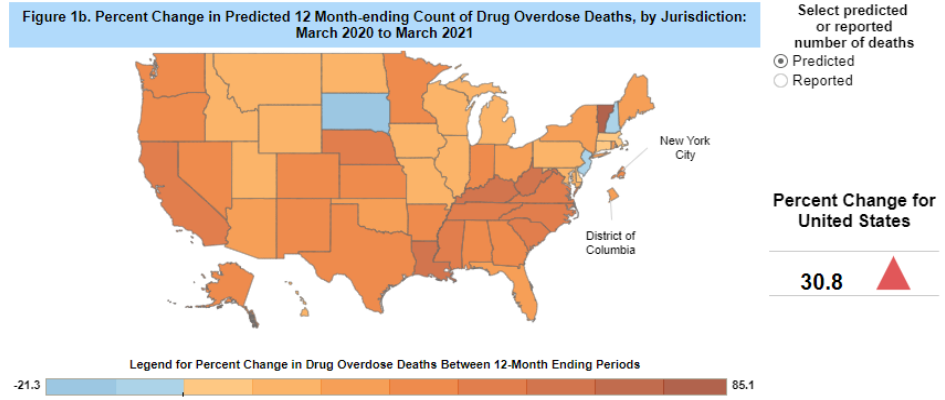


Figure 1b. Percent Change in Predicted 12 Month-ending Count of Drug Overdose Deaths, by Jurisdiction: March 2020 to March 2021



NOTES: *Reported* provisional counts for 12-month ending periods are the number of deaths received and processed for the 12-month period ending in the month indicated. Drug overdose deaths are often initially reported with no cause of death (pending investigation), because they require lengthy investigation, including toxicology testing. Reported provisional counts may not include all deaths that occurred during a given time period. Therefore, they should not be considered comparable with final data and are subject to change. *Predicted* provisional counts represent estimates of the number of deaths adjusted for incomplete reporting (see **Technical notes**).
Deaths are classified by the reporting jurisdiction in which the death occurred. Percent change refers to the relative difference between the reported or predicted provisional numbers of deaths due to drug overdose occurring in the 12-month period ending in the month indicated compared with the 12-month period ending in the same month of the previous year. Drug overdose deaths are identified using ICD–10 underlying cause-of-death codes: X40–X44, X60–X64, X85, and Y10–Y14.

Definitions

1. Addiction: (from SAMHSA) Strong desire to use, inability to control use, continued use despite obligations, social functioning, impaired health, the need to use more and more to achieve the same effect, spending a lot of time obtaining and using opioids.

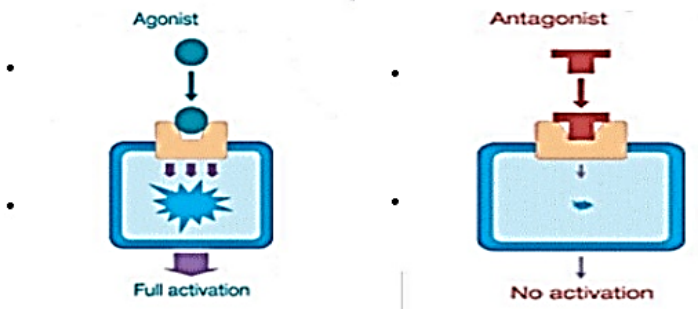
2. Dependence: Withdrawal symptoms after stopping or reducing use.

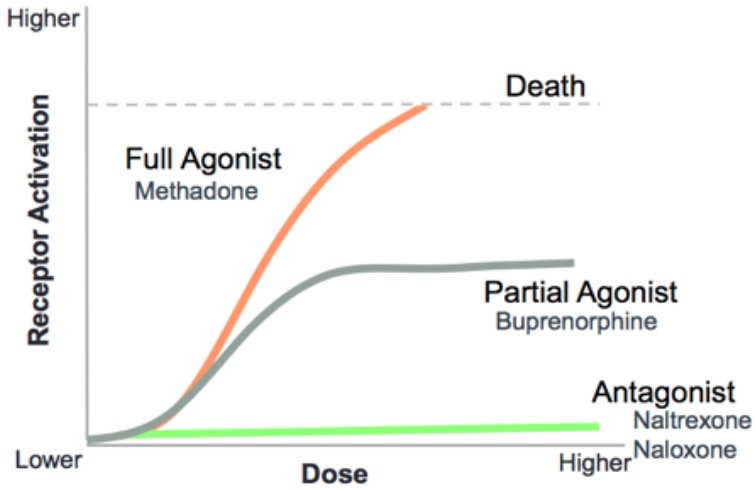
3. DSM-V: Substance use *disorder* used for abuse AND dependence.

What are the Treatment Options: Opioids

1. Methadone
2. Buprenorphine
3. Naltrexone:

Comparison between agonist & antagonist:





Center for Substance Abuse Treatment. Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction. Treatment Improvement Protocol (TIP) Series 40. DHHS Publication no. (SMA) 04-3939. Rockville, MD: US Substance Abuse and Mental Health Services Administration, 2004. http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.chapter.72248

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What does the evidence say: Methadone

a. Reduction in death rates:

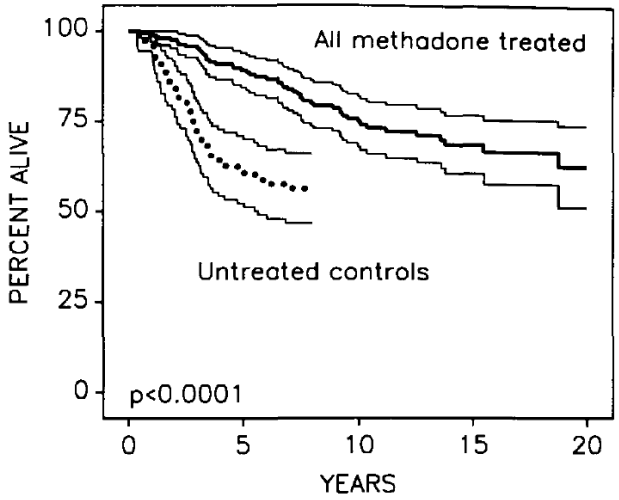


Fig. 1. Twenty-year survival estimates for cohorts 1–3 (solid line) and 8-year survivals in the control group (dotted line) with 95% confidence intervals.

166 MMT vs 115 controls over 8 years

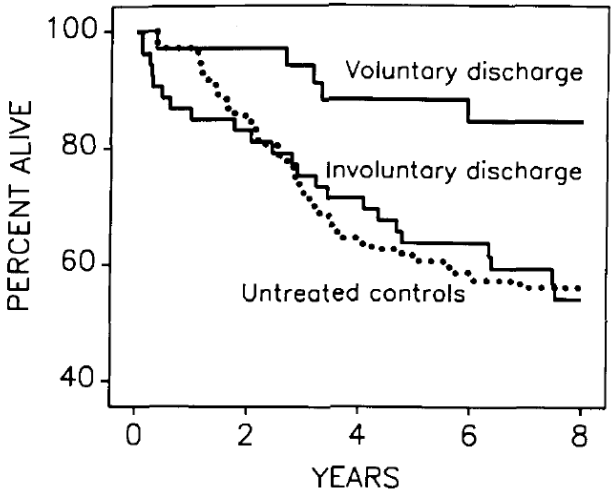


Fig. 3. Cohort 2 (voluntary discharge; upper solid line) contrasted to cohort 3 (involuntary discharge; lower solid line) and controls (dotted line).

