

## Why are sex workers who use substances at risk for HIV?



Sex workers who use drugs are particularly vulnerable to HIV and other bloodborne and sexually transmitted infections for several reasons. Sex workers who inject drugs can acquire HIV through unprotected sex or syringe sharing, with the latter conferring higher HIV transmission risk. Sex workers who are alcohol or drug dependent are more likely to engage in transactions while under the influence of substances and might earn less per transaction; when experiencing withdrawal symptoms they can feel more pressure to acquiesce to clients' demands for unprotected sex, especially if offered more money or drugs.<sup>1</sup> Sex workers' intimate male partners and clients often engage in behaviours with high risk of HIV infection.<sup>2,3</sup> In some cases, drug use is involuntary because pimps and managers coerce sex workers into drug use as a means of control.<sup>4</sup> Sex workers who use drugs can be stigmatised in workplace venues where drug use is discouraged, displacing them to the street where control over condom and drug use is compromised and exposure to violence compounds HIV risks.<sup>5</sup> Because sex work and drug use are illegal in most countries, sex workers who use drugs are more vulnerable to police harassment (eg, frequent arrest and syringe confiscation) or police misconduct (eg, bribes, extortion, blackmail, and physical and sexual abuse),<sup>6,7</sup> which discourages them from seeking HIV prevention and treatment.

Injection drug use is associated with elevated HIV risks in sex workers. In 20 countries worldwide, HIV prevalence was higher in female injectors than male injectors.<sup>8</sup> Across Europe, a linear relationship exists between HIV prevalence in female sex workers and increasing levels of injecting drug use.<sup>9</sup> Of nine countries where HIV incidence increased by more than 25% between 2001 and 2011, six are in eastern Europe and central Asia, where injection drug use is the predominant risk factor.<sup>10</sup> Similar to several countries in southeast Asia (eg, Vietnam and China), high proportions of sex workers inject drugs in eastern Europe and central Asia, but great heterogeneity exists between and within countries. In Russia, adult HIV prevalence is 0.8–1.4%, corresponding to 730 000–1 300 000 infections,<sup>11</sup> and although most HIV cases are linked to injection drug use, sexual transmission is rising.<sup>12</sup> History of drug injection is especially common in sex workers in Tolyatti, Irkutsk,

Yekaterinburg, and St Petersburg in Russia, where 64% of female sex workers inject drugs.<sup>7</sup>

Although numerous HIV prevention interventions for female sex workers exist, only one has been empirically tested in those who inject drugs. In two Mexico–USA border cities, two brief 30 min interventions based on motivational interviewing successfully reduced the incidence of HIV and sexually transmitted infections by greater than 50%<sup>13</sup> and sharing of injection equipment by greater than 95%. The study included 584 sex workers and follow-up was 1 year. Attractive features of this combination intervention were its brevity, harm reduction approach, use of promotoras (peer outreach workers), and involvement of local sex workers in the development of intervention components. The extent to which this approach is appropriate in other contexts, or could be combined with biomedical or structural interventions, has not been explored. For example, 67% of female sex workers in St Petersburg, Russia, report alcohol bingeing,<sup>7</sup> which has been ignored in HIV prevention research.

Integrated intervention approaches are needed that are not narrowly focused on HIV prevention to the exclusion of other contextual factors that are important in the lives of sex workers who use drugs.<sup>5,9</sup> These factors include the influence of intimate partners and children, ethno-cultural factors, mobility, history of violence, and sex workers' personal attitudes towards sex work and substance use. For example, the needs of people who voluntarily began trading sex or using drugs differ greatly from those who were coerced. Sex workers with substance use histories have a high prevalence of physical and sexual abuse,<sup>7</sup> which could compromise their use of HIV prevention interventions.<sup>14</sup> Sex workers with dependent children might avoid drug treatment or HIV prevention and treatment for fear that their children could be apprehended.<sup>15</sup> In Russia and other countries in eastern Europe and central Asia, high levels of police sexual abuse (subbotnik) and the requirement that drug users register for services are structural impediments that undermine engagement in HIV prevention and treatment.<sup>7,9,12</sup> HIV prevention programmes for sex workers who use drugs should consider their unique needs for harm reduction and voluntary drug treatment. However, opioid substitution treatment is illegal in Russia and is almost universally unavailable across central Asia.



Getty Images

Published Online  
July 22, 2014  
[http://dx.doi.org/10.1016/S0140-6736\(14\)61042-4](http://dx.doi.org/10.1016/S0140-6736(14)61042-4)  
See [Series](#) page 260

Although empowerment of sex workers has been pivotal to HIV prevention successes in many countries,<sup>5</sup> such programmes have tended not to focus on sex workers who inject or use drugs, in part because they are even more marginalised. In view of the vulnerability of sex workers who are substance users and their unique needs, we contend that the principles of “nothing about us without us” should be accepted in the development, execution, interpretation, and dissemination of HIV research and prevention programming.<sup>16,17</sup>

Maia Rusakova, Aliya Rakhmetova, \*Steffanie A Strathdee  
NGO Stellit, St Petersburg, Russian Federation (MR); Sex Workers’ Rights Advocacy Network, Budapest, Hungary (AR); and Department of Medicine, University of California San Diego, La Jolla, CA 92093, USA (SAS)  
sstrathdee@ucsd.edu

We declare no competing interests.

