Piloting a peer-driven intervention model in Latvia and Lithuania: results and information gained

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UNODC Project Office for the Baltic States
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Background info

• UNODC project ”HIV/AIDS prevention and care among injecting drug users and in prison settings in Estonia, Latvia and Lithuania”

• Low numbers of new clients, especially, stimulant users

• Limited knowledge about drug users’ habits, risk behavior, HIV knowledge and accessibility to health care services
Aim and Objectives

To study effectiveness of Peer-Driven Interventions

• To recruit injecting drug users (IDUs), in particular those who have not been previously in contact with harm reduction program
• To collect information about IDUs’ risk behavior and HIV knowledge
• To educate/ train IDUs on HIV prevention
• To refer IDUs to other services
Methods

- Harm reduction programs in Latvia and Lithuania
- Involvement of current drug users using respondent driven sampling and chain-referral education and recruitment outreach model
- Reward system based on prepaid phone cards (credits)
- Knowledge assessment: 8-item knowledge test
- Anonymous survey: structured questionnaire
- Project implementation (data collection) period:
  - Latvia: February – July 2010 (6 months)
  - Lithuania: January (April) – June (August) (6 months)
Respondent-Driven sampling
## Reward system

<table>
<thead>
<tr>
<th>Involvement in the project (questionnaire)</th>
<th>Latvia</th>
<th>Lithuania</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 card = 1 or 0.99 LVL</td>
<td>2 cards = 10 LTL</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recruit new IDU (have not been previously in contact with the LTC)</th>
<th>Latvia</th>
<th>Lithuania</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 card</td>
<td>1 card = 5 LTL</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of correct answers (knowledge test)</th>
<th>Latvia</th>
<th>Lithuania</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5 = no reward</td>
<td>≤ 5 = no reward</td>
<td></td>
</tr>
<tr>
<td>5 or 6 = 1 card</td>
<td>≥ 6 = 1 card</td>
<td></td>
</tr>
<tr>
<td>≥ 7 = 2 cards</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Max reward one recruiter could receive</th>
<th>Latvia</th>
<th>Lithuania</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 LVL or ~18 USD</td>
<td>40 LTL or ~16 USD</td>
<td></td>
</tr>
</tbody>
</table>

* 20 LTL could be exchanged to Maxima gift card in one LT site
## Participants

<table>
<thead>
<tr>
<th></th>
<th>Latvia</th>
<th>Lithuania</th>
</tr>
</thead>
<tbody>
<tr>
<td>The total number of participants</td>
<td>1196</td>
<td>367</td>
</tr>
<tr>
<td>The number of valid questionnaires</td>
<td>1152</td>
<td>367</td>
</tr>
<tr>
<td>The number of new clients</td>
<td>969 (84.1%)</td>
<td>324 (88.3%)</td>
</tr>
<tr>
<td>Number of sites</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Number of sites included in the data analysis</td>
<td>11</td>
<td>6</td>
</tr>
</tbody>
</table>
Knowledge test

1. HIV routes of transmission and the “window” period of HIV infection
2. Main dangers of injection drug use
3. Impact of stimulant use on health
4. Reasons of opiate overdose and response to a peer’s drug-overdose
5. Principles of safer sex
6. Meaning of cross-infection
7. Difference between hepatitis A, B & C
8. Available services for IDUs in local area
Necessary inputs for PDI

• **Rewards**
  – Motivating
  – Legal
  – Cost-effective
    • 3.34 LVL (6.47 USD) were spent for involvement of one client in PDI

• **Time**
  – Selection and training of “seeds”: ~ 40 minutes for training of “seeds”
  – Knowledge assessment: ~ 15 minutes

• **Other (optional):** documentation, questionnaire, premises, tea, coffee, biscuits
DATA FROM QUESTIONNAIRES
<table>
<thead>
<tr>
<th></th>
<th>Latvia</th>
<th></th>
<th>Lithuania</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>883</td>
<td>76.6</td>
<td>294</td>
<td>80.1</td>
</tr>
<tr>
<td>Female</td>
<td>269</td>
<td>23.4</td>
<td>73</td>
<td>19.9</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 20</td>
<td>115</td>
<td>10.0</td>
<td>37</td>
<td>10.1</td>
</tr>
<tr>
<td>20 – 25</td>
<td>311</td>
<td>27.0</td>
<td>102</td>
<td>27.8</td>
</tr>
<tr>
<td>&gt; 25</td>
<td>726</td>
<td>63.0</td>
<td>228</td>
<td>62.1</td>
</tr>
<tr>
<td>Mean age</td>
<td>28.9 (17-68)</td>
<td></td>
<td>29.05 (15-65)</td>
<td></td>
</tr>
</tbody>
</table>

Most of respondents are males older than 25 years
## Sociodemographic characteristics cont.

