

Medication Treatment for Opioid Use Disorder

February 19th, 2019 12:00pm – 1:00pm

Presenters: Thomas E. Freese, PhD, Gloria Miele, PhD, and Daniel Dickerson, DO, MPH, and Larissa Mooney, MD







Disclosures

The speakers do not have relevant financial relationships with commercial interests.







Objectives

- ➤ Specify three FDA approved medications to treat patients with opioid use disorders.
- ➤ Describe at least three (3) benefits for using medication assisted treatment in tribal health clinic settings.
- ➤ Identify at least three (3) strategies to prevent opioid overdose.
- ➤ Demonstrate two (2) lessons learned from the clinical case presentation.





Opioid epidemic

- ► An opioid crisis exists within AI/AN communities.
- ► AI/ANs had the highest drug overdose death rates in 2015 (CDC)
- ▶ Al/ANs had the largest percentage increase in the number of deaths over time from 1999-2015 compared to other racial and ethnic groups (CDC).
- From 1999-2015, deaths rose more than 500 percent among AI/ANs (CDC).
- In March 2017, the Indian Health Service (HIS) chartered the National Committee on Heroin, Opioids, and Pain Efforts (also known as the HOPE Committee).



Medications for Opioid Use Disorder

- ► Buprenorphine (sublingual, implantable, injectable)
- ► Naltrexone (oral and extended release injectable)
- Methadone

"Detox" has no long-term effect on outcomes; it is medication maintenance that saves lives and reduces relapse







Pharmacotherapy for Opioid Addiction: **Methadone**

- Most effective
 - survival, treatment retention, employment
 - Illicit opioid use, hepatitis and HIV infections, criminal activity
- Highly regulated, dispensed at Opioid Treatment Programs (OTP)
 - Supervised daily dosing with take-home doses if stable
 - Counseling, urine testing
 - Psychiatric, medical services often not provided
 - Illegal to prescribe methadone for addiction in general practice
- Cost-effective
 - Every dollar invested generates \$4-5 in savings





Pharmacotherapy for Opioid Addiction: **Methadone**

Daily, observed dosing

- ► Full opioid agonist
- ▶ Onset within 30-60 minutes
- ► Long-acting: Daily dosing effective for addiction
- ▶ Dose 20-40 mg for acute withdrawal
- >80 mg for craving and "blockade"
- ► To evaluate stability, ask about take-home doses
- ► Multiple medication interactions

Advise staying in treatment until social, medical, psychiatric, legal, and family issues are stable.

- "Detox" therapy has no long-term effect on outcomes
- ▶ Longer duration, higher dose treatment most effective
- For some patients methadone therapy should be lifelong, as risk of relapse is high after cessation









- 2000 Federal Drug Addiction Treatment Act ("DATA-2000"):
 - Made office-based addiction treatment by physicians legal
 - Must complete 8-hour training and obtain federal waiver
- 2002: Suboxone (buprenorphine/naloxone) FDA approved
 - Outcomes much superior to psychosocial treatment alone
 - Longer treatment duration is more effective
- Compared to methadone:
 - Similar abstinence from illicit opioids and decreased craving
 - Lower retention in treatment
 - Can be prescribed in general practice, lowering barriers to treatment







- Partial opioid agonist, so safer than methadone
- High mu receptor affinity, so blocks other opioids
- Formulated with naloxone abuse deterrent
- Sublingual dosing and newer implant (Probuphine)
- Can precipitate withdrawal in tolerant patients
- Requires induction after patient enters mild-moderate withdrawal
- Home induction appears to be safe and effective, widely adopted
- Induction from methadone more difficult (taper to ~30 mg)
- Implant approved for stable patients on ≤8 mg buprenorphine







