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HIV PREVENTION AMONG INJECTION DRUG USERS IN KENYA AND TANZANIA

NEW OPPORTUNITIES FOR PROGRESS

*Phillip Nieburg and Lisa Carty*¹

Introduction and Key Findings

Overall growth in numbers of new HIV infections has slowed in most regions of the world. One outlier to this improving trend, however, is the continued growth in numbers of HIV infections linked to injection drug use, especially in Eastern Europe, Central Asia, and, more recently, in sub-Saharan Africa.²

Numerous reports have documented the extraordinarily high risk of HIV spread through sharing of syringes among people who inject drugs and the medical, public health, and political difficulties of providing such people with effective HIV prevention and drug treatment. Some reports, including studies from Kenya and Tanzania, have noted that women's HIV prevalence in many countries is higher than HIV prevalence among men and that this gender disparity is observed in both the general population and in groups of people who use drugs. Still other reports have noted the likelihood that unprotected sex between people injecting drugs and their sexual partners who do not inject drugs is likely to be a source of HIV transmission to the general population. Thus, preventing the spread of HIV among people who inject drugs is one way of both preventing AIDS among that group and reducing the likelihood of HIV transmission to—and among—people in the general population. Effectively addressing these challenges requires a comprehensive mix of prevention, care, and treatment programs that is currently lacking in most of sub-Saharan Africa. Indeed, a recent editorial in *The Lancet* pointed out that “people who inject drugs have been left behind in global efforts to scale up access to HIV prevention, treatment

¹ Phillip Nieburg, M.D., is a senior associate with the Global Health Policy Center at CSIS. Lisa Carty is a senior adviser and deputy director of the Global Health Policy Center. The authors thank the U.S. Embassy PEPFAR country teams in Tanzania and Kenya for their guidance and support. They are also grateful to the staff of the many nongovernmental and governmental organizations they met with in Tanzania and Kenya both for sharing their insights and experiences and for their dedication to their difficult work. Finally, the authors appreciate the helpful comments on earlier drafts of this report provided by Rey Chad Abdool, Irene Benech, Suzanne Brundage, Zoe Hudson, Eva Matiko, J. Stephen Morrison, Richard Needle, Todd Summers, and Daniel Wolfe.

² UNAIDS, *Report on the Global AIDS Epidemic 2010* (Geneva: UNAIDS, 2010), accessed on February 4, 2011, at http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2010/20101123_globalreport_en.pdf.

care and support.”³ The editorial called for the upcoming June 2011 *UN High-level Meeting on AIDS* to highlight the underused but available evidence-based interventions that need to be financed, implemented, and scaled up in order to reduce HIV transmission among people who inject drugs.

Revisions to HIV prevention guidance from the President’s Emergency Plan for AIDS Relief (PEPFAR) have increased PEPFAR’s ability to support more comprehensive prevention programs among people who inject drugs.⁴ In the face of reports of increasing injection drug use (IDU) in some locations in sub-Saharan Africa, the revised PEPFAR guidance provides an opportunity to strengthen current approaches to the prevention and control of HIV/AIDS among people who inject drugs and their sexual contacts in several selected regions in East Africa.

A recent visit to East Africa by a team from the CSIS Global Health Policy Center provided an opportunity to assess the IDU-HIV situation and the programs addressing HIV-related aspects of IDU in coastal regions of Kenya and Tanzania. In each country, the team spoke with a large number of people representing host governments, operational indigenous nongovernmental organizations (NGOs), U.S. government country teams, other donor agencies, and recovering drug users, some of whom had already been infected by HIV. Significantly, the U.S. government has recently signed separate partnership frameworks with the governments of both Kenya⁵ and Tanzania⁶ to help frame PEPFAR’s role in the HIV/AIDS response in those countries. In both cases, the partnership frameworks were explicitly aligned with the national HIV/AIDS control plans and programs, although only Kenya’s partnership agreement explicitly addressed IDU issues.

This East African assessment is the initial phase of a larger CSIS project examining IDU-related HIV/AIDS issues in a number of global regions. That project and the current report build on two earlier CSIS publications, *Combating the Twin Epidemics of HIV/AIDS and Addiction*⁷ and *HIV Prevention among Injection Drug Users*,⁸ which examined gaps and barriers in the use of evidence-based IDU interventions in a number of countries with established or emerging HIV epidemics linked to IDU.