<table>
<thead>
<tr>
<th></th>
<th>Latvia</th>
<th>Lithuania</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latvian</td>
<td>439</td>
<td>38.3</td>
</tr>
<tr>
<td>Lithuanian</td>
<td>6</td>
<td>0.5</td>
</tr>
<tr>
<td>Russian</td>
<td>593</td>
<td>51.7</td>
</tr>
<tr>
<td>Polish</td>
<td>37</td>
<td>3.2</td>
</tr>
<tr>
<td>Roma</td>
<td>15</td>
<td>1.3</td>
</tr>
<tr>
<td>Other</td>
<td>56</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Imprisonment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>465</td>
<td>40.6</td>
</tr>
<tr>
<td>No</td>
<td>679</td>
<td>59.4</td>
</tr>
</tbody>
</table>
### Sociodemographic characteristics cont.

<table>
<thead>
<tr>
<th>Education</th>
<th>Latvia</th>
<th>Lithuania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never attended the school</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Primary</td>
<td>152</td>
<td>33</td>
</tr>
<tr>
<td>Basic</td>
<td>387</td>
<td>124</td>
</tr>
<tr>
<td>Secondary</td>
<td>319</td>
<td>120</td>
</tr>
<tr>
<td>Special secondary (vocational)</td>
<td>234</td>
<td>84</td>
</tr>
<tr>
<td>Higher</td>
<td>48</td>
<td>6</td>
</tr>
</tbody>
</table>

- Latvia:
  - Never attended: 12 (1.0%)
  - Primary: 152 (13.2%)
  - Basic: 387 (33.6%)
  - Secondary: 319 (27.7%)
  - Special secondary: 234 (20.3%)
  - Higher: 48 (4.2%)

- Lithuania:
  - Never attended: 0 (0%)
  - Primary: 33 (9.0%)
  - Basic: 124 (33.8%)
  - Secondary: 120 (32.7%)
  - Special secondary: 84 (22.9%)
  - Higher: 6 (1.6%)
### Sociodemographic characteristics cont.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Latvia</th>
<th></th>
<th>Lithuania</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td><strong>Employed (permanent job)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>152</td>
<td>13.2</td>
<td>12</td>
<td>3.3</td>
</tr>
<tr>
<td>Employed (not permanent job)</td>
<td>303</td>
<td>26.3</td>
<td>33</td>
<td>9.0</td>
</tr>
<tr>
<td><strong>Unemployed</strong></td>
<td>577</td>
<td>50.1</td>
<td>282</td>
<td>76.8</td>
</tr>
<tr>
<td>Pupil/ student</td>
<td>59</td>
<td>5.1</td>
<td>33</td>
<td>9.0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>1.9</td>
</tr>
<tr>
<td>No answer</td>
<td>61</td>
<td>5.3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Majority of respondents started to use drugs being adolescents.
In Latvia: 41.2% started illegal drug use with marijuana, and 24.3% with amphetamines.

In Lithuania: 37.5% started illegal drug use with marijuana, and 31.3% with heroin or opium extract.
In Latvia: currently 50.7% mainly use amphetamines and 34.3% - heroin

In Lithuania: currently 77% mainly use heroin and 12.9% - amphetamines
Drugs used in the last month in Latvia

- Heroin: 74.2%
- Tramadol / tramal: 50.0%
- Amphetamines: 17.8%
- Opium (poppy seed) extract: 17.6%
- Methadone or Subutex: 18.2%
- Cocaine: 9.9%
- Crystalized methamphetamine: 5.4%
- Liquid methamphetamine: 3.7%
- Methcathinone: 15.3%
- Catinon: 4.6%
- Ecstasy, MDMA: 4.1%
- LSD: 5.6%
- Marijuana: 33.9%
- Other hallucinogens: 7.4%
- Inhalants: 1.0%
Drugs used in the last month in Lithuania, %