Trial of Buprenorphine

40 people addicted to heroin

Buprenorphine 16 mg/day vs taper + placebo

All received indiv counseling + therapy groups

Followed for 1 year

	Buprenorphine 16 mg per day	Placebo
Retained at 1 yr	75%	0
% died	0	20%



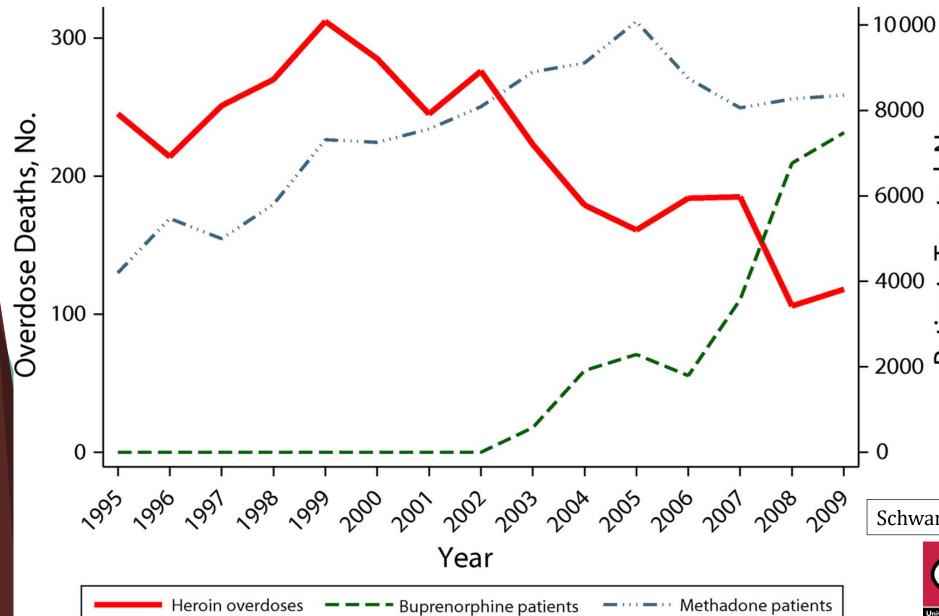












Schwartz, AJPH, 2012





Buprenorphine in Primary Care



- Not widely used in primary care
- Most prescribers treat few patients, so poor access
- Barriers in primary care include:
 - Urgency of scheduling
 - Induction visit and frequent early follow up (consider home induction)
 - Urine testing and prescription logistics
 - ► Linkages to psychosocial services
 - ▶ Difficult decisions about when to stop or refer
- Some physicians restrict prescribing to patients who were already in their own practice







Buprenorphine in Primary Care

- Advantages of buprenorphine in primary care:
 - Setting built for chronic disease management
 - Reduces the stigma of addiction treatment
 - Reduced contact with active drug users
 - Facilitates management of mental health and medical co-morbidities and preventive care
 - Important tool when problems arise during chronic opioid therapy
 - Public health benefit: increases local access to lifesaving care
- Highly gratifying form of treatment!







Naltrexone

- Opioid antagonist that blocks other opioids
- Does not lead to physical dependence, or to withdrawal when stopped
- Causes acute withdrawal in opioid-dependent patients
- Can be used in office-based settings without added training
- ► Effective in alcohol use disorder treatment
- Two formulations available:
 - Oral ReVia 50 mg PO daily
 - ► Injectable Vivitrol 360 mg IM monthly







Naltrexone for Opioid Use Disorder

- Requires opioid abstinence prior to initiation, a major barrier since most treatment-seeking patients are actively using opioids
- Difficult to compare with methadone or buprenorphine (trial underway)
- Russian studies show benefit in population where opioid substitution therapy is not available
- Mixed results in US populations (Cochrane reviews)
- Recent study (Lee, NEJM) in criminal justice population showed short term reduction in opioid relapse compared with "usual care" (not buprenorphine or methadone), and reduction in overdose compared with no medication



Overdose Prevention



- Naloxone ("Narcan") reverses opioid overdose
- Overdose education and naloxone is an effective harm reduction strategy
- For those at high risk of overdose and their friends or family
- Populations: syringe exchange, exit from jail, in drug treatment, high risk prescribed opioids
- Prescribe to Prevent educational modules







Need for comprehensive approaches to addiction treatment for Al/ANs

- Use of evidence-based psychosocial interventions (e.g., motivational interviewing, cognitive behavior therapy)
- Use of traditional practices (e.g., drumming, beading, attending AI/AN cultural events)
- Use of community based support networks and groups (A.A., White Bison
- ► AND...
- Use of FDA-approved medications for alcohol and opioid disorders!



References:

<u>J Addict Med.</u> 2014 Sep-Oct;8(5):299-308. doi: 10.1097/ADM.00000000000059.

Unobserved "home" induction onto buprenorphine.

Lee JD¹, Vocci F, Fiellin DA

A comparison of buprenorphine induction strategies: patient-centered home-based inductions versus standard-of-care office-based inductions.

Cunningham CO, Giovanniello A, Li X, Kunins HV, Roose RJ, Sohler NL.

J Subst Abuse Treat. 2011 Jun; 40(4): 349-56

Statement of the American Society Of Addiction Medicine Consensus Panel on the use of buprenorphine in office-based treatment of opioid addiction.