34 VD vs 53 NVD vs 115 controls

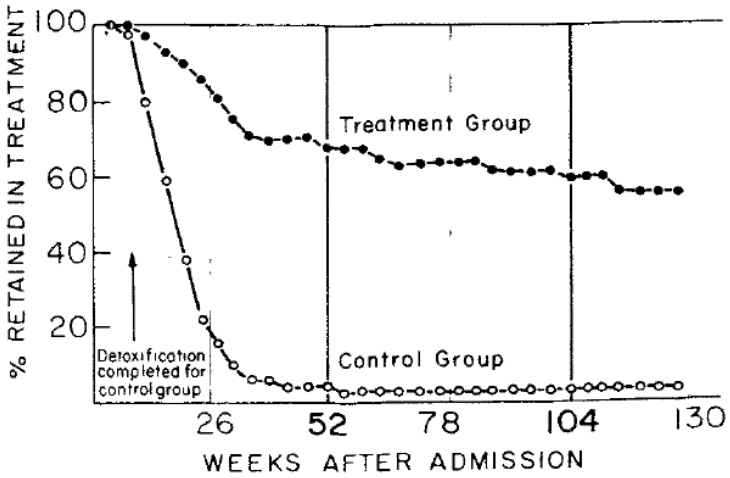
Gronbladh et al, 1990

What does the evidence say: Methadone

b. Retention in Treatment:

Newman et al, Lancet 1979:

- 100 heroin addicts randomized:
  - Detox/placebo
  - Maintenance
- 76% retention rate at 32 weeks in MMT
  - 10% in placebo
- 56% retention rate at 3 years
  - 2% in placebo

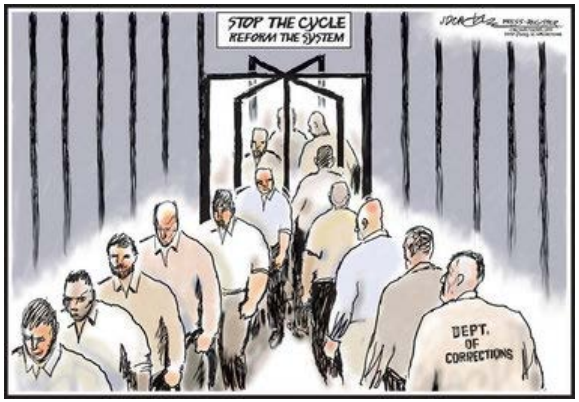


ig. 1—Proportion of subjects retained in study.

Admission to the study occurred over 7 months; at least 128 weeks apsed between admission of last subject and conclusion of the study.

What does the evidence say: Methadone

c. Reduction in recidivism rates:



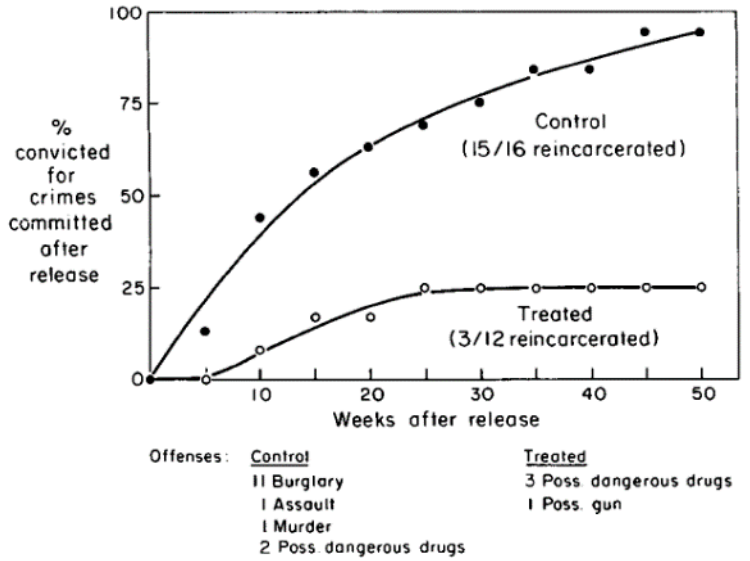


FIGURE 1. *Reincarceration of Treated and Untreated (Control) Subjects as a Function of Time after Release from Jail.*

Dole et al, NEJM 1969

What does the evidence say: Methadone

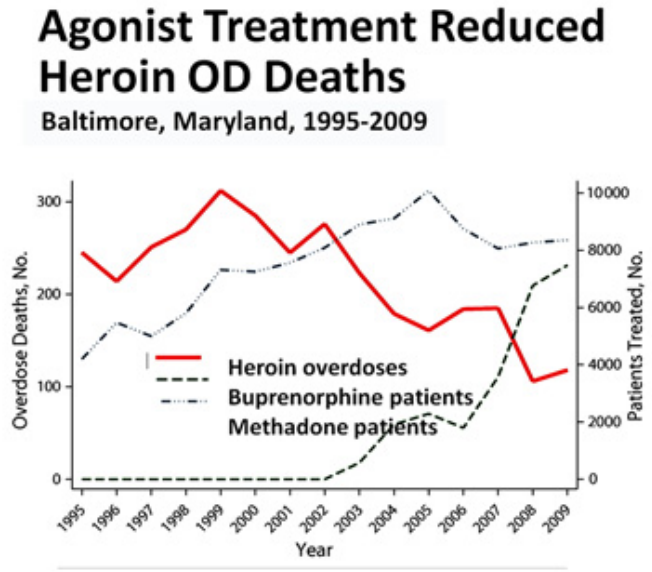
d. Reduced Disease transmission:

Gowing et al, JGIM 2005:

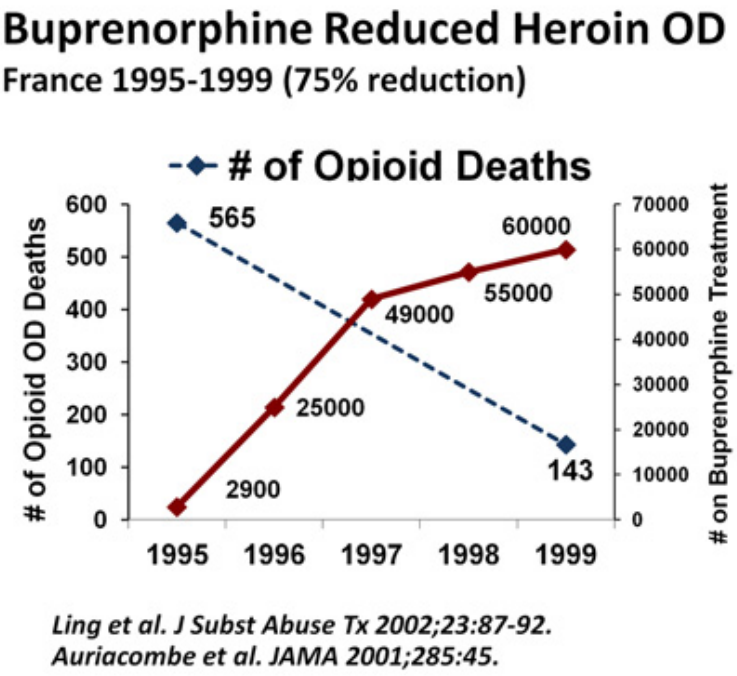
- 28 studies
- 7900 methadone patients
- Results: methadone significantly reduces the high-risk behaviors of HIV transmission (e.g., IVDU, high risk sex) and seroconversion

What does the evidence say: Buprenorphine

a. Reduction in death rates



Schwartz RP et al., Am J Public Health 2013.



