Implementing effective opioid and addiction treatment in criminal justice populations

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Disclosures, LeeJD

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• Study Drug: Alkermes (Vivitrol), Indivior (Suboxone)
• No financial COIs

Core Addiction Medicine Evidence-Based Interventions are all applicable to CJS

1. Smoking screening and smoking cessation medications
2. Screening and Brief Intervention (SBI) for risky alcohol
3. Medications for alcohol and opioid disorders
4. Acute withdrawal management
5. Overdose prevention w Naloxone
6. Non-judgemental treatment of medical and psyche co-morbidities
7. Evidence-based counseling approaches (CBT, MET, Contingency Mgt, Medical Mgt, 12-step)
Heroin users usually relapse after jail... less if MAT

In a recent NYC jail study, 88% of persons not on a medication relapsed to heroin use post-release (LeeJD, 2015, Addiction)

Does exposure to opioid substitution treatment in prison reduce the risk of death after release? A national prospective observational study in England

In a 2017 English national study, prison-based opioid substitution therapy was associated with a 75% reduction in all-cause mortality and an 85% reduction in fatal drug-related poisoning in the first month after release.
Despite the Evidence Supporting MAT…

Communities do not offer enough MAT…

• 2012: only 27.6 percent of heroin users undergoing treatment in the US received some form of MAT *(SAMHSA/TEDS: Treatment Episode Dataset, 2012)

...CJS offers even less

• 0% < Probation/Parole/Drug Court < 28% *(Matusow, 2014)

• 28 (55%) state prison systems offer methadone to inmates
• Over 50% of correctional facilities that offer methadone do so exclusively for pregnant women or for chronic pain management
• 7 states’ prison systems (14%) offer buprenorphine to some inmates.

What is the Difference between Opioid Agonists & Antagonists?
What makes Opioid MAT Rx so ideal?

• Binding Affinity: methadone, buprenorphine, and naltrexone all "out-compete" illicit opioids at the mu opioid receptor...they are 'stickier' and 'block' other opioids
• Agents (all of them) are relatively long-acting compared to illicit opioids... daily or less dosing
• Relatively slow onset by oral, SL, or depot routes (vs. inhaling or injecting illicit opioids)
• At stable doses, patients should feel relatively normal, can work, study, exercise, etc.
• At stable doses, patient experience fewer cravings or urges for illicit opioid use.

Methadone outcomes, 1965-2015

• Less heroin use
• Less IV use
• Less HIV transmission
• Less overdose death
• Less criminal behavior
  (harder to show less recidivism)
• Saves taxpayers money
• Longer lifespan

Methadone prior to prison or jail release is effective
Methadone should be continued during incarceration

Josiah D. Rich, Michelle McKenzie, Sarah Larney, Lien Tran, Jennifer Clarke, Amanda Noska, John B. Wong, Liem Tran, G. Ronald Smith, Jennifer L. Huang, Li Sheng, John H. Mendelson

Figure 2 Probability of attending a methadone clinic in (A) the intention-to-treat and (B) the as-treated populations at 4 weeks follow-up after participants’ release from incarceration.

Methadone continuation versus forced withdrawal on incarceration in a combined US prison and jail: a randomised, open-label trial

The Lancet, 2015

Problems: Methadone Clinics and Stigma

- Federally-licensed clinics treating opioid dependence only
- Limited locations
- Limited number of treatment slots
- May only take insurance
- Daily directly observed therapy (DOT)
- Patients have negative views (sedation, ‘rotting teeth/bones’, forced w/d, ‘handcuffs’)
- Providers have negative views of methadone patients and clinics

Reminder: Buprenorphine & Office-based Treatment

- Medical office visit
- Retail pharmacy
- Chronic treatment
Buprenorphine and Methadone Maintenance in Jail and Post-Release: A Randomized Clinical Trial

- BUP-NX vs. Methadone at arrest
- N=116, 1:1 randomization
- Results:
  - Higher % on BUP in jail (82% vs. 75%)
  - 10% vs. 2% D/C'd meds due to diversion
  - Higher rate of post-release retention if BUP
  - 48% vs. 23% (p<0.005)
- BUP appeared feasible and effective

Buprenorphine-Naloxone Maintenance Following Release from Jail

No differences vs. non-jail patients in community primary care BUP

Extended-Release Naltrexone (Vivitrol):
- Opioid antagonist approach
  - Monthly intramuscular injection
  - Given by nurse, PA, MD, pharmacist
  - Non-narcotic, not a controlled substance
  - Must detox off opioids first!!
  - Jail, prison, detox, rehab, other
  - Not for use if:
    - Pregnancy
    - Chronic pain requiring opioids
Less heroin relapse among parolees and probationers: XR-NTX vs. Treatment as Usual, N=308 across 5 US Sites

LeeJD et al, 2016, NEJM

CJS, MAT, Implementation: What do we do now? Jail incarceration

1. Heroin User
   Jail
   - Begin detox care
   - Offer buprenorphine, methadone, naltrexone
   - Refer back to community treatment

2. Methadone or buprenorphine patient
   Jail
   - No detox
   - Continue methadone/buprenorphine
   - Refer back to community treatment

In a recent NYC jail study, 88% of persons on a medication related to heroin use post-release (LeeJD, 2015, Addiction)
CJS, MAT, Implementation: What do we do now?  
Prison incarceration

Opioid dependent individual

- Prison

Detox vs. Maintenance

Pre-release: Offer buprenorphine, methadone, naltrexone

Refer back to community treatment

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CJS, MAT, Implementation: What do we do now?  
Community Supervision (drug court, probation, parole)

1. Heroin User
   - Offer buprenorphine, methadone, naltrexone

2. Methadone or buprenorphine patient
   - Continue methadone/buprenorphine

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CJS, MAT, Implementation: 
Data is strong, so onto logistics and local factors

- All 3 medications now have solid evidence supporting effectiveness
- Choice depends on patient, provider, environment
  - Is the patient using and in community? Is detox already complete?
  - Is there a provider accepting CJS referrals? Medicaid? Uninsured patients? Meds are covered?
  - How far away is the treatment provider?
  - What are the patient’s preferences and motivations?
Implementation:
Which medications to use? For which patient?
- So...
  - Is there a methadone provider in the county?
  - Is there a buprenorphine provider? Reimbursement?
  - Is there coverage/reimbursement for XR-NTX?
  - What is the patient motivated for?
    - ....any type or choice of MAT will be effective vs. none
- There are no well defined criteria dictating which med for which patient beyond availability and patient preference

Implementation:
How to improve XR-NTX re-entry outcomes?
- Patient matching
  - We don't yet know which patients do best
- Adherence boosters
  - CJS mandated treatment is an acceptable approach
  - Incentive Management works with other conditions
  - Case Management and Patient Navigation under study
  - Psychosocial treatment and meetings are compatible with all medications

Prologue: MAT and CJS
- Community bup-nx and methadone should be continued during incarceration
  - Similar to HIV or MH meds
- Use of MAT (bup-nx, methadone, XR-NTX) is a long-term strategy (“maintenance”)
- Any ‘dose’ of counseling goes with MAT
  - All MAT implies significant counseling from a provider
Thank You