³ Editorial, “HIV and injecting drug use: a global call for action,” *Lancet*, 377 (April 9, 2011): 1212, accessed on April 6, 2011, at <http://download.thelancet.com/pdfs/journals/lancet/PIIS0140673611604753.pdf>.

⁴ U.S. Department of State, *Comprehensive HIV prevention for People Who Inject Drugs, Revised Guidance* (Washington, D.C.: Office of the Global AIDS Coordinator, 2010), accessed March 22, 2011, at <http://www.pepfar.gov/guidance/idu/index.htm>.

⁵ *Partnership Framework between the Government of the Republic of Kenya and the Government of the United States of America to Support Implementation of the Kenya National HIV Response* (December 2009), accessed on March 23, 2011, at <http://www.pepfar.gov/documents/organization/135213.pdf>.

⁶ *Five-Year Partnership Framework in Support of the Tanzanian National Response to HIV and AIDS, 2010–2013, between the Government of the United Republic of Tanzania and the Government of the United States of America* (March 4, 2010), accessed on March 24, 2011, at <http://www.pepfar.gov/documents/organization/138931.pdf>.

⁷ David A. Fiellin et al., *Combating the Twin Epidemics of HIV/AIDS and Addiction: Opportunities for Progress and Gaps in Scale* (Washington D.C.: CSIS, 2007), accessed on March 25, 2011, at http://csis.org/files/media/csis/pubs/071016_fiellin.pdf.

⁸ Richard H. Needle and Lin Zhao, *HIV Prevention among Injection Drug Users: Strengthening U.S. Support for Core Interventions* (Washington, D.C.: CSIS, 2010), http://csis.org/files/publication/100408_Needle_HIVPrevention_web.pdf.

The team's first goal in visits to Kenya and Tanzania was to better understand local approaches to HIV-related IDU. Specifically, the team wanted to know (1) how well local community needs for addressing IDU were being assessed, (2) how much progress was being made in expanding access to programs for comprehensive drug care and treatment, and (3) how effectively HIV infections were being prevented among people using drugs who were not yet able to access comprehensive care and treatment programs. A second goal was to examine whether the revised PEPFAR guidance, even at this early stage, was starting to influence local policy and/or practices.

Our findings confirmed our pre-visit impressions about the growing numbers of people who inject drugs and the associated increases in HIV infections among residents of Kenya and Tanzania, including the islands of Zanzibar. Few recent population-based studies of IDU or IDU-related HIV infections are available. Thus, while it is clear that the number of people injecting drugs is large and growing, the kind of epidemiologic data needed for planning and implementing effective prevention and treatment programs (e.g., the current size and rate of increase of the group, their ages and genders, their HIV and hepatitis C status, etc.) remain uncertain. The few community-based HIV prevention and IDU care and treatment programs are operating at full capacity with extremely limited human and financial resources and, for most programs, without access to all of the currently recommended components of a comprehensive approach to HIV prevention, treatment, and care. There are no comprehensive care and treatment programs for women who inject drugs. In addition to the existing resource constraints, widespread stigma remains a major obstacle to providing effective HIV prevention and/or drug treatment to this group.

The team's impression is that recent changes in U.S. policy and guidance that have focused on the linkage of HIV transmission with IDU are playing an important role in helping move the HIV prevention and IDU treatment policies and practices of both countries toward a more evidence-based and effective approach. The evolving attitudes, policies, and practices within these countries have the potential to provide people who inject drugs with greater access to effective programs of drug treatment and care, AIDS treatment, and HIV prevention. Given the limited amount of PEPFAR HIV prevention funding going to Kenya and Tanzania for programs related to IDU, even a modest additional investment in evidence-based programs to address IDU could have a relatively large impact on HIV/AIDS transmission among people using drugs and could also act as an incentive to attract still more resources from national governments and other external donors.