Ling et al. J Subst Abuse Tx 2002;23:87-92.
Auriacombe et al. JAMA 2001;285:45.

Slide courtesy of Nora Volkow, Director of NIDA, ASAM plenary, 2016

What does the evidence say: Buprenorphine

b. Retention in Treatment:

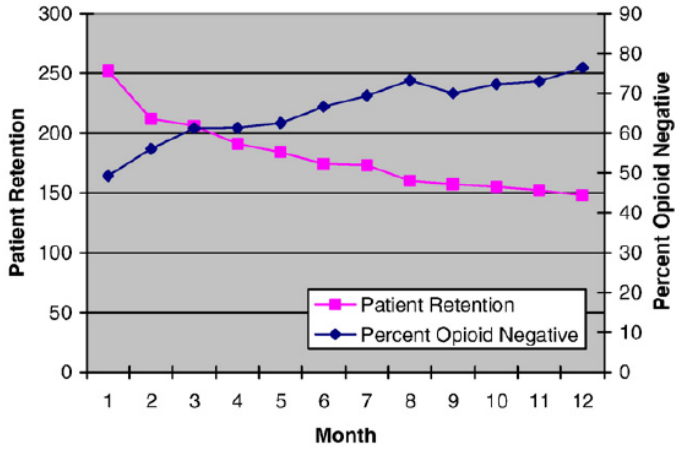


Fig. 1. Patient retention and percentage of patients in treatment classified as opioid-negative over 12 months.

Soeffing et al, JSAT 2009

- 255 patients
- 56% retained at 1 year
- Those with polysubstance use were more likely to adhere to treatment
- 64% were opioid negative in tox screens for >6 months

What does the evidence say: Buprenorphine

c. Reduction in recidivism rates:

- Criminal charges compared between methadone maintenance and office-based buprenorphine
- 2 years prior to treatment vs 2 years after initiating treatment
- Significant reductions in the methadone group in all charges and drug charges
- No significant reductions in the buprenorphine group

Table 2. Overall charges and drug charges in the 2 years before and 2 years after enrollment in methadone maintenance (METH) or office-based buprenorphine (BUP).

	2 years before treatment initiation			2 years after treatment initiation		
	BUP	METH	*p*-value[a]	BUP [*p*-value[b]]	METH [*p*-value[b]]	*p*-value[a]
Overall charges						
Number of subjects with a charge	108 (42.9%)	125 (49.6%)	.13	97 (38.5%) [.22]	82 (32.5%) [<.001]	.16
Mean number of cases per subject	0.77	0.97	.11[d]	0.70 [.37[c]]	0.63 [.002[c]]	.25[d]
Mean number of cases among subjects in treatment at 12 months	0.70	0.94	.04[d]	0.60 [.38[c]]	0.33 [<.001[c]]	.02[d]
Drug charges						
Number of subjects with a drug charge	54 (21.4%)	63 (25.0%)	.34	65 (25.8%) [.44]	44 (17.5%) [.015]	.03
Mean number of drug cases per subject	0.31	0.38	.37[d]	0.35 [.46[c]]	0.23 [.008[c]]	.02[d]
Mean number of drug cases among subjects in treatment at 12 months	0.30	0.40	.30[d]	0.34 [.60[c]]	0.13 [.001[c]]	.001[d]

[a] *p*-Value for comparison of BUP and METH subjects
[b] *p*-Value for comparison of 2 years before and 2 years after enrollment
[c] Wilcoxon signed ranks test
[d] Mann–Whitney *U* test

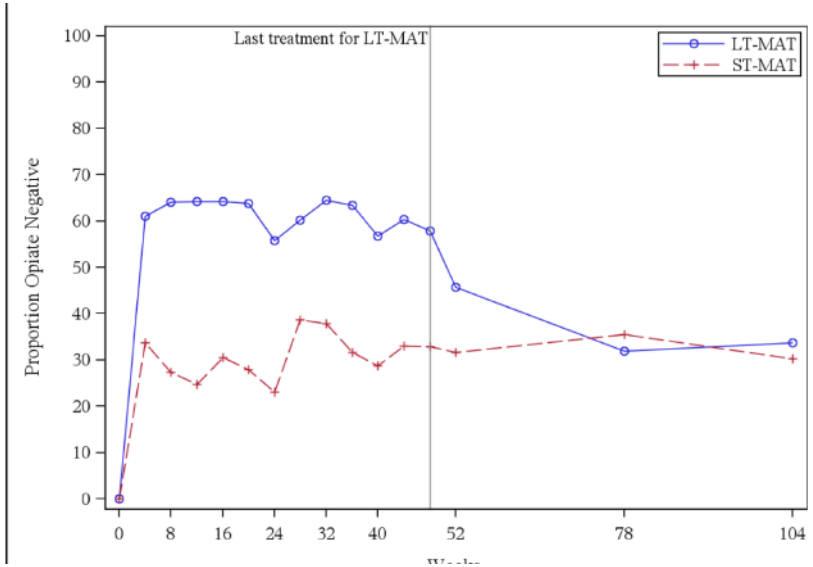
Rastegar, Kawasaki et al, Substance use and misuse 2016

What does the evidence say: Buprenorphine

d. Reduced Disease transmission:

- Compares two methods: 15 day detox (2x) and 21 therapy sessions with Bup/naloxone
- Every 3 day dosing of Bup/naloxone for 48 weeks with 21 therapy sessions
- In 4 high-risk communities in Thailand and China
- Followed for 52 weeks after treatment
- Long-Term (LT) buprenorphine rx associated with less heroin and injection drug use by nearly 3x as much as short-term detox
- Dramatically reduced rates of HIV-risk behavior

Metzger et al, 2015 J Acquir Immune Defic Syndr



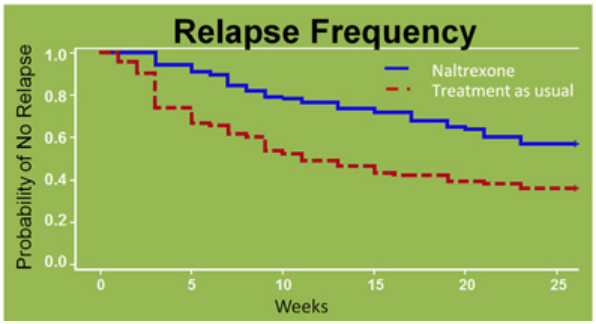
What does the evidence say: Naltrexone

a. Reduction in death rates

Improving Treatments for Addiction:

Naltrexone Trial in CJ Populations

- ***Participants:*** **parolees/probationers with opioid addiction**
  - **all *volunteers* – received either**
    - **Monthly injections of extended release naltrexone for 6 months**
    - **Community treatment, including methadone or Suboxone (encouraged)**



Overdoses in 78 weeks:

Control: 7

Naltrexone: 0

Lee et al. NEJM March 31, 2016.

