

JUSTICE SPEAKERS INSTITUTE TRAINING HANDOUT

IDENTIFICATION OF THE TYPES OF MOUD SUBSTANCES AND THEIR EFFECTS, INCLUDING METHODS OF USE

Dr. William Morrone, MPH
Medical Director and MAT Provider, Recovery Pathways

Dr. Morrone financial disclosures or conflicts of interest:
Recovery Pathways, LLC
Behavioral Institute & Criminal Justice Research
SVSU & Bay County Office of Medical Examiner

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



1

CRIMINAL JUSTICE & SUBSTANCE USE DISORDERS

- 65% Of the U.S. prison / jail population has a Substance Use Disorder (SUD)
- 20% Use drugs, but do not meet criteria for SUD.

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



2

TREATMENT / MAT

- Treatment of U.S. criminal justice population for SUD is Cognitive Behavior Therapy (CBT) or Motivational Interviewing (MI).
- Medication Assisted Treatment (MAT) stabilizes the brain.

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



3

JUSTICE SPEAKERS INSTITUTE TRAINING HANDOUT

AGONIST TREATMENT

- Opioid treatment is an effective treatment for addiction to opioid drugs such as heroin, oxycodone, hydromorphone (Dilaudid), fentanyl and Percocet. The therapy involves taking the opioid agonists methadone or buprenorphine. These medications work to prevent withdrawal and reduce cravings for opioid drugs by connecting with the brain's opioid receptor sites in place of addictive drugs.

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



4

ANTAGONIST TREATMENT

- An antagonist is a medication that blocks opioids by attaching to the opioid receptors without activating them. Antagonists cause no opioid effect and block full agonist opioids. Examples are naltrexone and Vivitrol.

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



5

MEDICATIONS FOR SUBSTANCE USE DISORDERS (SUD)

- Buprenorphine (Suboxone, Zubsolv) sublingual, SQ and implantable
- Naltrexone (oral & injectable Vivitrol) oral and extended release IM injectable
- Methadone – not detox

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



6

JUSTICE SPEAKERS INSTITUTE TRAINING HANDOUT

INTRODUCTION OF BUPRENORPHINE IN BALTIMORE (SCHWARTZ, AJPH MAY 2013)

- Opioid Agonist Treatments and Heroin Overdose Deaths in Baltimore, Maryland, 1995–2009
- Conclusion: Increased access to opioid agonist treatment was associated with a reduction in heroin overdose deaths. Implementing policies that support evidence-based medication treatment of opiate dependence may decrease heroin overdose deaths.
<https://ajph.aphapublications.org/doi/10.2105/AJPH.2012.301049>

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



10

BUPRENORPHINE VS. PLACEBO VS. METHADONE

- Maintenance for Opioid Dependency
- Cochrane Review of 31 trials with over 5,400 participants found:
 - Buprenorphine is an effective medication for retaining people in treatment at any dose above 2 mg and suppressing illicit opioid use (at doses 16 mg or greater) based on placebo-controlled trials.
 - Buprenorphine appears to be less effective than methadone in retaining people in treatment, if prescribed in a flexible dose regimen or at a fixed and low dose (2-6mg per day).
 - However, Buprenorphine prescribed at fixed doses (above 7 mg per day) was not different from methadone prescribed at fixed doses (40 mg or more per day) in retaining people in treatment or in suppression of illicit opioid use.

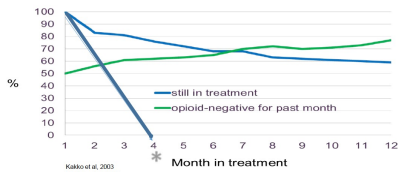
MEDICATIONS FOR OPIOID USE DISORDER TRAINING



11

TREATMENT RETENTION AND DECREASED ILLICIT OPIOID USE ON MAT

- Buprenorphine promotes retention, those who remain in treatment are likely, overtime, to abstain from heroin.
- Zero retention with abstinence. Treatment group is empty for 4 months.