Kraus ML, Alford DP, Kotz MM, Levounis P, Mandell TW, Meyer M, Salsitz EA, Wetterau N, Wyatt SA; American Society Of Addiction Medicine..

J Addict Med. 2011 Dec; 5(4):254-63. doi:

Collaborative care of opioid-addicted patients in primary care using buprenorphine: five-year experience.

Alford DP, LaBelle CT, Kretsch N, Bergeron A, Winter M, Botticelli M, Samet JH. Arch Intern Med. 2011 Mar 14;171(5):425-31.





Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence.

Mattick RP, Breen C, Kimber J, Davoli M.

Cochrane Database Syst Rev. 2014

NIDA (2016). Understanding Drug Abuse and Addiction: What Science Says. Retrieved January 2, 2017, from <u>Understanding Drug Abuse and Addiction: What Science Says</u>

<u>Psychosocial</u> combined with agonist maintenance treatments versus agonist maintenance treatments alone for treatment of opioid dependence.

Amato L, Minozzi S, Davoli M, Vecchi S. Cochrane Database Syst Rev. 2011 Oct 5;(10):CD004147

Lancet. 2003 Feb 22;361(9358):662-8.

1-year retention and social function after buprenorphine-assisted relapse prevention treatment for heroin dependence in Sweden: a randomised, placebo-controlled trial.

Kakko J¹, Svanborg KD, Kreek MJ, Heilig M.

Am J Public Health. 2013 May; 103(5): 917-22. doi: 10.2105/AJPH.2012.301049. Epub 2013 Mar 14. Opioid agonist treatments and heroin overdose deaths in Baltimore, Maryland, 1995-2009. Schwartz RP¹, Gryczynski J, O'Grady KE, Sharfstein JM, Warren G, Olsen Y, Mitchell SG, Jaffe JH







Cochrane Database Syst Rev. 2008 Apr 16;(2):CD006140. doi:

10.1002/14651858.CD006140.pub2.

Sustained-release naltrexone for opioid dependence.

<u>Lobmaier P¹</u>, <u>Kornør H</u>, <u>Kunøe N</u>, <u>Bjørndal A</u>

N Engl J Med. 2016 Mar 31;374(13):1232-42. doi: 10.1056/NEJMoa1505409.

Extended-Release Naltrexone to Prevent Opioid Relapse in Criminal Justice Offenders.

<u>Lee JD</u>¹, <u>Friedmann PD</u>¹, <u>Kinlock TW</u>¹, <u>Nunes EV</u>¹, <u>Boney TY</u>¹, <u>Hoskinson RA Jr</u>¹, <u>Wilson D</u>¹, <u>McDonald R</u>¹, <u>Rotrosen J</u>¹, <u>Gourevitch MN</u>¹, <u>Gordon M</u>¹, <u>Fishman M</u>¹, <u>Chen DT</u>¹, <u>Bonnie RJ</u>¹, <u>Cornish JW</u>¹, <u>Murphy SM</u>¹, <u>O'Brien CP</u>¹

<u>Lancet.</u> 2011 Apr 30;377(9776):1506-13. doi: 10.1016/S0140-6736(11)60358-9.

Injectable extended-release naltrexone for opioid dependence: a double-blind,

placebo-controlled, multicentre randomised trial.

Krupitsky E¹, Nunes EV, Ling W, Illeperuma A, Gastfriend DR, Silverman BL.

Office-Based Opioid Treatment with Buprenorphine (OBOT-B): Statewide Implementation of the Massachusetts Collaborative Care Model in Community Health Centers.

LaBelle CT, Han SC, Bergeron A, Samet JH.

J Subst Abuse Treat. 2016 Jan; 60:6-13.







Collaborative care of opioid-addicted patients in primary care using buprenorphine: five-year experience.

Alford DP, LaBelle CT, Kretsch N, Bergeron A, Winter M, Botticelli M, Samet JH. Arch Intern Med. 2011 Mar 14;171(5):425-31.

Prev Med. 2015 Nov;80:10-1. doi: 10.1016/j.ypmed.2015.04.002. Epub 2015 Apr 11. Vermont responds to its opioid crisis.

Simpatico TA¹

<u>J Addict Med.</u> 2016 Sep-Oct;10(5):300-8. doi: 10.1097/ADM.00000000000000223. Prescribe to Prevent: Overdose Prevention and Naloxone Rescue Kits for Prescribers and Pharmacists.

Lim JK¹, Bratberg JP, Davis CS, Green TC, Walley AY







Thank you for attending!