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The Twin Epidemics of HIV and Drug Use: Innovative Strategies for Healthy Communities

The 2012 International AIDS Conference in Washington, D.C., demonstrated broad consensus that the tools now exist to begin to end the AIDS pandemic. Yet all too often, people lack access to life-saving services and medications. Accounting for one-third of new HIV infections outside sub-Saharan Africa – as well as a growing number of incident and prevalent infections in Africa itself – people who inject drugs confront considerable obstacles in accessing HIV prevention and treatment services.

Immediately prior to the opening of the 2012 International AIDS Conference, amfAR, The Foundation for AIDS Research, and the International AIDS Society – with financial and planning support from the Open Society Foundations – convened a day-long meeting to review available evidence on effective strategies to combat HIV among people who use drugs. The meeting attracted approximately 200 participants from 30 countries, including researchers, clinicians, government officials, community-based organizations, AIDS advocates, people who use drugs, and people living with HIV.

This report summarizes the outcomes of this meeting. Key meeting findings include the following:

- *It will be impossible to “get to zero” new infections and AIDS-related deaths without addressing the severe and growing HIV crisis among people who use drugs. Achieving broad scale for effective HIV strategies for drug users is an urgent global health necessity.*
- *Official policy frameworks and government practices – including detention and coercive treatment of drug users, prohibition against funding or implementing validated HIV prevention strategies, and harassment by police officers – undermine efforts to ensure drug users’ access to life-preserving HIV prevention and treatment.*
- *Even in settings where unsound policy frameworks and government practices prevail, community-driven collaborations have developed an array of innovative strategies to engage drug users in essential HIV services.*

- *Treatment as prevention for those who inject drugs, where it has been tested, has been built on the foundation of needle and syringe programs and other low-threshold community services.*
- *Funding is woefully inadequate to bring existing tools and strategies to scale for drug users, underscoring the need for PEPFAR, the Global Fund, national governments, and other HIV funders to allocate major new resources toward targeted, evidence-based prevention and treatment programs for drug users.*
- *Effective programs that engage people who use drugs share several key attributes, including respect for human rights, a commitment to evidence-based practices, collaboration with local law enforcement and other key stakeholders, and the integral involvement and leadership of drug-using communities and the community-based organizations that serve them.*

The Burden of HIV among People Who Use Drugs

Globally, an estimated 3 million people who inject drugs are living with HIV,ⁱ representing roughly one in 10 infections worldwide. Nearly one in five of the estimated 16 million people who inject drugs are living with HIV, with HIV prevalence among drug users exceeding 40% in at least nine countries.ⁱ

HIV transmission associated with drug use is driving several national epidemics and worsening many others. Unsafe injection drug use is fueling epidemics in the former Soviet Union, represented in the United Nation's Eastern Europe and Central Asia region, and one of just two geographic areas where HIV infections have increased since the early 2000s.ⁱⁱ Of nine countries where new adult HIV infections increased by at least 25% from 2001 to 2011, four were former Soviet republics.ⁱⁱ In the Russian Federation, more than 35% of drug users are living with HIV.

"Groups who engage in the highest risk behaviors have the least ability to have a seat at the table. . . We will not get ahead of this epidemic until the needs of these communities are better reflected in planning and allocation decisions."

- *Ambassador Eric Goosby, U.S. Global AIDS Coordinator*

Other regions of the world have also been affected by HIV-related risks associated with unsafe drug injection. Due to drug-trafficking patterns, drug-related HIV transmission is a growing problem in many coastal areas of West, Southern, and Eastern Africa. In coastal areas in Kenya, for example, injection drug use now accounts for an estimated 17% of new HIV infections.

Injection drug use continues to contribute to the spread of HIV in the U.S., where injection drug users account for 12% of new HIV infections.ⁱⁱⁱ Communities of color are most heavily affected by drug-related HIV transmission, with Black and Latino drug users 10 and five times more likely, respectively, than white drug users to be newly diagnosed with HIV.^{iv}

As a wealth of information has demonstrated, HIV transmission during injection drug use is entirely preventable through implementation of a well-defined package of harm reduction interventions. The package includes voluntary HIV testing and counseling, access to clean needles and syringes, opioid substitution therapy, medications to reverse overdose, and access to effective health services, including antiretroviral therapy for those who are HIV-positive.