MEDICATIONS FOR OPIOID USE DISORDER TRAINING



12

NALTREXONE

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



13

NALTREXONE (VIVITROL / REVIA / GENERIC)

- Opioid antagonist that blocks other opioids at receptor
- Occupying opioid receptor reduces cravings
- Does not lead to physical dependence, or to withdrawal when stopped because it is an antagonist
- May cause acute withdrawal in opioid-dependent patients
- Can be used in office-based settings without added training
- Effective in alcohol use disorder treatment & FDA approved
- Two formulations available:
 - Oral ReVia, Depade, generic naltrexone daily
 - Injectable Vivitrol monthly

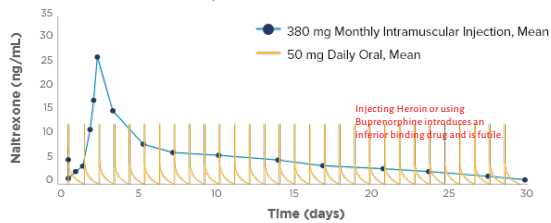
MEDICATIONS FOR OPIOID USE DISORDER TRAINING



14

NALTREXONE CONCENTRATION

FOLLOWING MONTHLY INJECTION COMPARED TO DAILY ORAL DOSING



MEDICATIONS FOR OPIOID USE DISORDER TRAINING



15

JUSTICE SPEAKERS INSTITUTE TRAINING HANDOUT

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. But Buprenorphine (trial complete) is non-inferior in Columbia University (NY) and Norway studies.
- Recent study (Lee, New England Journal of Medicine) in criminal justice population showed short term reduction in opioid relapse compared with “usual care” (not buprenorphine or methadone), and reduction in recidivism and overdose compared with no medication.

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



16

NALTREXONE IN CRIMINAL JUSTICE OFFENDERS

ORIGINAL ARTICLE

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

Joshua D. Lee, M.D., Peter D. Friedmann, M.D., M.P.H., Timothy W. Kinlock, Ph.D., Edward V. Nunes, M.D., Tamara Y. Boney, M.S., C.C.R.C., Randall A. Hoskinson, Jr., Donna Wilson, M.S., Ryan McDonald, M.A., John Rotrosen, M.D., Marc N. Gourevitch, M.D., M.P.H., Michael Gordon, D.P.A., Marc Fishman, M.D., et al.

CONCLUSIONS

In this trial involving criminal justice offenders, extended-release naltrexone was associated with a rate of opioid relapse that was lower than that with usual treatment. Opioid-use prevention effects waned after treatment discontinuation. (Funded by the National Institute on Drug Abuse; ClinicalTrials.gov number, NCT00781898.)

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



17

NALTREXONE IN CRIMINAL JUSTICE OFFENDERS

NEW ENGLAND JOURNAL OF MEDICINE, 374; 13 MARCH 31, 2016

MILESTONES

Fatal Overdose:

- 78 weeks – ZERO overdose in Naltrexone groups
- 78 weeks – Seven overdoses in treatment as usual

Non-fatal Overdose:

- 78 weeks – ZERO overdose in Naltrexone groups
- 78 weeks – Four overdoses in treatment as usual


MEDICATIONS FOR OPIOID USE DISORDER TRAINING



18

METHADONE

MEDICATIONS FOR OPIOID USE DISORDER TRAINING




19

METHADONE

- Methadone is the most used and most studied OUD medication in the world. The World Health Organization (WHO) considers it an essential medication.
- Many clinical trials and meta-analyses have shown that it effectively reduces illicit opioid use, treats OUD, and retains patients in treatment better than placebo or no medication.

MEDICATIONS FOR OPIOID USE DISORDER TRAINING




20

METHADONE

- Methadone maintenance treatment has success rates as high as 90 percent. It raises a patient's chance of long-term recovery compared to patients who don't use methadone treatment to stop taking opioids.
- The data shows that its success rates range between 60 and 90 percent overall. Meanwhile, abstinence-based or "cold turkey" approaches have a five to 10 chance of success.

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



21

JUSTICE SPEAKERS INSTITUTE TRAINING HANDOUT

WHAT DOES THE EVIDENCE SAY?