*Note: These patients VOLUNTARILY wanted naltrexone

*Note: No patient continued injections after 24-week trial

Slide courtesy of Nora Volkow, Director of NIDA, ASAM plenary, 2016

What does the evidence say: Naltrexone

b. Retention in Treatment:

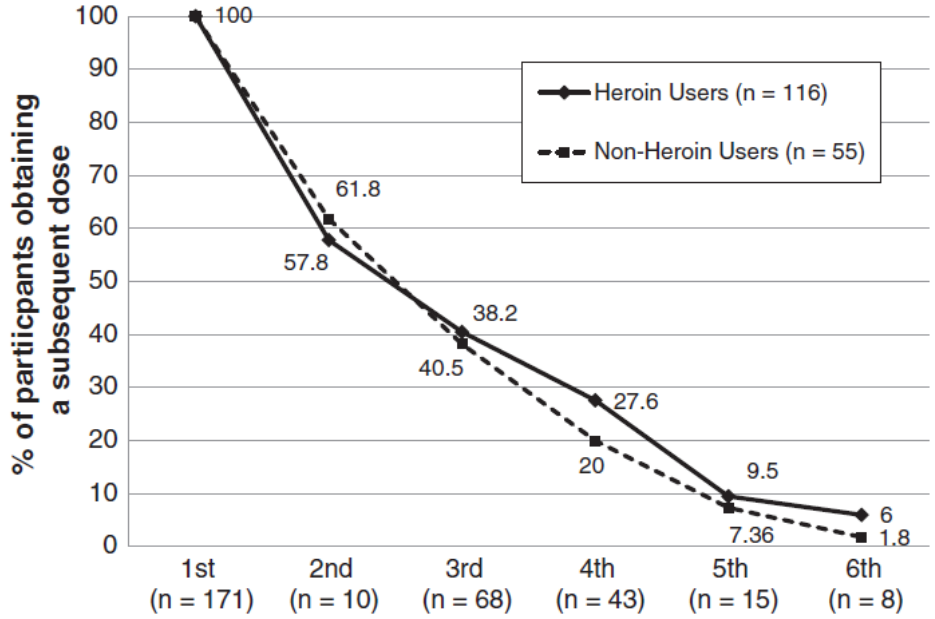


Fig. 1. Proportion of patients who obtained a subsequent dose by opioid type (Phase 1 and Phase 2, $N = 171$).

SJ Cousins et al. JSAT, 2016

Those who identified as homeless, injected heroin or having mental illness were less likely to stay in treatment

What does the evidence say: Naltrexone

c. Reduction in recidivism rates:

Gordon, et al. Journal of substance abuse treatment April 2015

- One small study
- Non-randomized
- 27 incarcerated individuals with OUD in the year prior to incarceration
- Received 1 injection prior to release and 6 injections in the community
- 10 (37%) retained in treatment
- Those completing treatment less likely to test positive for opiates
- Those who didn't were more likely to be re-arrested
  - Did not reach level of statistical significance.

What does the evidence say: Naltrexone

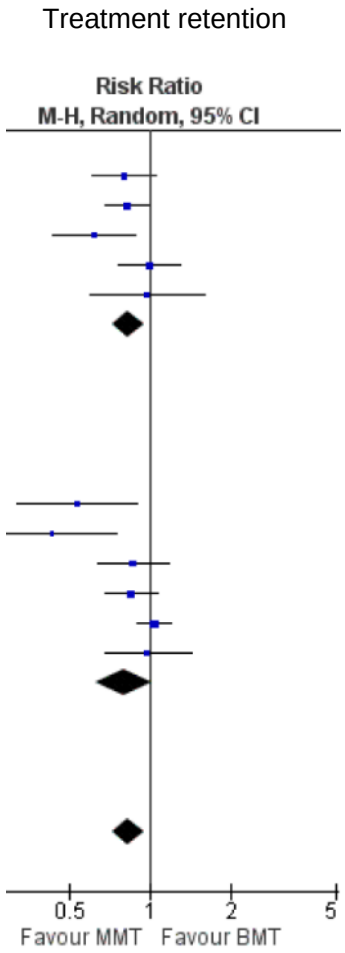
d. Reduced Disease transmission:

- Has not been studied specifically
- We do know it is more effective at negative urine drug screens than placebo

What does the evidence say: Comparison Studies

Mattick et al, 2014, Cochrane Review: buprenorphine vs methadone vs placebo

- 31 studies, ~5500 participants
- Methadone better at retention in treatment (52 weeks) (RR 1.12) vs buprenorphine
- Buprenorphine much better than placebo for 52-week retention (16mg) (RR 1.88)



What does the evidence say: Comparison Studies

b. Buprenorphine vs Naltrexone:

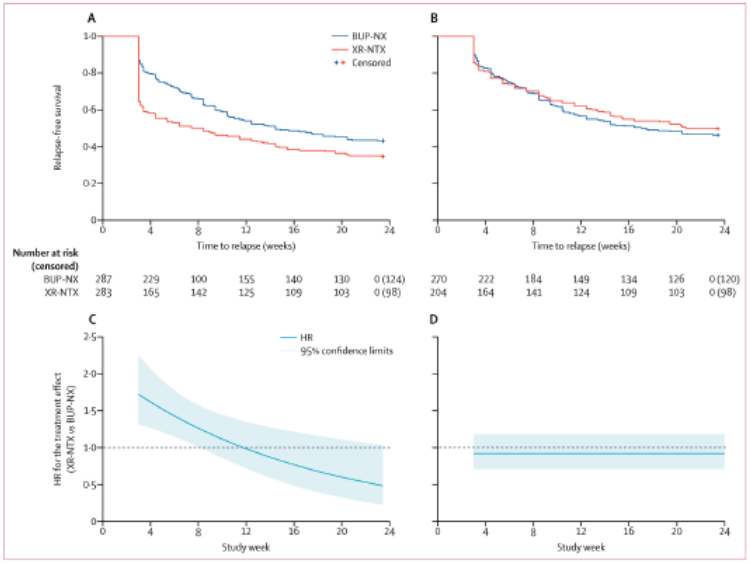


Figure 2. Relapse-free survival and treatment effect over time for the XR-NTX and BUP-NX treatment groups
Survival (A) and HRs and corresponding 95% CIs from the non-proportional hazards Cox model (time by treatment interaction included in the model; (C) assessed in the intention-to-treat population (n=570). Survival (B) and HRs by time (D) in the per-protocol population (n=474). XR-NTX=extended-release naltrexone. BUP-NX=buprenorphine-naloxone. HR=hazard ratio.

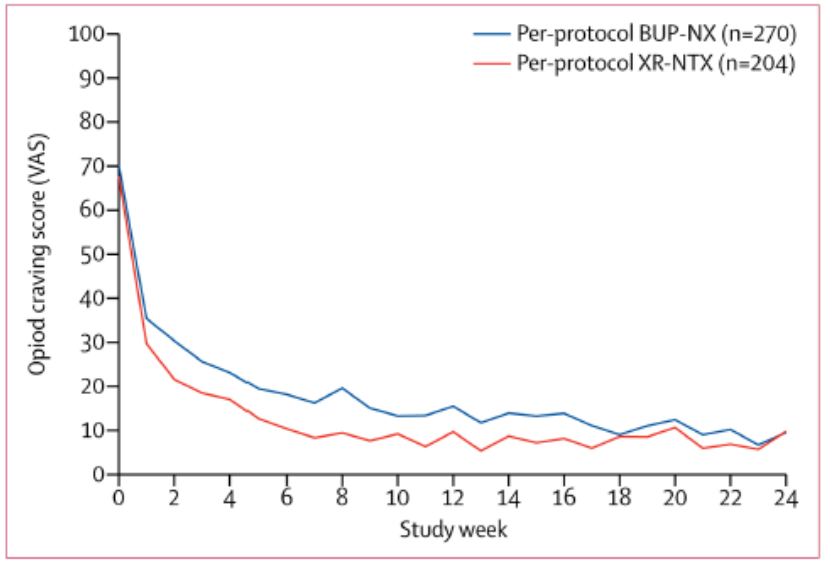
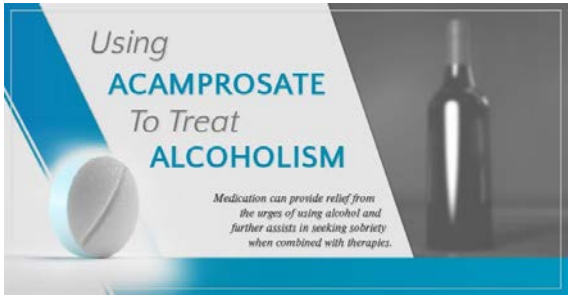


Figure 3. Opioid craving during the trial
Craving was self-reported with an opioid craving VAS, range 0–100. VAS=Visual Analogue Scale. XR-NTX=extended-release naltrexone. BUP-NX=buprenorphine-naloxone.