Countries that have invested in harm reduction strategies have seen sharp declines in new infections among drug users. In Australia,^v the Netherlands,^{vi} and Switzerland,^{vii} for example, drug-related HIV transmission has been virtually eliminated. In the U.S. – where state and local health departments, as well as philanthropic funders, have supported implementation of harm reduction programs – HIV incidence among drug users is now roughly one-seventh of the level reported in the late 1980s,^{viii} with unsafe injection drug use accounting for 9% of new infections in 2009.

By contrast, countries that have failed to invest in harm reduction programs have failed to make progress in curbing their national epidemics. This is evident in Thailand, where lack of needle exchange and harsh drug policies have been associated with continued high HIV incidence among drug users, and in the Russian Federation, where a ban on methadone or buprenorphine and failure to support needle exchange programs have resulted in continued high HIV prevalence among drug users, obstacles to antiretroviral treatment, and increases in sexual HIV transmission in the broader population.

Globally, drug users have extremely poor access to life-saving HIV prevention and treatment services, such as harm reduction programs or antiretroviral therapy.^{ix,x} Currently, only 8% of people who inject drugs have access to opioid substitution therapy or sterile injection equipment.

Policing and Legal Frameworks

Unsound policy frameworks impede efforts to reduce the HIV burden among drug users. Irrational policies include mandatory detention for drug treatment, prohibitions on or impediments to implementation of

needle and syringe programs or drug substitution therapy, and imposition of extreme criminal penalties for non-violent drug possession. The effects of such unhelpful policies are compounded by common law enforcement practices, such as harassment of needle exchange programs or unprovoked violence against persons suspected of using drugs.

“We are not going to arrest our way out of the drug problem . . . It is important to remove the stigma associated with drug addiction and to try to divert non-violent drug offenders from jail into treatment.”

- Gil Kerlikowske, Director, U.S. Office of National Drug Control Policy

Such policies are typically motivated by a belief that they help control the use of drugs, but decades of experience indicate that they do far more harm than good. Although some law enforcement officials in the United Kingdom originally opposed introduction of needle and syringe programs on the grounds that they would encourage drug use, these same officials told a special select committee of the U.K. House of Lords in

2011 that feared harms had never materialized. The benign effects of needle and syringe programs on rates of drug use contrast with their extraordinary public health benefits, as injection drug users currently account for only 2% of new HIV diagnoses in the U.K., according to Lord Norman Fowler, who as Health Minister under the Conservative government of Prime Minister Margaret Thatcher approved the creation and eventual expansion of needle exchange in Britain. Studies indicate that needle exchange programs not only reduce the odds that drug users will contract HIV or other blood-borne pathogens, but that they also serve as an effective bridge to drug treatment.^{xi} Programs that exchange used injection equipment for sterile equipment also help protect law enforcement personnel by removing potentially infectious needles and syringes from the street; according to a survey of San Diego police officers, needlestick injuries are common.^{xii}

Since the U.S. declared a “war on drugs” in 1971, the price of illicit drugs has declined while their purity has increased. Steering non-violent drug users toward incarceration rather than drug treatment not only criminalizes a health problem, but it worsens public health outcomes: globally, the risk of acquiring tuberculosis is 23 times greater in prison settings than in the general population.

In countries and communities throughout the world, innovative partnerships have emerged to advocate for adoption of evidence-based policy frameworks, or, in the alternative, to pursue effective options to link drug users to health services despite problematic laws and policies. For example, in Kenya, where aggressive enforcement of punitive drug laws is contributing to substantial overcrowding of prisons on the coast, an innovative community-based program provides legal assistance to pre-trial inmates to enable them to avoid long-term incarceration. Sixty percent of prison inmates in Kenya are awaiting trial, and many will be found innocent but only after spending up to two years behind bars. Through collaboration with prison officials,

the Mombasa Legal Aid Clinic, run by Muslims for Human Rights, places teams of paralegals and law students in prison settings, where they provide on-site legal assistance, work to ensure inmates have access to health services, and liaise with probation and judiciary officials. The program has also opened a legal aid clinic to help drug users prior to detention, and successfully pursued litigation on behalf of an HIV-positive drug user, arguing that imprisoning him without meaningful access to health care violated his rights under the new Kenyan constitution. By helping divert non-violent drug users away from long-term incarceration, the program is helping reduce prison congestion while promoting public health, as studies indicate that risk behaviors for HIV continue within Kenyan prison settings.

