Challenges in Implementing HIV Prevention and Treatment in EECA: Setting Priorities

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Percent Change in New HIV infections: 2005 to 2015

- 48% deaths
- 11% new cases

+ 58% new cases
+ 24% deaths
Guidance to Reverse the HIV Epidemic in EECA

• HIV epidemic remains concentrated in key populations:
  – PWID (mostly opioids with increasing ATS)
  – Transition to sexual partners of PWID
  – Emerging epidemics in MSM

• Data often limited to “official” reporting data (“Registration”)

• Overcoming the “Not Invented Here” conundrum
Evidence-Based Strategies to Prevent HIV Transmission

- Opioid Agonist Therapy (OAT Coverage)
- Syringe Services Programs
- Treatment as Prevention (HIV TasP)
- Pre-Exposure Prophylaxis (PrEP)
Opioid Agonist Therapies and the HIV Treatment Cascade

- Decreases HIV transmission: 54%
- Increase ART prescription: 54%
- Increase ART adherence: 214%
- Increase viral suppression: 45%
- Decrease ART discontinuation: 33%

Preventing HIV: OAT and ART

HIV Infections Averted

- Methadone: $530
- ART: $2,240
- OAT: $1,120

* p<0.05; ‡ p <.001

Mazhnaya A, JAIDS, In press
Coverage with Opioid Agonist Therapy
Based on Official Registration

Official Registration: ~57,000 (17.5%)
Coverage with Opioid Agonist Therapy
Based on Number of PWID

Estimated PWID: 340,000
Number on OAT: 10,451
Coverage: 3.0%

RECOMMENDED: >20%
Hierarchy of Barriers

82% of the perceived barriers

Zelenev A, DAD, in press
Potential Direction for Scale-up?

- Removal of Official Registration
- Altering direct supervision policies
- Increasing prescription of OAT?
  - Incentives to pharmacies (?)
- Increasing treatment in primary care settings
- Alternative financing strategies (pay for performance)
- Private treatment programs (fee-for-service)
Increasing HIV Cases in Heterosexual Men: Misclassification

- Ukraine Data Synthesis Project
  - Not unique to Ukraine, but throughout EECA
- Low reporting of MSM → 8.2%
- High prevalence of HCV (25.2%) → 34.5%

Table 1: Reported and estimated HIV cases by transmission category, adult and adolescent men, Ukraine, 2005–2011

<table>
<thead>
<tr>
<th>Case reporting category</th>
<th>As reported</th>
<th>Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men who have sex with men</td>
<td>493</td>
<td>2006</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>19,569</td>
<td>11,305</td>
</tr>
<tr>
<td>Persons who inject drugs</td>
<td>38,125</td>
<td>44,876</td>
</tr>
<tr>
<td>Other (nosocomial infections, blood transfusion and unclassified)</td>
<td>1343</td>
<td>1343</td>
</tr>
<tr>
<td>Total</td>
<td>59,530</td>
<td>59,530</td>
</tr>
</tbody>
</table>

Cakalo J, AIDS Behav, 2015
MSM and HIV in Ukraine

• Of all reported HIV cases in Ukraine, <1000 are reported to be among MSM

• Yet:
  – Estimated MSM (Ukraine): 181,000
  – 734,400 and 2.7M (1.6% to 6%)
  – HIV prevalence in MSM: 8.5% (~16,000)
Evidence-Based Strategies to Prevent HIV Transmission

- Medication-Assisted Treatment (MAT)
- SSP Programs (Syringe Services Programs)
- Treatment as Prevention (TasP)
- Pre-Exposure Prophylaxis (PrEP)
Effectiveness of TDF/FTC PrEP Improves With Adherence

PrEP is only available for small demonstration project in Kyiv

*Reduction in HIV incidence vs control. †Based on pill counts or the detection of study drug in plasma.
HIV and Prisoners (2011)

Official Prison Data
- Census: 149,000
- HIV: 6,069 (4.1%)
- On ART: 2,024 (33.4%)
- Registered with narcology service: 16,394 (11.1%)

Surveillance Data
- Randomized surveillance
- HIV: 19.4%
- 50% did not know their status
- On ART: 6.4%
- 56% met criteria for ART (CD4<350)
  - 11.4% on ART
- Opioid dependence: 49%
Summary

• HIV prevention and treatment strategies should be based on verifiable and objective data
  – Monitoring and evaluation may not be sufficient

• Implementation of evidence-based prevention and treatment should be tailored for the needs, including overcoming policy and stigma factors