The team concluded that several additional measures should be considered now so that these programs can achieve maximum impact. Specifically, efforts should be undertaken to: (1) strengthen the epidemiologic data base needed to effectively advocate for, plan, implement and evaluate intervention programs among people who inject drugs; (2) seek commitments from the Kenyan and Tanzanian governments for both additional resources and for efforts to continue reform of problematic policies; (3) ensure that special efforts are made to address the prevention, treatment, and care challenges facing women who inject drugs; (4) encourage greater coordination between U.S. and other donor programs focused on IDU; (5) promote the ongoing exchange of information and lessons learned between U.S. country teams in Kenya and Tanzania, their host country counterparts, and other countries in East Africa in order to promote an evidenced-based, regional approach to IDU; (6) plan for additional PEPFAR support to scale up and expand these early efforts based on evidence of their positive impacts.

Background

Drug addiction is now well understood to have a clear physiologic basis, and injection drug use is increasingly viewed in most industrialized countries as a public health problem in which medical care can play an important primary role.

Because the sharing of needles and syringes among people who use drugs results in direct bloodstream exposures to the blood of others, such sharing is likely to be the most efficient method of person-to-person transmission of HIV (and of hepatitis C, which spreads efficiently by the same route). For this reason, once these diseases begin spreading among a group of people who inject drugs while sharing equipment, infection rates in that group usually rise quickly to levels well above those in the general population. This phenomenon of a clear and persistent linkage between IDU on one hand and HIV on the other hand has been noted worldwide in both industrialized and developing countries. The HIV link is often amplified by the subsequent sexual spread of HIV to the non-drug-using sex partners of people who inject drugs.

A 2006 report from the U.S. Institute of Medicine highlighted the medical and public health consensus that a number of currently available interventions can markedly reduce the transmission of HIV among people who inject drugs and from those people to others, especially when these interventions are used together as components of a comprehensive program.⁹ The increasing evidence about the effectiveness of these interventions has led to a set of joint recommendations from the World Health Organization (WHO), the United Nations Office on Drugs and Crime (UNODC), and the Joint United Nations Programme on HIV/AIDS (UNAIDS) for a comprehensive package of interventions to address IDU and HIV/AIDS together (box 1).¹⁰

Box 1

Nine essential interventions in comprehensive programs for people who inject drugs

- needle and syringe programs;
- medication-assisted therapy and other drug dependency treatment;
- HIV testing and counseling;
- antiretroviral therapy;
- prevention and treatment of sexually transmitted infections;
- condom programming for people who use drugs and their sexual partners
- targeted information, education and communication programs
- viral hepatitis diagnosis, treatment and immunization;
- tuberculosis prevention, diagnosis and treatment

Source: Adapted from World Health Organization (WHO), *WHO, UNODC, UNAIDS Technical Guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users* (Geneva: WHO, 2009), as cited in footnote 9.

⁹ Institute of Medicine (IOM), *Preventing HIV Infection among Injecting Drug Users in High Risk Countries: An Assessment of the Evidence* (Washington, D.C.: National Academies Press, 2006), accessed on March 26, 2011, at http://www.nap.edu/catalog.php?record_id=11731.

¹⁰ World Health Organization (WHO), *WHO, UNODC, UNAIDS Technical Guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users* (Geneva: WHO, 2009), accessed on March 22, 2011, at http://www.unodc.org/documents/hiv-aids/idu_target_setting_guide.pdf.

These evidence-based global recommendations are consistent with those in the U.S. Institute of Medicine report.

Because people who inject drugs in several sub-Saharan African countries are increasingly being found to have high rates of new HIV infections (table 1), those African countries now risk similar impacts. More specifically, as overall national HIV prevalence in Kenya and Tanzania stabilizes and as new infection rates in the general population begin to fall, as appears to have already begun to occur,¹¹ HIV infections related to IDU are likely to become progressively larger proportions of the national HIV/AIDS burdens in those countries. In the context of the generalized epidemics seen in many African countries, IDU has been viewed until recently as a relatively minor driver of HIV transmission that is of limited consequence to the success of national HIV control activities. However, it now appears that effective prevention of IDU-related HIV is likely to be required to reach ultimate national prevention goals.