In the U.S., the Seattle police department, having been sued for disproportionately arresting African Americans in its aggressive effort to enforce drug laws, decided to collaborate with its community and academic critics in an effort to forge a new, less coercive approach. The result was an initiative known as LEAD, or Law Enforcement Assisted Diversion. LEAD focuses on an area of Seattle where street drug purchases are common, offering low-level or subsistence drug users or dealers, as well as sex workers, wraparound health and social services (e.g., housing, medical care, housing and drug treatment) in lieu of incarceration. Instead of sending low-level drug users to jail, the program instead links them with a social worker, who coordinates their care. Police officers, community advocates, and political leaders were engaged in the design of the approach. To be eligible for the program, individuals must have been in possession of less than three grams of an illicit drug and be amenable to treatment. The program, which has been in place for 10 months, had enrolled 44 people as of July 2012. Key program components have included extensive community education and outreach, as well as orientation and training for police officers.

In Southeast Asia, where compulsory drug treatment is common, Malaysia is working to transition to a different approach. In place of residential drug rehabilitation, which the country aims to phase out by 2015, Malaysia is introducing a network of “Cure and Care” clinics that tailor treatment options to the needs of individual clients, and do not keep them under lock and key. Program offerings include methadone maintenance therapy, psychosocial interventions, and assistance in finding work. Over two years, these clinics have served 16,855 clients, resulting in a 37% decline in injection drug use, which in turn helps lower rates of HIV transmission. More than 94% of Cure and Care clients report being satisfied with the services they have received, 67% of methadone clients are currently employed, a 76% reduction in arrests was reported, and a notable portion of clients obtained permanent housing and continued their education. Short-term evaluation efforts suggest that the approach is relieving prison overcrowding, reducing homelessness or housing instability among drug users, improving access to medical care,

enhancing clients' mental health, and is significantly cheaper and more effective than the compulsory drug detention centers that have been the norm.

Kyrgyzstan is another innovator with respect to drug policy and HIV prevention frameworks, adopting evidence-based approaches in a region where aversion to harm reduction has been common. Kyrgyzstan permits needle and syringe programs, as well as individual syringe possession; has allowed methadone maintenance therapy; has decriminalized small-scale drug possession; and has implemented harm reduction programs, including syringe exchange and methadone, in prisons. The country also promotes cooperation between police and harm reduction programs, with the national government issuing a regulation that directs law enforcement authorities to avoid unnecessary incarceration of those vulnerable to HIV, to establish links to HIV services, and to treat arrestees with respect. In close cooperation with civil society groups, the police have developed a special training course for police academy enrollees on working with drug users and sex workers, and a separate training for serving officers has been implemented nationwide. These efforts are changing police attitudes regarding drug use; according to a recent survey, more than half of law enforcement personnel had a favorable impression of needle and syringe programs, and 44% agreed that police should steer drug users to public health services rather than prisons and jails.

“Police can be the best friend or the worst enemy of harm reduction.”

- Aleksandr Zelitchenko
Central Asian Drug Action Program

Program Innovations

Effective programmatic responses for people who inject drugs require a commitment to heeding available evidence regarding which approaches work best to reduce the harms associated with drug use. Experience to date in most parts of the world reflects an over-reliance on criminal justice approaches to drug use.

“In no other marginalized population is there such willful blindness to the evidence that exists [as with respect to drug users].”

- Dr. Michel Kazatchkine
Former Executive Director, Global Fund to Fight AIDS, Tuberculosis and Malaria; Professor of Immunology, Université René Descartes (Paris)

Even in settings where officials are less open to evidence-based approaches to HIV and drug use, community groups are finding innovative ways to promote the health and well-being of people who use drugs. For example, Tinga Kalafa, a recovering addict who is a member of the

Kenya Network of People Who Use Drugs, has benefited from focused training provided by Dr. Rich

Needle, senior public health advisor to the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), on effective outreach strategies to engage and motivate drug users to obtain HIV prevention, treatment, care and support. To date, however, Kenya has not yet begun the needle and syringe programs Tinga and others have identified as needed. In the Russian Federation, the Eva Women's Network is uniting drug-using women across the country to advocate for policy changes, including the creation of drug rehabilitation programs specifically designed for women.