- 1 Strathdee SA, Philbin MM, Semple SJ, et al. Correlates of injection drug use among female sex workers in two Mexico–US border cities. *Drug Alcohol Depend* 2008; **92**: 132–40.
- 2 Robertson AM, Syvertsen JL, Palinkas LA, et al. Sex workers’ noncommercial male partners who inject drugs report higher-risk sexual behaviors. *Sex Transm Dis* 2013; **40**: 801–03.
- 3 Patterson TL, Volkman T, Gallardo M, et al. Identifying the HIV transmission bridge: which men are having unsafe sex with female sex workers and with their own wives or steady partners? *J Acquir Immune Defic Syndr* 2012; **60**: 414–20.
- 4 Goldenberg SM, Rangel G, Vera A, et al. Exploring the impact of underage sex work among female sex workers in two Mexico–US border cities. *AIDS Behav* 2012; **16**: 969–81.
- 5 Shannon K, Strathdee SA, Goldenberg SM, et al. Global epidemiology of HIV among female sex workers: influence of structural determinants. *Lancet* 2014; published online July 22. [http://dx.doi.org/10.1016/S0140-6736\(14\)60931-4](http://dx.doi.org/10.1016/S0140-6736(14)60931-4).

- 6 Cottler LB, O’Leary CC, Nickel KB, Reingle JM, Isom D. Breaking the blue wall of silence: risk factors for experiencing police sexual misconduct among female offenders. *Am J Public Health* 2014; **104**: 338–44.
- 7 Odinokova V, Rusakova M, Urada LA, Silverman JG, Raj A. Police sexual coercion and its association with risky sex work and substance use behaviors among female sex workers in St Petersburg and Orenburg, Russia. *Int J Drug Policy* 2014; **25**: 96–104.
- 8 Des Jarlais DC, Feelemyer JP, Modi SN, Arasteh K, Hagan H. Are females who inject drugs at higher risk for HIV infection than males who inject drugs: an international systematic review of high seroprevalence areas. *Drug Alcohol Depend* 2012; **124**: 95–107.
- 9 Platt L, Jolley E, Rhodes T, et al. Factors mediating HIV risk among female sex workers in Europe: a systematic review and ecological analysis. *BMJ Open* 2013; **3**: e002836.
- 10 UNAIDS. World AIDS Day Report. 2012. [http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/gr2012/JC2434\\_WorldAIDSday\\_results\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/gr2012/JC2434_WorldAIDSday_results_en.pdf) (accessed June 18, 2014).
- 11 UNAIDS. Russian Federation HIV/AIDS Estimates 2011. 2013. [http://www.euro.who.int/\\_data/assets/pdf\\_file/0004/188761/Russian-Federation-HIVAIDS-Country-Profile-2011-revision-2012-final.pdf](http://www.euro.who.int/_data/assets/pdf_file/0004/188761/Russian-Federation-HIVAIDS-Country-Profile-2011-revision-2012-final.pdf) (accessed June 18, 2014).
- 12 Decker MR, Wirtz AL, Moguilnyi V, et al. Female sex workers in three cities in Russia: HIV prevalence, risk factors and experience with targeted HIV prevention. *AIDS Behav* 2014; **18**: 562–72.
- 13 Strathdee SA, Abramovitz D, Lozada R, et al. Reductions in HIV/STI incidence and sharing of injection equipment among female sex workers who inject drugs: results from a randomized controlled trial. *PLoS One* 2013; **8**: e65812.
- 14 Urada LA, Morisky DE, Pimentel-Simbulan N, Silverman JG, Strathdee SA. Condom negotiations among female sex workers in the Philippines: environmental influences. *PLoS One* 2012; **7**: e33282.
- 15 Rolon ML, Syvertsen JL, Robertson AM, et al. The influence of having children on HIV-related risk behaviors of female sex workers and their intimate male partners in two Mexico–US border cities. *J Trop Pediatr* 2013; **59**: 214–19.
- 16 Open Society Institute. Nothing about us without us—greater, meaningful involvement of people who use drugs: a public health, ethical, and human rights imperative. Toronto: Canadian HIV/AIDS Legal Network and the International HIV/AIDS Alliance, 2008.
- 17 WHO, UNFPA, UNAIDS, NSWP, World Bank. Implementing comprehensive HIV/STI programmes with sex workers: practical approaches from collaborative interventions. 2013. [http://www.who.int/hiv/pub/sti/sex\\_worker\\_implementation/en/](http://www.who.int/hiv/pub/sti/sex_worker_implementation/en/) (accessed June 20, 2014).



## With thanks to all those who reviewed for *The Lancet* in 2014

Editors are privileged to accompany authors on several aspects of the research journey: hypotheses, protocol review, early phase studies, practice-changing trials, meta-analyses to consolidate understanding, and reviews and seminars to disseminate best practice. At each stage, we benefit from the guidance of peer-reviewers: not so much to exclude manuscripts, but instead to include as many of the greatest interest that we can. Although final decisions are always editorial, they are greatly facilitated by the deeper technical knowledge, scientific insights, understanding of social consequences, and passion that reviewers bring to our deliberations. For these reasons, the editors warmly thank the 2363 reviewers (appendix) whose comments helped to shape *The Lancet* and medical care in 2014.

Recognising the particular importance of randomised controlled trials (RCTs) to inform care and the wishes of trial authors to see these studies made available to the health-care community as quickly as possible, *The Lancet* introduced 48-hour fast track review in 2014 for all RCTs selected for external review. The editors recognise the time pressure that a rapid turnaround imposes on busy investigators, and appreciate the enthusiasm and constancy with which reviewers have supported this initiative. We look to increase further the speed of decisions and publication for RCTs in 2015, and are always happy to welcome new reviewers (particularly statisticians) to join us in this effort.

William Summerskill  
*The Lancet*, London EC2Y 5AS, UK

See Online for appendix

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.