Convergence of HIV, TB, Drug Use, Hepatitis

Transforming the HIV/TB Response: Defining the next 10 years
Estimated numbers of IDUs and regional prevalence of HIV in people who inject drugs, 2010

Opium production in Afghanistan 1980-2009

Modified from data from the UNODC World Drug Reports
Prevalence of IDU among MSM in Southern Africa

<table>
<thead>
<tr>
<th>Country</th>
<th>Sample Size (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi</td>
<td>18</td>
</tr>
<tr>
<td>Namibia</td>
<td>16</td>
</tr>
<tr>
<td>Botswana</td>
<td>4</td>
</tr>
<tr>
<td>South Africa</td>
<td>5</td>
</tr>
<tr>
<td>Pooled</td>
<td></td>
</tr>
</tbody>
</table>

Prevalence of IDU among MSM in Malawi (n=18)
HCV follows IDU epidemics...

- Injection drug use reported in 151 countries
- Estimated 15.9 million IDUs
- Evidence of HCV in 57 countries where IDU reported
- All report estimates >20%

Aceijas and Rhodes Int J Drug Policy 2007
In most settings, the prevalence is much higher.
Most HIV-infected IDUs are co-infected with HCV

- Men who have sex with men
- Heterosexual
- Injection drug users

Rockstroh JID 2005; Sulkowski Ann Intern Med 2003;
Most HIV-infected IDUs are co-infected with HCV (ASIA)

- Chennai
- NE India
- Vietnam
- Taiwan

HCV coinfected

HIV only

Most HIV-infected IDUs are co-infected with HCV in ASIA.
Estimated TB incidence rates, 2010

TB Incidence

Estimated HIV prevalence in new TB cases, 2010

HIV Prevalence in TB Cases

WHO, Global TB Control 2011
Percent of TB Patients Tested for HIV: 2004 and 2010

- Global: 3% (2004), 34% (2010)
- AFRO: 4% (2004), 59% (2010)
- AMRO: 22% (2004), 46% (2010)
- Brazil: 41% (2004), 45% (2010)
- South Africa: 5% (2004), 53% (2010)
Combination prevention and treatment approaches for people who use drugs
Effect of ART on HIV incidence after 5 years for different eligibility criteria and yearly recruitment rates.

Scaling up Combination HIV Interventions when force of infection is great: Nairobi. (Strathdee, et al, Lancet 2010)

Must optimize *efficacy AND coverage* of needle exchange programs and opioid substitution tx to have impact
New HIV-1 diagnoses in France, 2003–08

IDU as share of total HIV cases and of patients receiving ART, 2008

IDUs receiving government-funded methadone or buprenorphine treatment, 2009

Number of IDUs receiving government-funded methadone or buprenorphine treatment versus those in drug detention, 2009

Detention is not Treatment: A voice from China

“I was addicted to heroin for several years before being sent to into an involuntary treatment centre in my country. Since the day I was sent, I was never given any medicine … As soon as I was considered ‘detoxified’, the warden hurriedly arranged for me to labour at a locked factory. I worked 16 hours a day, overstretched, and if I failed to complete my workload, I would be treated with violent beatings…

“It is dubbed ‘rehabilitation through labour’ but I never felt that I was rehabilitating; the only thing I felt was punishment, and I believe everyone else there felt the same.”

--Li Wei
Drug use and drug policies are driving emerging HIV, hepatitis, TB epidemics in too many settings.

Combination approaches to prevention and treatment for drug users can save lives and can control disease spread.

Incarceration is not treatment, detention is not treatment, and both increase disease risks and vulnerabilities.
Acknowledgements

• Lancet Co-authors
  – Steffanie Strathdee
  – Louisa Degenhardt
  – Brad Mathers
  – Daniel Wolfe

• Johns Hopkins
  – David Dowdy  Andrea Wirtz
  – Shruti Mehta  Deanna Kerrigan
  – Stef Baral