Vancouver, the largest city in the Canadian province of British Columbia, is home to North America's only stand-alone supervised injection site for drug users, operated by PHS Community Services Society. Open since 2003, at a time when Vancouver had the highest rate of new infections in the country, the program has enjoyed the support of the chief of police and valuable partnerships with leading researchers. At the Vancouver site, drug users are able to receive advice and counseling from trained nurses, as well as referrals to drug treatment. According to extensive research, the Vancouver site prevents 35 new HIV infections and saves an estimated \$6 million each year. Frequent users of the site are 70% less likely to share needles and 33% more likely to enter drug detoxification. Whereas the high rate of overdose deaths was a primary motivation for the program's creation, a review of the program from 2004 to 2010 found that no client had suffered an overdose death. After it began operating, overdose deaths fell by 35% within a four-block radius of the program site. Significantly, the program enjoys considerable public support, with 76% of Vancouver residents expressing approval of supervised injection.

In the U.S. state of Georgia, which has the fifth highest rate of new HIV infections and the third highest rate of sexually transmitted infections in the U.S., the Atlanta Harm Reduction Coalition has effectively implemented harm reduction services notwithstanding unfavorable policy conditions, high rates of incarceration, and extensive poverty and unemployment. In an effort to diminish police resistance to needle and syringe programs, the Atlanta program has worked to educate new police recruits, emphasizing the reduction in the risk of occupational needlestick as a result of harm reduction in the community.

In Viet Nam, a country with more than 120 government-run drug detention centers, drug users have coalesced to create community-based overdose prevention programs and to advocate for the legalization of naloxone, an opioid inverse agonist that counters the effects of drug overdose. Drug user groups aided by the Center for Supporting Community Development Initiatives (SCDI) have helped 600 Vietnamese drug users find jobs to further their recovery from drug addiction. According to a recent evaluation of Hanoi participants in such drug user groups by the Yale School of Public Health, enrollees now use a new needle each time they inject drugs. Working with support groups of people who use drugs, SCDI facilitates linkages to overdose prevention services, methadone, HIV and STI testing, and social support. While

cautioning that detoxification alone is unlikely to have a major long-term impact on HIV risk or abstinence from drug use, participants from other countries confirmed that such services offer respite from drug use, linkages to much-needed services, and – particularly important in countries with punitive legal frameworks – an alternative to police surveillance, prolonged detention, and stigmatized treatment by health care providers and community leaders.

According to community leaders from diverse regions, stigma remains a central barrier to service access for drug users. Engagement and leadership of drug-using communities and those who serve them represents a primary strategy to mitigate the stigma associated with drug use.

Getting to Scale

To have a meaningful public health impact, programs also need to achieve sufficient scale. Recent modeling suggests programmatic coverage of at least 60% is needed to reduce HIV incidence among drug users.^{ix}

“Our experience in Vancouver shows that if you have appropriate leadership and a willingness to change things, you can bring programs to scale.”

- *Dr. Julio Montaner
British Columbia Center for
Excellence in HIV/AIDS; Former
President, International AIDS
Society*

Achieving broad scale requires robust funding, strong political and community leadership, and attention to lessons learned in settings where programs have been successfully implemented. Unfortunately, few parts of the world have met these essential prerequisites for a scaled-up AIDS response for drug users. According to a recent analysis by UNAIDS, countries are allocating a share of AIDS resources for drug users and other key populations that is substantially below the proportion of HIV/AIDS cases represented by these populations in national epidemics.^{xiii}

Participants at the pre-conference meeting heard about success stories, as well as about settings where epidemics have worsened due the failure to achieve sufficient programmatic scale. In Vancouver, studies have detected a sharp decline in HIV incidence as harm reduction services and antiretroviral therapy have been brought to scale for drug users.^{xiv} In addition to emphasizing the health benefits for drug users, proponents of programmatic scale-up in Vancouver argued that such investments would also avert the spread of HIV to the general population. A key element of Vancouver’s success has been client-centered

outreach that assists drug users in navigating a complex local service system. Dr. Julio Montaner, of the British Columbia Center for Excellence in HIV/AIDS, cautioned against pitting primary prevention services (such as harm reduction) against treatment-as-prevention, arguing that both approaches work synergistically.