Lee et al. Lancet, 2018

What are the treatment options: Alcohol

1. Acamprosate
2. Disulfiram
3. Oral Naltrexone
4. IM Naltrexone



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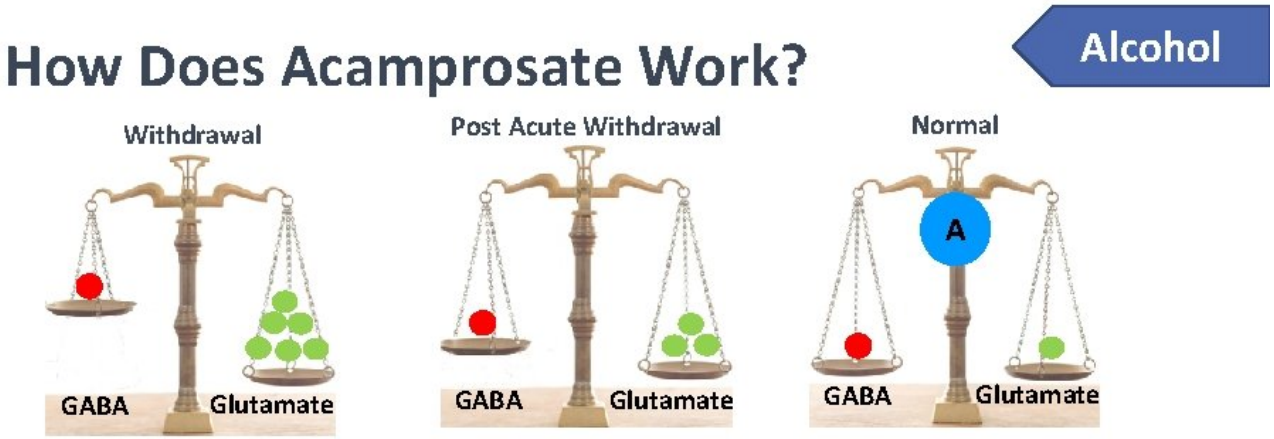
Acamprosate

How Does Acamprosate Work?



- After one stops consuming alcohol, the glutamate system continues to be overactive as it readjusts by down regulating the glutamate receptors.
- During this time, the individual continues to feel anxiety and agitation that can lead to relapse. Acamprosate helps to reregulate the glutamate system.

- Only proven after detox for relapse prevention
- Expensive
- TID dosing

Disulfiram

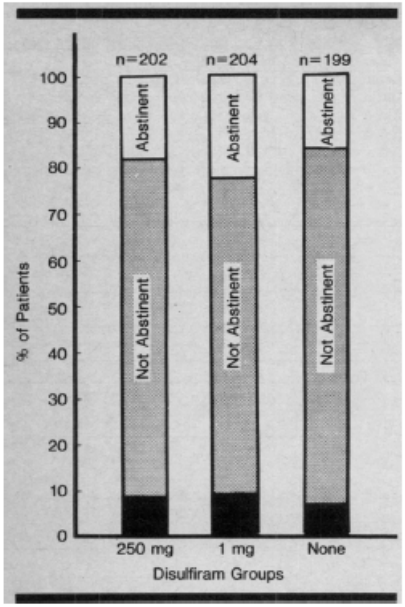
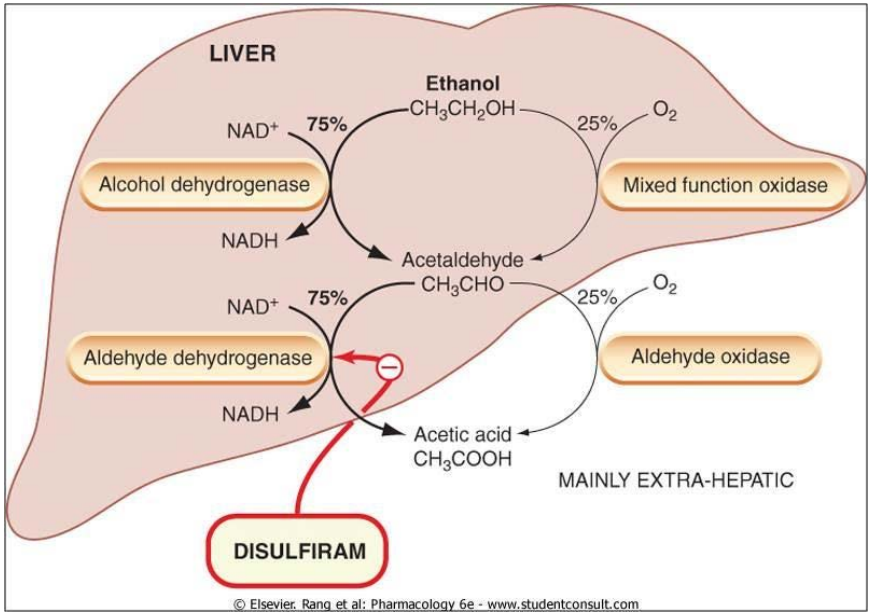


Fig 1.—Abstinence rates. Clear portion of each bar gives percentage of patients totally abstinent for one year in each treatment group; dotted portion indicates percentage of patients not abstinent; and lined portion gives percentage of patients for whom there were insufficient data to evaluate abstinence.

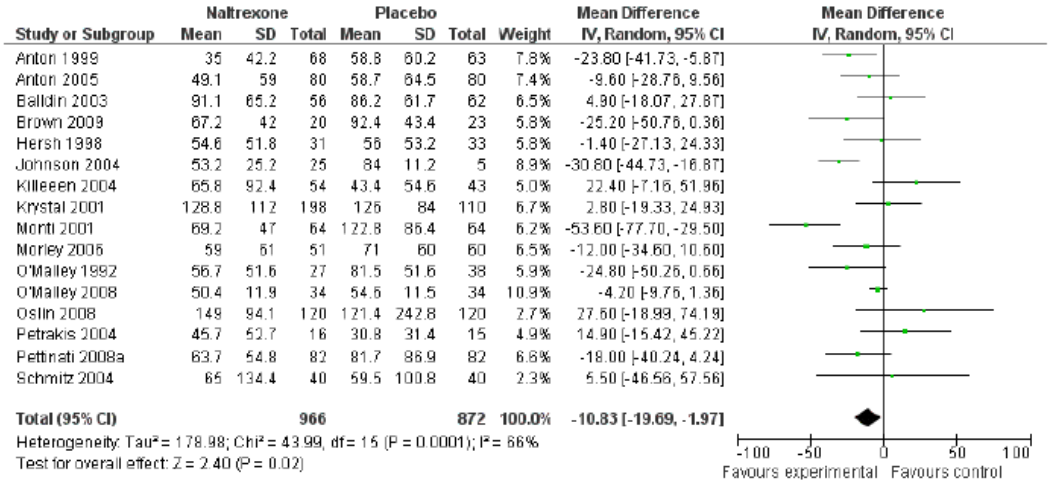
Fuller et al, JAMA 1986



"20% …[of those]… who finished the study were judged compliant"

Oral Naltrexone

Figure 9. Forest plot of comparison: 1 NTX versus PBO, outcome: 1.5 Consumed amount per drinking day.