- Tramadol: 8.7%
- Heroin: 86.1%
- Opium extract: 13.1%
- Methadone or Subutex: 19.9%
- Morphine: 1.1%
- Cocaine: 4.6%
- Amphetamine: 51.8%
- Ecstasy: 8.7%
- Dzer: 0.5%
- LSD: 6%
- Marijuana: 26.7%
- Inhalants: 0.5%
Part of drug users use both stimulants and opiates.
## Duration of injecting drug use, years

<table>
<thead>
<tr>
<th>Duration</th>
<th>Latvia</th>
<th></th>
<th></th>
<th>Lithuania</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td></td>
<td>n</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>&lt; 3</td>
<td>211</td>
<td>18.5</td>
<td></td>
<td>34</td>
<td>9.3</td>
<td></td>
</tr>
<tr>
<td>3 - 5</td>
<td>154</td>
<td>13.5</td>
<td></td>
<td>89</td>
<td>24.3</td>
<td></td>
</tr>
<tr>
<td>5 - 10</td>
<td>359</td>
<td>31.5</td>
<td></td>
<td>105</td>
<td>28.6</td>
<td></td>
</tr>
<tr>
<td>&gt; 10</td>
<td>417</td>
<td>36.5</td>
<td></td>
<td>139</td>
<td>37.8</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1141</td>
<td>100.0</td>
<td></td>
<td>367</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Mean duration</td>
<td>9.5 (0 – 52)</td>
<td></td>
<td></td>
<td>10.0 (0 – 46)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Majority of respondents has long history of injecting drug use
Injecting duration by city-site, in years

- Jēkabpils
- TB clinic - Riga
- AIDS center - Riga
- Daugavpils
- Olaine
- Ogre
- Kaunas
- Vilnius
- Alytus

Legend:
- <3
- 3-5
- 5-10
- >10
RISK BEHAVIOR
It is important to educate drug users about other HIV and overdose prevention measures.
# Sharing injecting paraphernalia

<table>
<thead>
<tr>
<th></th>
<th>Latvia</th>
<th></th>
<th>Lithuania</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Inject with other person’s syringe</td>
<td>399</td>
<td>35.3</td>
<td>123</td>
<td>33.5</td>
</tr>
<tr>
<td>Gave his/her used syringe to others</td>
<td>570</td>
<td>50.0</td>
<td>181</td>
<td>49.3</td>
</tr>
<tr>
<td>Used new (sterile) syringe last time when injected</td>
<td>1010</td>
<td>87.9</td>
<td>263</td>
<td>71.7</td>
</tr>
</tbody>
</table>
Sharing of syringes

- Mean number of people who has taken respondent’s already used syringe:
  - 2.2 (1-20) in Latvia
  - 3.5 (1-90) in Lithuania
- Mean number of people who has given to respondent used syringe:
  - 2.1 (1-10) in Latvia
  - 2.5 (1-50) in Lithuania
- 90% received syringes from familiar persons; 9% from both familiar and unfamiliar; 1% from unfamiliar

Majority of respondents share their syringes with few, well-known persons
Repeated use of own syringe

- 80% respondents in LV and 83% respondents in LT have used their own syringe several times.
- Mean number of times respondents used their own syringes:
  - 3.3 (1-50) in Latvia
  - 4.4 (1-50) in Lithuania
- Most often respondents use their own syringe 2 or 3 times.
- Those with longer injection history tend to use their own syringe more times than those who inject drugs for less years.
KNOWLEDGE
UNGASS questions (correct answers)

- Does one, faithful, HIV-partner reduce the risk of getting HIV? 80.6% (Latvia), 85% (Lithuania)
- Does a condom use during sex reduce the risk of getting HIV? 97% (Latvia), 95.6% (Lithuania)
- Can a healthy looking person be HIV positive? 80.6% (Latvia), 88.3% (Lithuania)
- Can you get HIV from the insect bite? 83.3% (Latvia), 57.5% (Lithuania)
- Can you get HIV if you eat together with the HIV positive person? 88% (Latvia), 77.7% (Lithuania)

Legend:
- Green: Latvia
- Blue: Lithuania
Those who have *been in prison* (and males in LT) know more about HIV prevention and have less misconceptions about HIV transmission. 34.6% of respondents in LT and 44.1% in LV *don’t know* about *dual infection*
Knowledge about overdose prevention

1. Call the ambulance
2. Take out and hold the tongue
3. Check the pulse
4. Lay a person down on a side
5. Do not let to fall asleep
6. Make artificial respiration
7. Make heart massage
8. Put something under the neck
9. Inject Nalaxone
10. Other

- Overdosed drugs
- Witnessed overdose
- Know how to help

How did you help to the person who overdosed?