The rate of new adult HIV infections (HIV incidence) appears to be falling globally and in most geographic regions of the world. The regional exceptions to this trend of decreasing HIV rates are Eastern Europe and Central Asia, the two regions with the largest recent increases in numbers of people who inject drugs.¹² In fact, five of the world's seven countries with the highest overall HIV incidence are in those two regions.

More than 20 years ago, Plummer et al. highlighted the importance of continuing to focus on core transmission groups, even in generalized HIV/AIDS epidemics,¹³ because as overall numbers of HIV infections in the general population decline over time, numbers of new infections related to these core groups would assume increasing importance in national HIV/AIDS epidemics.

However, although prevention of new HIV infections has been an acknowledged U.S. and global priority for many years, PEPFAR was, until recently, unable to directly support some key components of comprehensive HIV prevention programs for people who inject drugs. For example, PEPFAR was unable to routinely support addiction treatment programs, including medication-assisted treatment (MAT) with methadone or other medications, *unless those people to be treated were already infected with HIV*.¹⁴ Exceptions to that MAT policy, though possible, had to be approved on a program-by-program basis from the Office of the Global AIDS Coordinator (OGAC). Support for needle and syringe programs was strictly prohibited, even for people using drugs who were not yet able to access addiction treatment programs.

¹¹ Ibid.

¹² UNAIDS, *Report on the Global AIDS Epidemic 2010*.

¹³ Francis A Plummer et al., "The importance of core groups in the epidemiology and control of HIV-1 infection," *AIDS* 5(S1) (1991): 169–176. The concept of core groups, now called most-at-risk populations (MARPs), includes sex workers, people who use drugs, and men having sex with men (MSM).

¹⁴ U.S. Department of State, "HIV Prevention among Drug Users Guidance #1: Injection Heroin Use," March 2006 (Washington, D.C.: Office of the Global AIDS Coordinator, 2006). This document is no longer available on the PEPFAR website.

Table 1. Information on HIV and Injection Drug Use, Kenya and Tanzania, 2004–2010

		Kenya	Zanzibar	Mainland Tanzania
Total population		41 million	1 million	42 million
HIV prevalence among 15–49 year olds in total population		Men: 5.5% Women: 8.8%	Men: 0.6% Women: 0.9%	9.2%
Proportion of all HIV infections linked to IDU		4%–5%	?	?
Proportion of HIV infections at coast linked to IDU		17%	N/A	?
Among people who inject drugs	Estimated number injecting drugs	30,000	4,000	25,000–50,000
	Overall HIV prevalence	36%–43%	16%	42%
	Proportion of women among them	5%–11%	5%	N/A
	Example of HIV prevalence differences by gender within a single study	Men: 32% Women: 80%	Men: 14% Women: 74%	Men: 27% Women: 58%
	Proportion sharing syringes	32%	>50%	33%–54%
PEPFAR IDU funding as a proportion of the total FY2010 HIV prevention portfolios ¹⁵		0.8%	2.7%	

Source: This table was created using data from sources cited in this report in footnotes 7, 17, 19, 20, 23, 39, and 40.

In July 2010, however, OGAC issued a revised *Comprehensive Guidance on HIV Prevention for People Who Inject Drugs*¹⁶ for use in PEPFAR-supported programs. That evidence-based technical guidance allows individual PEPFAR country programs to begin supporting a broader array of HIV prevention and addiction care and treatment opportunities among people injecting drugs. The revised guidance advocates for a comprehensive prevention program, highlighting

¹⁵ *President’s Emergency Plan for AIDS Relief, Fiscal year 2010: PEPFAR Operational Plan*, April 2011 (Washington, D.C.: 2011), Table A.2: FY 2010 Approved Funding in PEPFAR Operational Plans by Operating Unit and Budget Code: Prevention, p. 130, accessed April 13, 2011, at <http://www.pepfar.gov/documents/organization/150800.pdf>. The denominators for these calculated proportions do *not* include funding for HIV counseling and testing. These proportions probably represent minimal estimates since PEPFAR resources allocated to other categories (e.g., health system strengthening, HIV counseling and testing, condom procurement) presumably contribute to the effectiveness of programs addressing IDU. Finally, because the revised PEPFAR guidance was issued only during the last three months of FY2010, its impact on PEPFAR’s total FY2010 funding to address IDU might have been expected to be small; presumably, data for the current (FY2011) fiscal year will indicate increases in the IDU funding category for those two countries and for PEPFAR as a whole.