Study or Subgroup	Naltrexone Mean	SD	Total	Placebo Mean	SD	Total	Weight	Mean Difference IV, Random, 95% CI
Anton 1999	35	42.2	68	58.8	60.2	63	7.8%	-23.80 [-41.73, -5.87]
Anton 2005	49.1	59	80	58.7	64.5	80	7.4%	-9.60 [-28.76, 9.56]
Balldin 2003	91.1	65.2	56	86.2	61.7	62	6.5%	4.90 [-18.07, 27.87]
Brown 2009	67.2	42	20	92.4	43.4	23	5.8%	-25.20 [-50.76, 0.36]
Hersh 1998	54.6	51.8	31	56	53.2	33	5.8%	-1.40 [-27.13, 24.33]
Johnson 2004	53.2	25.2	25	84	11.2	5	8.9%	-30.80 [-44.73, -16.87]
Killeen 2004	65.8	92.4	54	43.4	54.6	43	5.0%	22.40 [-7.16, 51.96]
Krystal 2001	128.8	112	198	126	84	110	6.7%	2.80 [-19.33, 24.93]
Monti 2001	69.2	47	64	122.8	86.4	64	6.2%	-53.60 [-77.70, -29.50]
Morley 2006	59	61	51	71	60	60	6.5%	-12.00 [-34.60, 10.60]
O'Malley 1992	56.7	51.6	27	81.5	51.6	38	5.9%	-24.80 [-50.26, 0.66]
O'Malley 2008	50.4	11.9	34	54.6	11.5	34	10.9%	-4.20 [-9.76, 1.36]
Oslin 2008	149	94.1	120	121.4	242.8	120	2.7%	27.60 [-18.99, 74.19]
Petrakis 2004	45.7	52.7	16	30.8	31.4	15	4.9%	14.90 [-15.42, 45.22]
Pettinati 2008a	63.7	54.8	82	81.7	86.9	82	6.6%	-18.00 [-40.24, 4.24]
Schmitz 2004	65	134.4	40	59.5	100.8	40	2.3%	5.50 [-46.56, 57.56]
Total (95% CI)			**966**			**872**	**100.0%**	**-10.83 [-19.69, -1.97]**

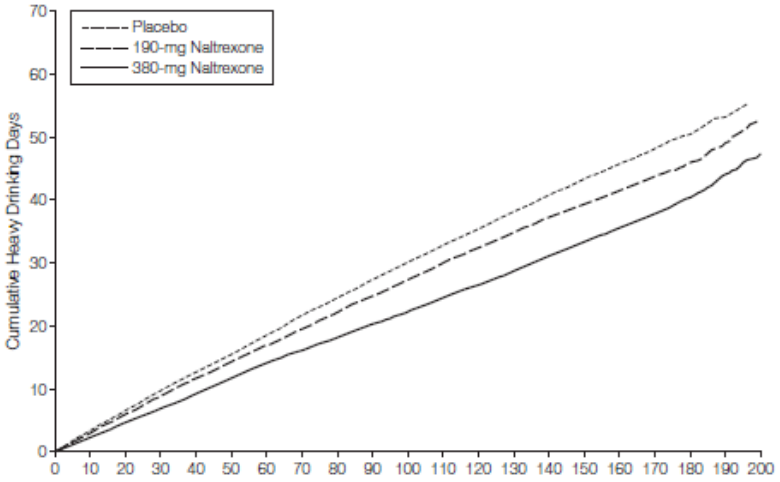
Heterogeneity: Tau² = 178.98; Chi² = 43.99, df = 15 (P = 0.0001); I² = 66%
Test for overall effect: Z = 2.40 (P = 0.02)

Rösner S, Hackl-Herrwerth A, Leucht S, Vecchi S, Srisurapanont M, Soyka M.
Opioid antagonists for alcohol dependence.
Cochrane Database of Systematic Reviews 2010, Issue 12. Art. No.: CD001867.
DOI: 10.1002/14651858.CD001867.pub3.

www.cochranelibrary.com

ER Naltrexone

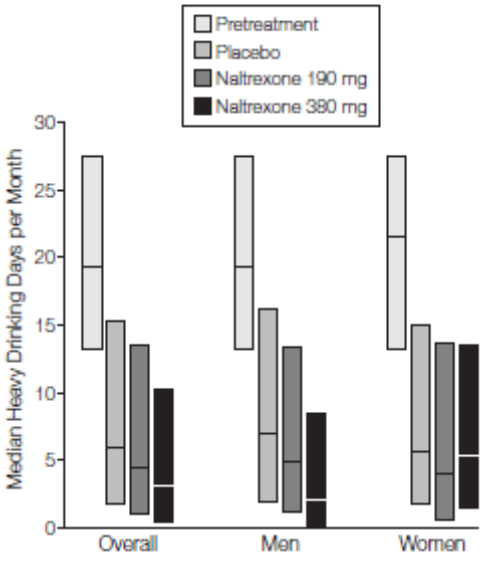
Figure 2. Primary Efficacy Analysis: Mean Heavy Drinking Event Rate



Treatment Dose	1	2	3	4	5	6
No. of Patients						
Placebo	209	194	169	160	142	134
Naltrexone						
190 mg	210	187	169	156	144	137
380 mg	205	186	161	147	139	130

Intention-to-treat analysis shows the cumulative mean event rate of heavy drinking during the study by treatment group. The participant retention rates are shown at 4-week intervals through 24 weeks, which was the intended duration of the treatment.

Figure 3. Median Heavy Drinking Days per Month for Each Treatment Group Overall and by Sex



In addition to injections of study treatment, all patients received standardized, low-intensity psychosocial support. This represents an intention-to-treat analysis with the last observation carried forward. The bars represent interquartile range.

Garbutt, et al. JAMA 2005

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What are the *off-label* treatment options: Alcohol

1. Gabapentin
2. Topiramate
3. Baclofen

Gabapentin

Gabapentin Treatment for Alcohol Dependence: A Randomized Controlled Trial

Barbara J. Mason, PhD[a], Susan Quello, BA, BS[a], Vivian Goodell, MPH[a], Farhad Shadan, MD[b], Mark Kyle, MD[b], and Adnan Begovic, MD[b]

Published in final edited form as:
JAMA Intern Med. 2014 January 1; 174(1): 70–77. doi:10.1001/jamainternmed.2013.11950.

Conclusions and Relevance—Gabapentin (particularly the 1800 mg dosage) was effective in treating alcohol dependence and relapse-related symptoms of insomnia, dysphoria and craving, with a favorable safety profile. Increased implementation of pharmacological treatment of alcohol dependence in primary care may be a major benefit of gabapentin as a treatment option for alcohol dependence.