- Latvia
- Lithuania
Knowledge about needle and syringe disinfection

Do you know how to disinfect used syringe?

- In Latvia: 90% Yes, 10% No
- In Lithuania: 87.5% Yes, 12.5% No

Other:
- In Latvia: put needle in the flame, boil syringe and needle, use vinegar essence for washing the syringe etc.
- In Lithuania: washed and boiled

HIV resistance:
- Boiled – straight away at 100°C, 20 min. - in 56°C
- Alcohol - 10 min.
- Chlorine, bleach - 1-5 min.

How do you disinfect used syringe?

- Cold water: Latvia 52.6%, Lithuania 62.3%
- Hot water: Latvia 45.2%, Lithuania 48.6%
- Boil briefly: Latvia 61.4%, Lithuania 12.5%
- Spirit or alcohol: Latvia 44.3%, Lithuania 24.9%
- Bleach, chlorine: Latvia 9.2%, Lithuania 10.9%
- Other: Latvia 6.2%, Lithuania 1.55%
RISK PRACTICES ASSOCIATED WITH SEX
Sexual activity

Amphetamine users are more sexually active and have had more sexual partners in comparison with heroin users.
Condom use during the last 30 days

34.5% in LV and 22.8% in LT of those who have more than one sexual partner always used condom
Condom use with casual sexual partner during 30 days

42.2% in LV and 30.0% in LT of those who have more than one sexual partner always used condom.
ACCESSIBILITY OF SERVICES
Purchase of condoms

Where did you obtain condoms during the last year?

- Bought: Latvia 34.4%, Lithuania 39.2%
- Received for free: Latvia 9.5%, Lithuania 11.4%
- Bought and received for free: Latvia 21.6%, Lithuania 6.8%
- Don’t need them: Latvia 30.8%
- N/A: Latvia 34.5%, Lithuania 11.7%

Legend:
- Green: Latvia
- Blue: Lithuania
Testing for HIV and hepatitis B and C

More LT respondents are tested for HIV and hepatitis B/C, but...
WHO/UNODC/UNAIDS coverage indicator
HIV testing and counselling

Have you been tested for HIV during the last 12 months and know the result?

<table>
<thead>
<tr>
<th>Low</th>
<th>≤40%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium</td>
<td>&gt;40-≤75%</td>
</tr>
<tr>
<td>High</td>
<td>&gt;75%</td>
</tr>
</tbody>
</table>

Latvia: 31.2%
Lithuania: 46.6%
LT: longer injectors and those who have been in prison are more tested for HIV/C/B. LV: longer injection history = higher prevalence of lifetime testing.
Purchase of needles during last year

Only 24.7% of LT and 38.7% of LV new clients receive syringes from LTC.
Number of clean (sterile) needles per month

Mean number of clean (sterile) needles per month in Lithuania - 28,87 (1-200) SD= 31,371
in Latvia - 27,48 (0-400) SD=27,992
Health care services (1)

What doctors have you visited/approached during the last year?

- Family doctor
- Surgeon
- Infectologist
- Narcologist
- Psychologist
- Other specialist

Other specialist:
in Latvia: mainly gynaecologist,
in Lithuania: mainly gynaecologist and dentist
Those who use opiates as a primary drug, have more often undergone drug dependency treatment, especially detoxification, out-patient treatment, day-care treatment.
CONCLUSIONS
Effectiveness of PDI method

• Reached and educated significant amount of new clients
  – 3.2 times in LV and 1.7 times in LT in comparison with the same period in 2009

• Increased overall number of clients

• Assessed drug users’ knowledge of HIV prevention and behavior risks

• Showed that drug users are underestimated source for transfer of knowledge / information

• Low costs, but it is important to find the “cost-effective” reward
General findings

- Many drug users use both opiates and stimulants
- Half of respondents have shared injecting equipment
- HIV testing level is low
- Knowledge is insufficient:
  - about syringe disinfection
  - overdose prevention
  - dual infection
- Sexual behavior is very risky
Thank you for attention!

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