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



22

WASHINGTON STATE INSTITUTE FOR PUBLIC POLICY

Program name <small>(Click on the program name for more detail)</small>	Date of last literature review	Total benefits	Taxpayer benefits	Non-taxpayer benefits	Costs	Benefits minus costs (net present value)	Benefit to cost ratio	Chance benefits will exceed costs
Medication-assisted Treatment								
Methadone maintenance for opioid use disorder	Dec. 2016	\$8,989	\$1,662	\$7,326	(\$3,907)	\$5,081	\$2.30	82 %
Buprenorphine (or buprenorphine/naloxone) maintenance treatment for opioid use disorder	Dec. 2016	\$8,517	\$1,658	\$6,859	(\$4,792)	\$3,725	\$1.78	78 %
Injectable naltrexone for opiates (for individuals in the criminal justice system)	Dec. 2016	\$316	\$1,724	(\$1,408)	(\$17,166)	(\$16,849)	\$0.02	1 %
Injectable naltrexone for opiates	Dec. 2016	(\$1,032)	\$1,148	(\$2,180)	(\$17,166)	(\$18,197)	(\$0.06)	0 %
Injectable naltrexone for alcohol	Dec. 2016	(\$7,706)	\$243	(\$7,949)	(\$17,166)	(\$24,872)	(\$0.45)	0 %

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



23

BUPRENORPHINE (OR BUPRENORPHINE/NALOXONE) MAINTENANCE TREATMENT FOR OPIOID USE DISORDER

- Buprenorphine/buprenorphine/naloxone is an opiate substitution treatment for opioid dependence. It is a daily medication generally provided in addition to counseling therapies.
- Buprenorphine/buprenorphine/naloxone is a partial agonist that suppresses withdrawal symptoms and blocks the effects of opioids.

Washington State Institute for Public Policy
1010 University Street • PO Box 40100 • Olympia, WA 98512 • 360.407.1400 • www.waipc.org

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



24

JUSTICE SPEAKERS INSTITUTE TRAINING HANDOUT

INJECTABLE NALTREXONE FOR OPIATES

- Long-acting injectable naltrexone is used as an alcohol or opiate antagonist to treat alcohol or opiate dependence. Naltrexone is an antagonist that blocks the euphoric effects of alcohol or opiates, and patients do not develop tolerance or experience withdrawal symptoms when they stop taking the drug. It is intended to reduce cravings and prevent relapse.

Washington State Institute for Public Policy
1100 UNIVERSITY BLVD. • P.O. BOX 40090 • SEASIDE, WA 98132 • 360.535.8200

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



25

METHADONE MAINTENANCE FOR OPIOID USE DISORDER

- Methadone is an opiate substitution treatment used to treat opioid dependence. It is a synthetic opiate that blocks the effects of opiates, reduces withdrawal symptoms, and relieves cravings.

Washington State Institute for Public Policy
1100 UNIVERSITY BLVD. • P.O. BOX 40090 • SEASIDE, WA 98132 • 360.535.8200

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



26

WRAP UP

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



27

JUSTICE SPEAKERS INSTITUTE TRAINING HANDOUT

MEDICATION ASSISTED TREATMENT (MAT)

- What addiction medications are currently available?
- Does the program have established protocols for MAT patients that include provision of therapy as well as medication administration?
- Does program have MAT taper, length of time requirement, or other policy that is not consistent with MAT evidence-based practices?

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



29

MEDICATION ASSISTED TREATMENT (MAT)

- Does the treatment program support MAT approaches to recovery?
- Is the MAT service provided on site or contracted with an outside provider – what is the monitoring protocol?
- What communication protocols are in place with MAT prescribing physicians or other medicals staff to ensure there is adequate communication regarding client’s MAT compliance and progress?

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



30

SUMMARY - MEDICATIONS FOR OPIOID USE DISORDER

- Fentanyl and/or Heroin and methamphetamine overdose deaths are major public health problems
- Medication is the only evidence-based treatment
- Methadone and buprenorphine are effective agonist pharmacotherapies for opioid use disorder
- Naltrexone is non-inferior to buprenorphine and can also be used in patients who are not currently physically dependent on opioids
- Qualified practice settings (QPS) may play an important role in treatment of opioid use disorders and prevention of overdose

MEDICATIONS FOR OPIOID USE DISORDER TRAINING



31

JUSTICE SPEAKERS INSTITUTE TRAINING HANDOUT

THANK YOU

DR. WILLIAM MORRONE, MPH

Consultant–Justice
Speakers Institute

DrMorrone@JusticeSpeakersInstitute.com



Justice Speakers Institute
PROMOTING JUSTICE WORLDWIDE

MEDICATIONS FOR OPIOID USE DISORDER TRAINING