In Ukraine, by contrast, an epidemic once concentrated among drug users has spread to the broader population due to the country's failure to invest in proven prevention and treatment strategies. "The key lesson from Ukraine is scale," reported Dr. Doug Bruce, of the Yale School of Medicine, who has worked in Ukraine for seven years. "The country as a whole did not benefit [from HIV prevention] because scale was not achieved."

A similar cautionary tale is emerging in East Africa. According to a rapid epidemiological assessment conducted by the U.S. Centers for Disease Control and Prevention, 24% of male drug injectors and 61% of female injectors are living with HIV in Kenya. As in Ukraine, a lack of programmatic scale blunts the effectiveness of HIV prevention efforts. Across all of sub-Saharan Africa, only 400 people currently receive methadone maintenance therapy, even though studies have detected a steady rise in rates of injection drug use in the region. "If we were to predict the future, we could predict that Africa will go the way of Ukraine because of a lack of access," said Dr. Bruce, who advised that only immediate scale-up of methadone services and needle and syringe programs could avert a major spike in new infections in Africa.

In addition to political leadership and a commitment to evidence-based action, major new funding will be needed to scale up AIDS responses for drug users. Currently, the Global Fund to Fight AIDS, Tuberculosis and Malaria is the largest single donor for harm reduction programs, supporting 120 programs in 55 countries. Yet the \$430 million committed by the Global Fund for harm reduction services falls far shy of the estimated \$2.3 billion that will be required *annually* by 2015 to achieve sufficient scale-up.^{xv} The Global Fund has developed a framework to strengthen programming for drug users and other key populations at higher risk, although the Fund's Michael O'Connor reported that it is reexamining funding processes and continues to struggle to ensure that most-at-risk populations have a seat at the table where country proposals are developed and agreed on. O'Connor suggested that the Global Fund's new five-year strategy, which envisions the Fund doing more to determine which countries will be eligible for funding, will empower the Fund to work with countries to develop country proposals that respond to available epidemiological evidence. He also noted the possibility that the Fund will create a special funding channel for most-at-risk populations, and recommended that those supportive of such an approach make their opinion known to Board members in the next months.

Within the Global Fund and the broader development donor community, a major push is under way to demand co-investments by middle-income countries. This represents a potentially serious impediment to programmatic scale-up in Eastern Europe and Central Asia, where national governments have been resistant to harm reduction.

The 2011 decision by the U.S. Congress to reinstate the prohibition on use of federal funds to support needle exchange severely restricts the ability of PEPFAR to support scale-up of evidence-based programs for drug users. Noting that the scientific evidence supporting harm reduction is clear, U.S. Global AIDS Coordinator Eric Goosby said that other donors would have to fund syringe exchange as long as the U.S. funding ban remains in place. In particular, he urged collaboration between diverse donors, private foundations and national governments to ensure that a comprehensive array of services can be implemented for drug users living with, or at risk of, HIV.

“We need to repeal the ban on needle exchange funding and promote a comprehensive package of services for drug users.”

- *Representative Barbara Lee
9th Congressional District, California*

Goosby acknowledged that global health funding in general has not adequately addressed the needs of key populations at higher risk for HIV. He pledged that the U.S. would intensify its diplomatic engagement with affected countries that have unsound legal and policy frameworks in place, urging them to invest in the needs of most-at-risk communities and to nurture community organizations that work with drug users and other vulnerable populations.

Conclusions

An extraordinary body of evidence and practical experience exists on effective strategies to address HIV among drug users. International experience has identified an impressive range of effective programmatic models addressing prevention of HIV and overdose, referrals to drug and HIV treatment, and delivery of antiretroviral therapy in low-, middle-, and upper-income countries.

To achieve the scale required to lay the groundwork for the end of AIDS among drug users and those who live in countries where epidemics are concentrated among those who inject drugs, major new funding will be needed, restrictions on available funding must be removed, evidence-based policy frameworks must be implemented, and community-based programs must be put in place.

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