Abstinence rate: 17% and no “heaving drinking” 44%

Gabapentin

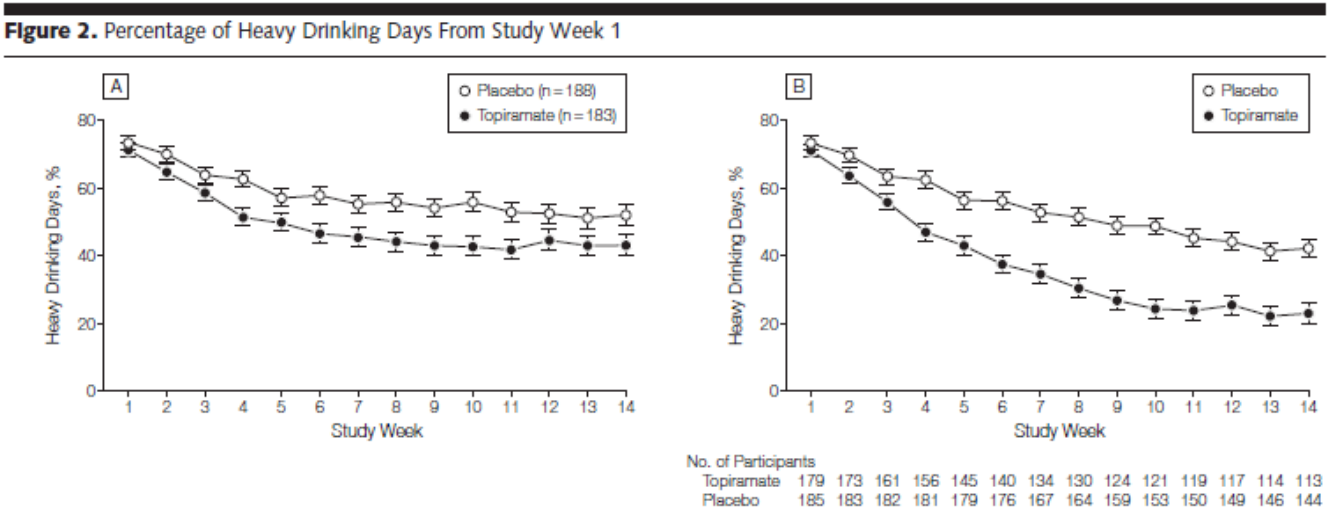
Gabapentin Combined with Naltrexone for the Treatment of Alcohol Dependence

Raymond F. Anton, M.D., Hugh Myrick, M.D., Tara M. Wright, M.D., Patricia K. Latham, Ph.D., Alicia M. Baros, Ph.D., L. Randolph Waid, Ph.D., and Patrick K. Randall, Ph.D.
Medical University of South Carolina, Institute of Psychiatry

- Used in first 6 weeks of abstinence combined (50mg daily naltrexone, max 1200mg daily gabapentin)
- Found statistically significantly superior to naltrexone alone in the following areas:
  - Longer delay to heavy drinking
  - Less total heavy drinking days
  - Less drinks/drinking days
- Results didn't last after gabapentin stopped after 6 weeks…so why stop?

Topiramate

- 25mg-300mg/day over 5 weeks
- Final dose 300mg/day divided



Johnson, et al. JAMA 2007

Baclofen

Addolorato et al Lancet 2007

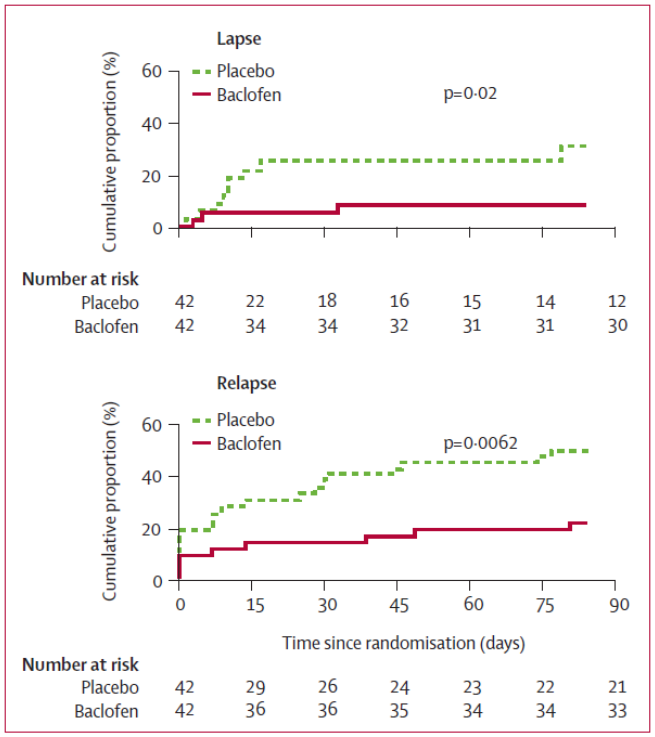


Figure 2: Kaplan-Meier survival analysis of proportion of lapse and relapse
Number at risk refers to proportion remaining free of lapse and relapse.

42 etoh cirrhotic patients 10mg TID for 12 weeks

	Total alcohol abstinence (n [%])		Odds ratio (95% CI)	p
	Placebo	Baclofen		
Child-Pugh A*	1/6 (17)	3/4 (75)	10·3 (0·4–939·7)	0·2381
Child-Pugh B	5/20 (25)	12/20 (60)	4·5 (1·2–17·4)	0·03
Child-Pugh C	6/16 (38)	15/18 (83)	8·3 (1·7–41·3)	0·0094
Total	12/42 (29)	30/42 (71)	6·3 (2·4–16·1)	0·0001

*Point and interval odds ratio estimates and relative p values were calculated using exact logistic regression.

Table 4: Total alcohol abstinence by Child-Pugh classification

*caution! Has potential for withdrawal seizures, and don't use if patient is suicidal!

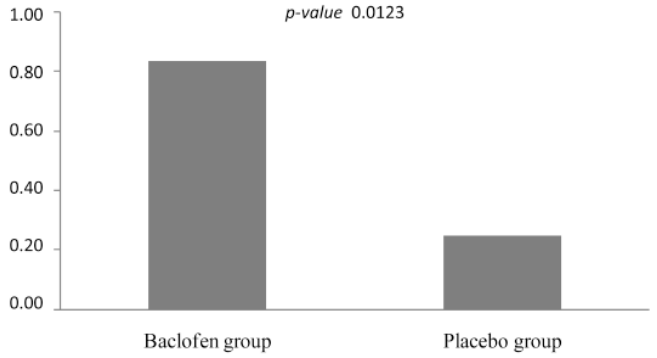


Figure 1.
Figure 1 shows that, with respect to the placebo group (3 out of 12, 25.0%), a significantly higher number of alcohol-dependent HCV-infected cirrhotic patients achieved and maintained total alcohol abstinence in the baclofen group (10 out of 12, 83.3%; p=0.0123, Fisher's exact test).

How does OAT impact etoh use?

- Effect of Initiation of OAT
  - Mixed results: Caputo et al 2002, short-term rx associated with reduction in etoh, but long-term resulted in increased consumption
  - Nava et al, 2008: 12-month study with OUD and AUD showed both methadone and buprenorphine associated with a reduction in ETOH use, buprenorphine more efficiacious
  - Meta-analysis: 15 studies with no clear pattern (Srivastava et al, 2008)

What is the uptake of etoh Rx on OAT?

- Nolan et al, 2016
  - Treatment is widely ignored
  - At one OTP in NYC, 21% had AUD, but only 5% engaged in etoh detox and 7% in psychosocial intervention
  - Many programs require termination of MOUD as terms of acceptance
    - Magnitude for risk of OD for treatment of AUD in those on MOUD may be overblown*
    - *watch out for precipitated withdrawal if co-administering phenobarbital and methadone
  - All MOUD participants should be offered treatment

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Evidence for OAT and etoh rx?

