TRANSLATING SCIENCE TO END HIV IN EASTERN EUROPE AND CENTRAL ASIA

AIDS 2018 POST-CONFERENCE SYMPOSIUM

Georgia, 20 June 2019
Harm reduction services – Innovative ways forward

Anna Deryabina,
ICAP at Columbia University
• **275 million** people use drugs
• **30+ million** people suffer from drug use disorders
• **10.6 million** people inject drugs (PWID)
• **3.3 million** people die from harmful use of alcohol every year
• **1.6-1.7 million** PWID living with HIV

UNODC, World Drug Report, 2018
HIV and Substance Use by Region

**Outer circle** - Number of PWID

**Inner circle** – number of PWID living with HIV

**Europe** – Western and Central (WC) and Eastern & South Eastern (ESE)

**Asia** – Central Asia & Transcaucasia (CAT), East & South-East (ESE), South-West (SW), North & Middle-East (NME), South (S)

**Americas** – North (N) and Latin & Caribbean (LAC)

*UNODC, World Drug Report, 2017*
HIV and Substance Use

- Increased risk of sexual transmission
- 24x increased HIV acquisition by PWID
- Use of opioids associated with increased risk of immunosuppression among PLHIV
- Challenges in retention and adherence with HIV treatment
- Limited access to services due to stigma and discrimination
Challenges to the HIV Continuum For PWID

- **Identify KPs**: Difficult to find stigmatised and hidden populations; KP not self identified, criminalisation of behaviours; violence; services are not available, accessible or acceptable
- **Reach KPs**: Ineffective testing protocols; stigma; lack of voluntary testing services
- **Diagnose**: Loss to follow-up, poor linkages between KP services and treatment
- **Enrol in care**: Low ARV literacy and awareness; lack of support for KP on ART; not addressing other health and social issues may lead to decreased treatment adherence; may be incarcerated, interrupting treatment
- **Initiate ART**: 
- **Sustain on ART**: 
- **Suppress viral load**:

[Image of IAS logo and World Health Organization logo]
PLHIV (PWID [N1=13,727] and non-PWID [N2=20,177]) enrolled in HIV care, on ART and with viral load suppression (<1000 copies/mL) as of December 31, 2018 in Kazakhstan, the Kyrgyz Republic and Tajikistan.
Improving HIV Testing
HIV Self-Testing

Green K, et al. IAS2017

www.iasociety.org
Social Network Methods

- respondent-driven referral
- peer-based active case-finding

Outreach HIV Testing

1-2% -> 9-16%

Oprimized Case Finding

Kan M et al. J. IAS 2018
Mobile & Online Services

- Online counselling and information service
- HIV risk screening and navigation to testing facilities
- A drug checking service
Improving ART Initiation & Adherence
Opioid Agonist Therapy

- Facilitates ART initiation
- Increases adherence to ART
- Reduces treatment discontinuation
- Increases viral load suppression
- Improves HIV prevention benefit of ART

Mukandavire Ch. et al. AIDS. 2017
Low A. et al, Clinical Infectious Diseases, 2016
Integration of Services

HIV-infection  Tuberculosis  Opioid dependence

Separate
Patients receive services in different facilities

Partial integration
Specialized services integrate some key services

Full integration & co-location
Patients receive all the required services in one site
Integration of Services

Proportion of PLHIV enrolled in OAT on ART

--- | --- | --- | ---
Intervention Sites | Non-intervention sites
42% 41% | 91% 80% | 69% 75% | 87% 63%

Proportion of PLHIV enrolled in OAT on ART with viral load suppression (<1000 c/ml)
Extended-Release Naltrexone

VS by treatment group from baseline to 6 months.

Baseline | 6 months | Baseline | 6 months
---|---|---|---
<50 copies/mL | <200 copies/mL |<50 copies/mL

- Improved to VS: XR-NTX 30.3, Placebo 18.5
- Maintained VS: XR-NTX 30.3, Placebo 27.3
- Lost VS: XR-NTX 7.6, Placebo 6.7
- Remained Detectable: XR-NTX 33.3, Placebo 31.8

<50 copies/mL

Springer et al. JAIDS, 2018
Home-based adherence support

Viral load suppression among those completed program

- Newly initiated on ART
- Patients with unsuppressed baseline viral load

- Reported ever injecting drugs
- No reported history of injecting drug use

$p > 0.05$
Improving Prevention of HIV Acquisition
Pre-Exposure Prophylaxis (PreP)

Unmatched case-control study limited to tenofovir recipients

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<tr>
<th></th>
<th>HIV +</th>
<th>HIV -</th>
<th>Total</th>
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<tbody>
<tr>
<td>Tenofovir detected</td>
<td>5 (39%)</td>
<td>93 (67%)</td>
<td>98</td>
</tr>
<tr>
<td>Tenofovir not detected</td>
<td>8 (61%)</td>
<td>45 (33%)</td>
<td>53</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13</td>
<td>138</td>
<td>151</td>
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Index partner testing with HIV-infection recency assays

Vasylyeva T, AIDS Care. 2015
Differentiated Service Delivery

For all PWIDs:
• Needle and syringe programs
• Opioid agonist therapy
• HIV testing services
• Condom programs
• Targeted information, education and communication
• Diagnosis, prevention and treatment of TB, STIs, and viral hepatitis
• Community distribution of naloxone

For HIV-Negative PWIDs:
• HIV prevention methods (e.g. PrEP)

For HIV-Positive PWIDs:
• Antiretroviral therapy
• Adherence support

Critical Enablers
• Supportive legislation, policy, and financial commitment
• Addressing stigma and discrimination
• Accessible, available and acceptable health services
• Community empowerment
• Addressing violence against people from key populations
Elements of HIV Programs for PWID (N=46 countries)

Adapted from Regional Summary: Assessment of HIV Service Packages for Key Populations in Selected Countries in Middle East and North Africa (2019), APMG
Pathway to achieve HIV epidemic control among PWID

HIV self-testing & Peer-based active case finding
Integration of OAT & HIV treatment
Support for ART adherence

HIV TX PROGRAMS

SOCIAL ENABLERS
- Decriminalize drug use
- Eliminate stigma & discrimination
- Engage PWID-led CBOs
- Employ DSD care models

Expanded access to OAT, NSP & other effective substance use treatment options

Expanded coverage with NSP & OAT
Offer PrEP

Primary HIV PREVENTION

Substance USE TX PROGRAMS
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• PEPFAR/CDC in Central Asia