Global, regional, and country-level coverage of testing and treatment for HIV and hepatitis C infection among people who inject drugs: a systematic review

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Background: People who inject drugs (PWID) are disproportionately affected by HIV and HCV infections in most countries. Global data on HIV and HCV testing and treatment coverage among PWID are limited. This systematic review evaluated country-level, regional, and global coverage of HIV and HCV testing and treatment among PWID.

Methods: We searched bibliographic databases (MEDLINE, Embase, PsycINFO) and grey literature for studies, published until April-2022, that evaluated the proportion of PWID who received testing or treatment for HIV or HCV. For each country, we estimated the proportion of PWID recently tested for HIV antibody (past 12 months), and those ever tested for HCV antibody and HCV-RNA. We also estimated the proportion of PWID with HIV currently receiving antiretroviral therapy, and those with HCV ever receiving HCV treatment. Regional and global estimates, weighted by PWID population size, were generated where sufficient data were available.

Results: Data of recent HIV antibody testing and ever HCV antibody testing were available for 67 and 47 countries, respectively. Globally, we estimated that 53% of PWID were recently tested for HIV antibody [uncertainty interval (UI): 48-58%; range: <1-86%], and 46% had ever tested for HCV antibody (UI: 41-53%; range: <1-93%). HCV RNA testing data were available from three countries. Coverage of HIV antibody and HCV antibody testing was >75% in five and 14 countries, respectively. Estimated uptake of current HIV treatment (18 countries) ranged from 3% to 82% across countries. Estimated uptake of ever HCV treatment (23 countries) ranged from 2% to 89% across countries. Uptake of HIV and HCV treatment was >75% in two and one countries, respectively.

Conclusion: HIV and HCV testing and treatment uptake among PWID was highly variable, and sub-optimal in most countries. Strategies to improve access to HIV and HCV care among PWID and availability of public health surveillance are required.

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