Criminal Justice Settings: Opportunities for Diagnosis and Linkage to Care

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Overview

• 10.2 M behind bars (>30 million transition through 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
Why Focus on Prisoners?

When asked about why he kept robbing banks: “it is where the money is!”
- Willie Sutton
HIV Prevalence in Prisoners

Prevalence: 3.8% (N=389,000)

Dolan K et al, Lancet, 2016
HCV Prevalence in Prisoners

Prevalence: 15.1% (N= 1,546,500)

Dolan K et al, Lancet, 2016
In the prison environment, laws and policing selects members with poor health status and/or at risk for HIV, TB, or viral hepatitis. This leads to concentration, amplification, and deterioration. High risk behaviors, new social networks, and transmission to new community members result in dissemination. Post-release morbidity and mortality follows. Kamarulzaman et al, Lancet, 2016.
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)
• Restrictions: highly varied across settings despite the principle of equivalence of treatment (prison/community)
• Re-infection
  – Within prison
  – After release
Elbasvir-Grazoprevir to Treat Hepatitis C Virus Infection in Persons Receiving Opioid Agonist Therapy
A Randomized Trial
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• 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)

Lessons Learned from HIV

Positive correlates:
- Transitional case management
- ART before release
- Multiple co-morbidity

Negative correlates:
- Brief incarcerations (<30 days)
- Re-incarceration
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)
  - Pre-release VS: aOR = 10.5 (3.21, 34.1)

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 et al, CPDD, 2017
Impact of Opioid Use After Release from a Controlled Setting (Malaysia)

Wegman, Lancet GH, 2017
Impact of Starting Methadone Treatment Before Release from Prison

Kinlock, J Sub Abuse Treat, 2009

Days in Treatment
- Counseling: 21.3
- Counseling + Transfer: 91.3
- Counseling + MMT: 166

Entered Treatment (%)
- Counseling: 25
- Counseling + Transfer: 53.6
- Counseling + MMT: 70.4

Completed 1 Yr (%)
- Counseling: 0
- Counseling + Transfer: 17.3
- Counseling + MMT: 36.7

Methadone ≤60 mg
Impact of Methadone Dose on Retention on Treatment in Malaysia


Graph showing retention on methadone over time since release from prison (months). Two lines represent different methadone doses: methadone ≤ 80 mg and methadone > 80 mg. The graph indicates a retention rate of 62% for the lower dose and 18% for the higher dose.
Lessons from HIV in Ukraine

Altice FL et al, Lancet, 2016

- Full projection: 55.1% (40.2 to 68.2)
- Conservative projection: 28.2% (13.6 to 41.1)
- No new incarceration of people who inject drugs: 12.8% (-4.7 to 24.6)
- 50% OAT scale-up with 12 month retention post-release: 19.8% (14.6 to 24.5)
- 50% OAT scale-up with no retention post-release: 5.6% (1.6 to 8.3)

Removal of elevated transmission risk due to incarceration

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

• Opioid agonist therapies
  – Consider new implants (probuphine, naltrexone)
• Needle and syringe programs
• Peer-driven interventions
  – Network-based PDIs
  – Peer navigators
  – Data-to-care strategies – Disease Intervention Specialists
“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