- Disulfiram
  - Making methadone contingent on taking disulfiram was effective (Bickel et al, 1988)
  - Adding disulfiram to methadone without contingencies was not (Ling et al, 1983)

Evidence for OAT and etoh rx?

- ER naltrexone
  - Found safe, feasible in a small pilot in HIV clinic (Korthuis et al, 2017) but only 8 individuals in pilot

Evidence for OAT and etoh rx?

- Non-pharmacologic
  - Collaborative care intervention (Watkins et al, 2017)
    - 377 primary care patients with either AUD, OUD +/- AUD
    - 6 sessions of brief psychotherapy by psychologist with addiction expertise—intervention
    - TAU: referral to community programs
    - Those in intervention twice as likely to get treatment and greater rates of abstinence
    - Rates of those with **both** AUD and OUD were low, failed to report numbers or any subgroup differences
  - Mindfulness
    - Effective in polysubstance use, pain
  - CBT
    - Effective in ETOH and SUDs (Magill and Ray, 2009)

Prognosis?

- Comorbidity may reduce efficacy of available treatments.
- Opioid misuse tied to poorer AUD treatment outcomes and vice versa.
- There are no specific treatment approaches, pharmacological or non-pharmacological, that effectively treat co-morbid AUD and OUD.
- It can complicate treatment of chronic pain.
- Research is lacking, especially the role pain plays.

Case Discussion

63 yo man, with chronic DJD, CKD, CAD and a h/o OUD, on methadone treatment at 180mg daily, admits to drinking ten 12oz beers daily. He cites pain as the primary reason for drinking. Doesn't have etoh abstinence periods and denies a h/o withdrawal seizures.

For pain, he currently takes:

- pregabalin 200mg TID
- duloxetine 60mg daily
- tizanidine 4mg TID

Other medications:

- Lisinopril-HCTZ 20-25mg
- ASA 81mg
- metoprolol succinate, 25mg daily

How would you manage his alcohol use disorder?

Case Follow-Up

- ~~Naltrexone and gabapentin contraindicated~~
- ~~Acamprosate and disulfiram with lackluster evidence~~
- Initiated topiramate and titrated up to 100mg daily
- Offering broad support: AA, SMART recovery, counseling

- Reduced drinking to 2 beers daily

Summary

- Etoh and opioid therapy is understudied
- Treatment can be given simultaneously
- Determine best treatment milieu
- Different SUDs call for different treatment
- Screen in the UDS at your OTP

Thank you!

Sarah S. Kawasaki, MD
Pennsylvania Psychiatric Institute (PPI) and
Penn State Hershey Medical Center
skawasaki@pennstatehealth.psu.edu

PCSS Mentoring Program

- PCSS Mentor Program is designed to offer general information to clinicians about evidence-based clinical practices in prescribing medications for opioid use disorder.
- PCSS Mentors are a national network of providers with expertise in **addictions, pain, evidence-based treatment including medications for opioid use disorder (MOUD)**.
- 3-tiered approach allows every mentor/mentee relationship to be unique and catered to the specific needs of the mentee.
- No cost.

For more information visit:

https://pcssNOW.org/mentoring/

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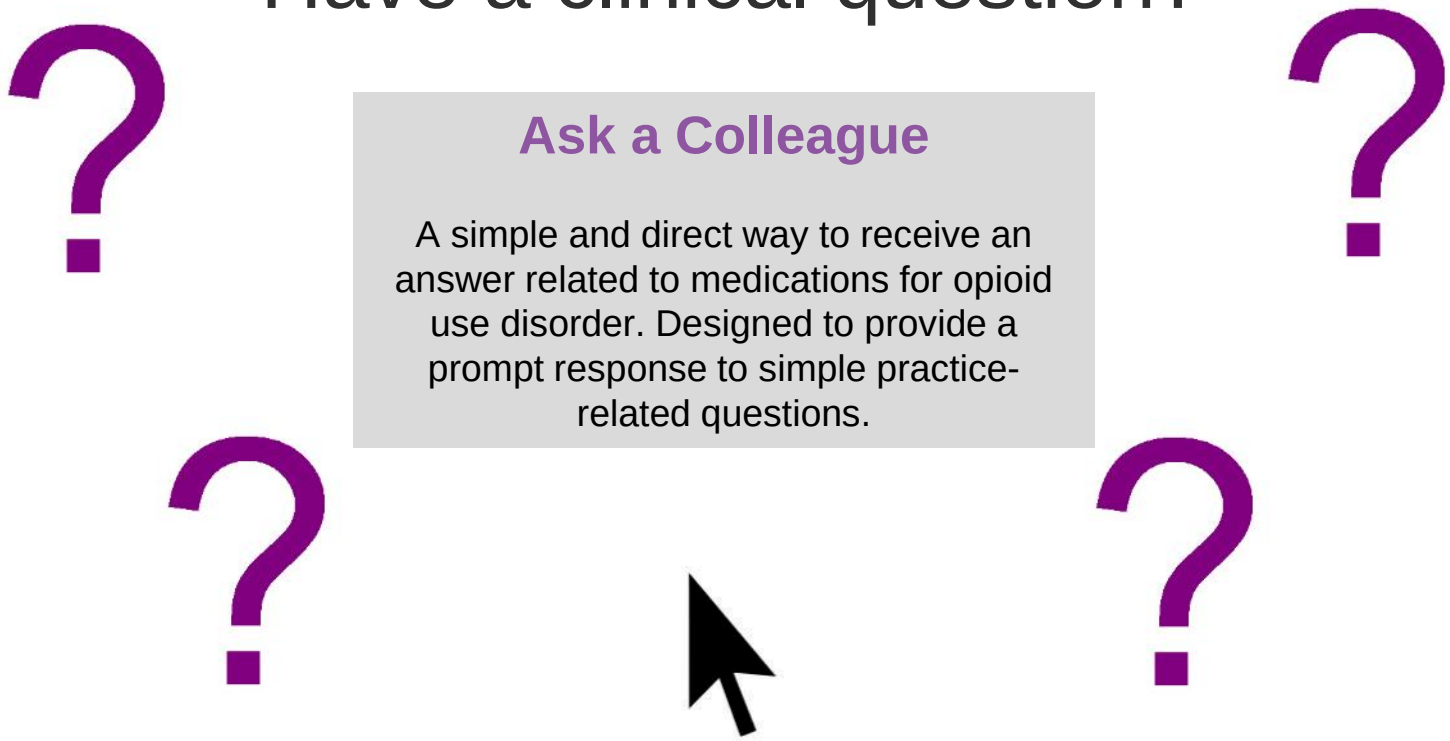
PCSS Discussion Forum

Have a clinical question?



Ask a Colleague

A simple and direct way to receive an answer related to medications for opioid use disorder. Designed to provide a prompt response to simple practice-related questions.

http://pcss.invisionzone.com/register

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PCSS is a collaborative effort led by the American Academy of Addiction Psychiatry (AAAP) in partnership with:

Addiction Technology Transfer Center	American Society of Addiction Medicine
American Academy of Family Physicians	American Society for Pain Management Nursing
American Academy of Pain Medicine	Association for Multidisciplinary Education and Research in Substance use and Addiction
American Academy of Pediatrics	Council on Social Work Education
American Pharmacists Association	International Nurses Society on Addictions
American College of Emergency Physicians	National Association for Community Health Centers
American Dental Association	National Association of Social Workers
American Medical Association	National Council for Mental Wellbeing
American Osteopathic Academy of Addiction Medicine	The National Judicial College
American Psychiatric Association	Physician Assistant Education Association
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