# Addressing the Incarcerated Setting to Achieve HCV Elimination

#### Frederick L. Altice, M.D., M.A.

Professor of Medicine and Public Health Yale University



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#### Why Focus on Prisoners?



When asked about why he kept robbing banks: "it is where the money is!" - Willie Sutton

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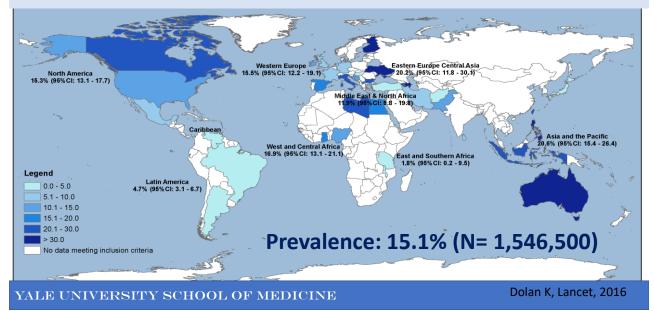
Dolan K, Lancet, 2016

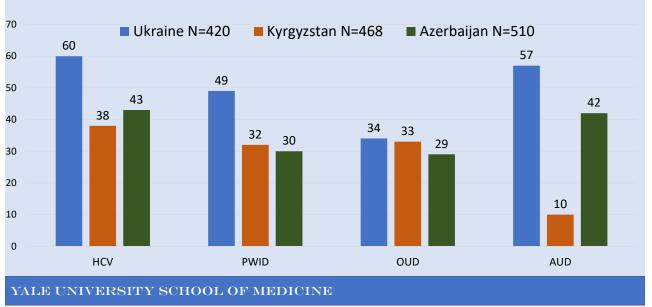
## Overview

- 10.2 M incarcerated at any one time with >30 million transitioning through prisons/jails annually
- What matters:
  - Dynamics (sentenced prisoners, pre-trial detention, compulsory detention, etc)
  - Healthcare Responsibility (Ministries of Health, Justice, Interior, Special Prison branch)
  - High levels of within prison drug injection reported
  - >90% of prisoners will return to their community

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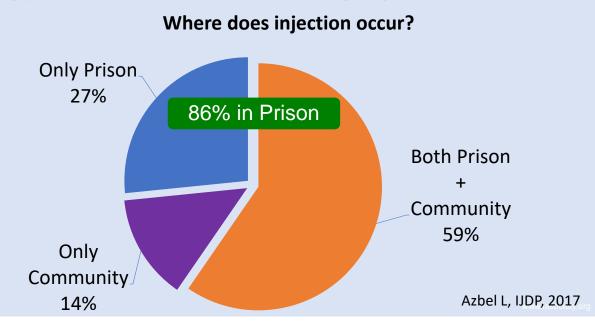
**HCV Prevalence in Prisoners** 

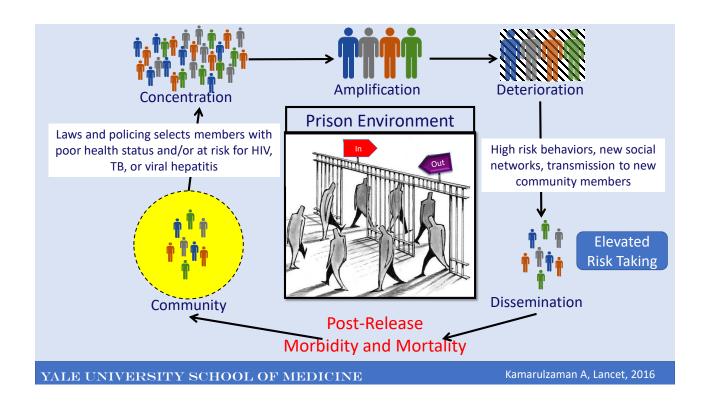




#### Prisoners: Eastern Europe and Central Asia

#### Kyrgyzstan: Within Prison Drug Injection





#### Key Issues

- Pre-DAA era: HCV treatment outcomes were similar in prisoners and the community
- DAA era: SVR rates high, similar to the community
- Costs (payer MoH vs other fixed and limited funding) antiprisoner sentiment
- Restrictions: highly varied across settings despite the principle of equivalence of treatment (prison/community)
- Re-infection within prison and after release

#### **Transitional Care for Incarcerated Persons**



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#### Opioid Agonist Therapies Optimize Community HCV Treatment Outcomes

- Entry: Chronic HCV and adherent with 80% of OAT doses
- Placebo-controlled trial of immediate vs delayed HCV treatment with DAAs
- Outcomes
  - SVR: 91.5% vs 89.5% in immediate vs delayed treatment
  - SVR unchanged by ongoing drug use (~60% of participants)
  - Re-infection rates ~4% (36-month follow-up underway)

Dore G, Annals Intern Med, 2016

#### Lessons Learned from HIV

- HIV patients released from prison with opioid use disorder (74% were co-infected with HCV)
- Patients self-selected buprenorphine, methadone or no OAT
- Independent correlates of viral suppression at 24 weeks
  - Retention on OAT: aOR = 5.4 (1.15–25.1)

