Review of Cost-effectiveness Analyses of Injecting Drug User Interventions to prevent HIV in Asia

Authors: Anita Alban, Ditte Hjorth Hansen, Celie Manuel

Presenter: Anita Alban

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The study is targeted at the strategic decision-making level

- Are current responses effective and cost-effective?
- What is the scale-up perspective?
- Priority Setting of Injecting Drug User (IDU) interventions in Asia
Benchmarks for decision-making (WHO)

Very cost-effective: cost per DALY: less than average per capita income in a given country

Cost-effective: cost per DALY: less than 3 times average per capita income (CMH)

Results: IDU HIV interventions in Asia: USD 64-325 per DALY = very cost-effective
### CEA of IDU HIV Interventions: Comparative Analysis I

<table>
<thead>
<tr>
<th>Country</th>
<th>Reference year of analysis</th>
<th>HIV Prevalence %</th>
<th>Estimated no of IDUs</th>
<th>Regular reach Coverage</th>
<th>Impact first 1-3 years - HIV averted</th>
<th>Cost-effectiveness ratio, HIVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dhaka</td>
<td>2001/02</td>
<td>2.40%</td>
<td>6500</td>
<td>80%</td>
<td>3 years</td>
<td>USD 64-200 per HIV averted</td>
</tr>
<tr>
<td>Kathmandu</td>
<td>2003</td>
<td>68%</td>
<td>5000</td>
<td>20%, 30%, 60%</td>
<td>3 years</td>
<td>USD 74-57 per HIV averted</td>
</tr>
<tr>
<td>Nepal</td>
<td>2006</td>
<td>26%</td>
<td>12500</td>
<td>7%, 30%, 60%</td>
<td>3 years</td>
<td>USD 146-325 per HIV averted</td>
</tr>
<tr>
<td>Karachi</td>
<td>1999</td>
<td>54%</td>
<td>21800</td>
<td>20-38%</td>
<td>1 Year</td>
<td>USD 97 per HIV averted</td>
</tr>
<tr>
<td>Svetlogorsk</td>
<td>2002</td>
<td>74%</td>
<td>1100 plus</td>
<td>43-63%</td>
<td>2 Year</td>
<td>USD 323-359 per HIV averted</td>
</tr>
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</table>

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</thead>
<tbody>
<tr>
<td>Dhaka Bangladesh</td>
<td>2001/02</td>
<td>2.40%</td>
<td>6500</td>
<td>3%*</td>
<td>1905 per HIV averted</td>
<td>74 per DALY</td>
<td>1870</td>
</tr>
<tr>
<td>Kathmandu Nepal</td>
<td>2003</td>
<td>68%</td>
<td>5000</td>
<td>3%</td>
<td>779-1016 per HIV averted</td>
<td>27-69 per DALY</td>
<td>1490</td>
</tr>
<tr>
<td>Karachi Pakistan</td>
<td>2006</td>
<td>26%</td>
<td>12500</td>
<td>3%</td>
<td>2228-4950 per HIV averted</td>
<td>137-289 per DALY</td>
<td>2225</td>
</tr>
</tbody>
</table>

3 years perspective, 2004 PPP USD
IDU Kathmandu: CER decreases by coverage, 5 years perspective

<table>
<thead>
<tr>
<th>Coverage (%)</th>
<th>Cost (USD)</th>
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</thead>
<tbody>
<tr>
<td>20%</td>
<td>64</td>
</tr>
<tr>
<td>30%</td>
<td>56</td>
</tr>
<tr>
<td>60%</td>
<td>47</td>
</tr>
</tbody>
</table>

3% discount rate of benefits

Alban, Manuel 2008, ADB
IDU Karachi: Cumulative CERs, nine-year perspective

Cost-effectiveness ratios over time, 60% coverage

3% discount rate of benefits

Alban et al 2007
High discount rates changes the slope of the CER curve

Cost-effectiveness over time, coverage 60%

Alban et al 2007
Conclusions I

- HIV IDU interventions in Asia are very cost-effective at low and high coverage levels
- **However**, low coverage levels cannot bring down the prevalence rates!!
- CER of IDU interventions must be complemented by ability to reduce prevalence rates among IDUs
Conclusions II

- Cost-effectiveness analyses is an important tool for decision-making.
- Supplementary knowledge needed on Cost-effectiveness of IDU HIV approaches including methadone.
- Few studies makes it difficult to learn from experiences.
Conclusions III

- Studies must be undertaken by independent researchers.
- M&E&R is vastly underfunded to ensure effective and efficient HIV interventions.
- More and easier to handle effectiveness models are needed for planning purposes. Will AEM rapid CEA results do the trick?
Thank you

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aa@easeint.com