

SWITCHING FROM A CRIMINALISATION TO A PUBLIC HEALTH APPROACH TO INJECTING DRUG USE IN EASTERN EUROPE AND CENTRAL ASIA: A MODELLING ANALYSIS OF THE COSTS AND IMPACT ON HIV TRANSMISSION

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Background:

HIV incidence is increasing in Eastern Europe and Central Asia (EECA), primarily driven by injecting drug use. Coverage of antiretroviral therapy (ART) and opioid agonist therapy (OAT) are sub-optimal, with people who inject drugs (PWID) experiencing considerable incarceration. We evaluated whether using saved monies from decriminalising drug use and/or possession to scale-up ART and OAT could control HIV among PWID in EECA.

Methods:

An HIV transmission model among PWID incorporating incarceration, ART and OAT was calibrated to Belarus, Kazakhstan, Kyrgyzstan and St. Petersburg (Russia). Country-specific costs for OAT, ART and incarceration were collated/estimated. Compared to baseline, the model projected the life years gained (LYG), incremental costs (2018 Euros) and infections prevented over 2020-2040 for three scenarios: (1) Decriminalisation: Remove incarceration due to drug use and drug possession for personal use, reducing incarceration among PWID by 25-46%; (2) Public Health Approach: Use savings from decriminalisation to scale-up ART and OAT; and (3) Full Scale-up: scenario 2 plus invest additional resources to scale-up ART to 81% coverage and OAT to 40% coverage. The incremental cost-effectiveness ratio (ICER) per LYG for each scenario were calculated and compared to country-specific 1xGDP per-capita willingness-to-pay thresholds. Costs and LYG were discounted 3% annually.

Results:

Current levels of incarceration, OAT and ART are estimated to cost €197-4,129 million over 2020-2040 across settings; 74.8-95.8% due to incarceration costs. Decriminalisation results in cost-savings (€38-773 million) but modest LYG (745-1,694). The Public Health Approach was cost-saving, allowing each country to reach 81% ART coverage and 29.7-41.8% OAT coverage, resulting in 17,768-148,464 LYG and 58.9-83.7% of infections prevented. Results were similar for the Full Scale-up scenario.

Conclusion:

Cost-savings from decriminalising drug use could dramatically reduce HIV transmission through increased OAT and ART coverage among PWID in EECA.

Disclosure of Interest Statement:

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