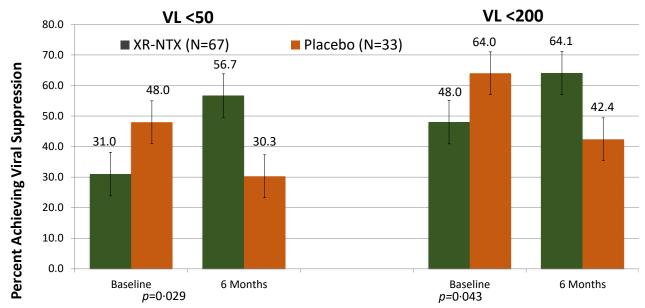
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## Lessons Learned from HIV

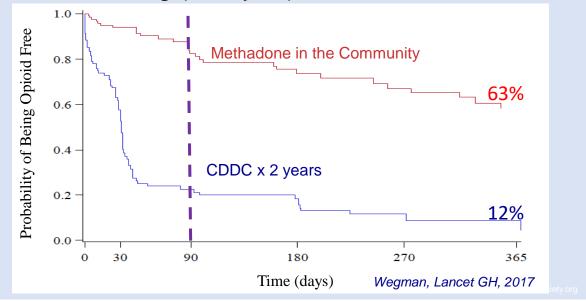
- Two RCTs using XR-NTX in HIV patients transitioning to the community
  - Alcohol (34% HCV+)
  - Opioids (82% HCV+)
- Compared to placebo, patients randomized to XR-NTX were significantly more likely to have viral suppression after 24 weeks
- Retention on XR-NTX was a predictor of outcome

Springer SA, PLoS One, 2012

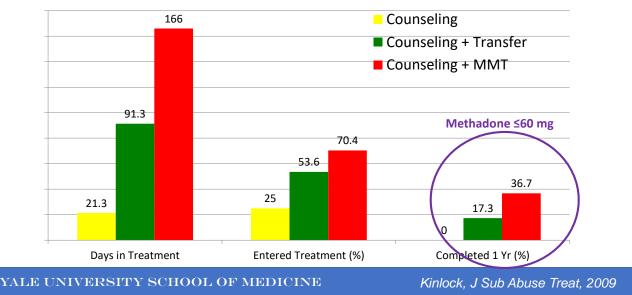
#### Extended-Release Naltrexone Improved HIV Viral Suppression Levels in Prisoners with Alcohol Use Disorders Transitioning to the Community



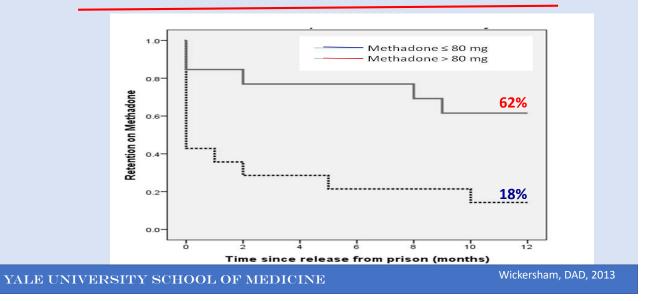
# Impact of Methadone on Opioid Use After Release from a Controlled Setting (Malaysia)

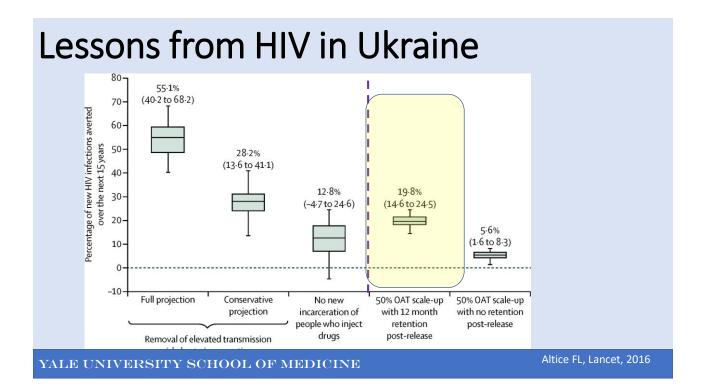


#### Impact of Starting Methadone Treatment Before Release from Prison

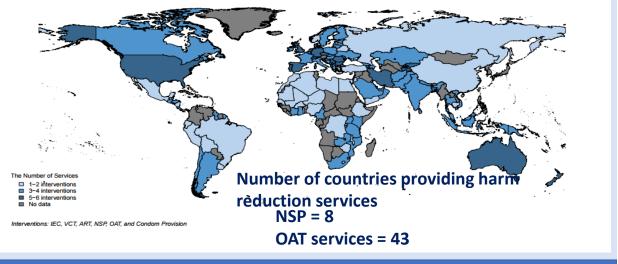








#### Harm Reduction Programs in Prisons



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Kamarulzaman, Lancet, 2016

#### Potential Linkage Strategies to HCV Treatment (and Re-infection Prevention)

- Treatment of underlying substance use disorders
  - Consider new implants (probuphine, naltrexone)
- Needle and syringe programs
- Peer-driven interventions
  - Network-based PDIs
  - Peer navigators
  - Data-to-care strategies Disease Intervention Specialists

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"It is said that no one truly knows a nation until one has been inside its jails. A nation should not be judged by how it treats its highest citizens, but its lowest ones." --Nelson Mandela

