ARE HARM REDUCTION PROJECTS FOR PEOPLE WHO INJECT DRUGS IN UKRAINE IMPROVING HIV AND HCV PREVENTION AND TREATMENT OUTCOMES?

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Background: People who inject drugs (PWID) in Ukraine have high prevalences of HIV and hepatitis C (HCV). Since 2003, the Global Fund to fight AIDS, tuberculosis, and malaria has funded non-governmental organizations (NGOs) in Ukraine to provide PWID with needles and syringes, condoms, HIV and HCV testing, and improve linkage to opioid substitution therapy (OST) and HIV treatment. We investigated whether contact with these NGOs was associated with improved HIV and HCV prevention and treatment outcomes.

Methods: Five rounds of respondent-driven sampled integrated bio-behavioral survey data (2009 [N=3962], 2011 [N=9069], 2013 [N=9502], 2015 [N=9405], and 2017 [N=10076]) among PWID in Ukraine (including HIV/HCV testing and questionnaires) were analyzed using mixed-effect logistic regression models (mixed-effects: city, year). These regression models assessed associations between being an NGO client and various behavioral, OST, HIV testing, and HIV treatment outcomes, adjusting for demographic characteristics (age, gender, lifetime imprisonment, registration in a drug abuse clinic, education level). We also assessed associations between being an NGO client and being HIV-positive or HCV-positive, likewise adjusting for demographic characteristics (as above).

Results: NGO clients were more likely to have received HIV testing ever or in the last year, to have used condoms at last sexual intercourse and sterile needles at last injection, to be currently or ever on OST, and to have received syringes or condoms in the last year (figure). PWID who were HIV-positive (aOR 1.40, 95% confidence interval [95% CI]: 1.32-1.48) or HCV-positive (aOR 1.56, 95% CI: 1.49-1.64) were more likely to have contact with NGOs, with HIV-positive PWID in contact with NGOs being more likely to be registered at AIDS centers and to be on antiretroviral therapy (figure).

Conclusion: Contact with PWID targeted NGOs in Ukraine is associated with consistently better preventive, HIV testing, and HIV treatment outcomes, suggesting a beneficial impact of Global Fund programming.

Figure: Adjusted odds ratios (with 95% confidence intervals) for various outcomes from being an NGO client compared to not being an NGO client, using mixed-effect logistic regression. Models were adjusted for age, gender, whether they had ever been imprisoned, whether they are registered at a drug clinic, and education level.
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