¹⁶ U.S. Department of State, *Comprehensive HIV prevention for People Who Inject Drugs*.

three specific elements to prevent HIV infection among injection drug users: (1) community-based outreach programs; (2) treatment of drug dependence; and (3) access to clean injection equipment for those not yet able to access effective treatment. Specifically, the new guidance allows PEPFAR country programs to begin supporting programs using medication-assisted treatment (MAT)¹⁷ in which approved medications such as methadone or buprenorphine are provided to directly treat addiction. The guidance also allows support for purchase of naloxone, a medication used to prevent deaths from acute overdose with heroin or other opiates. The guidance also removed the absolute prohibition against support for needle and syringe programs to prevent HIV infections among people unable to access effective addiction treatment programs.

The IDU-HIV/AIDS Situation in the Republic of Kenya

Large-scale injection of heroin began relatively recently in Kenya as “white” (purer) heroin became increasingly available in the late 1990s and early 2000s.¹⁸ Estimates of numbers of people who inject drugs in Kenya range from 18,000 to 30,000 (table 1).¹⁹ Although IDU is now thought to be most heavily concentrated in populations on the country’s east (Indian Ocean) coast, including the coastal cities of Mombasa and Malindi, several inland cities, including the capital of Nairobi, are also thought to have growing numbers of people who inject drugs.²⁰ An estimated 5–11 percent of Kenyans who inject drugs are women.

The most recent national HIV data from Kenya indicates that 8.8 percent of the country’s 15 to 49 year old women and 5.5 percent of 15 to 49 year old men are HIV-infected (table 1) and that about 80 percent of them do not know their infection status.²¹ The 2008 Kenya Modes of Transmission Study indicated that the three “most-at-risk populations” (MARPs, including people who inject drugs)²² accounted for about one-third of Kenya’s new HIV infections, with about 4 percent of new HIV infections linked to IDU.²³ Although that same survey estimated that persons who injected drugs accounted for 17 percent of all new infections in Kenya’s Coast

¹⁷ Although medication-assisted treatment (MAT) has been used successfully to treat opiate addiction in the United States for many years, there are few MAT programs in sub-Saharan Africa. MAT has sometimes been called opiate substitution therapy (OST), but MAT is the preferred term in this report.

¹⁸ Clement Deveau et al., “Heroin Use in Kenya and Findings from a Community Based Outreach Programme to Reduce the Spread of AIDS,” *African Journal of Drug and Alcohol Studies* 5 (2006): 95–107.

¹⁹ Needle and Zhao, *HIV Prevention among Injection Drug Users*.

²⁰ Kenya National AIDS Control Council, World Bank, UNAIDS, *Kenya HIV Prevention Response and Modes of Transmission Analysis, Final Report, March 2009* (Nairobi: National AIDS Control Council, 2009), accessed March 24, 2011, at http://www.unaidsrsta.org/sites/default/files/modesoftransmission/Kenya_MoT_Country_Synthesis_Report_22Mar09.pdf.

²¹ Republic of Kenya, “Kenya AIDS Indicator Survey 2007, Final Report, September 2009” (Nairobi, 2009), accessed March 28, 2011, at http://www.aidskenya.org/public_site/webroot/cache/article/file/Official_KAIS_Report_20091.pdf.

²² For HIV/AIDS, the most-at-risk populations (MARPs) are usually considered to include (1) sex workers, (2) people who inject heroin and other drugs and (3) men who have sex with men (MSM). The “youth” category is sometimes considered to be a MARP.

²³ Kenya National AIDS Control Council et al., *Kenya HIV Prevention Response and Modes of Transmission Analysis, Final Report, March 2009*.

Province, that latter estimate did *not* include any estimate of the frequency of HIV transmission from people who inject drugs to their sexual partners. A study among people who injected drugs in Nairobi found an overall 36 percent HIV prevalence, although the 80 percent HIV prevalence among the relatively small number of women in the study was much greater than the 32 percent HIV prevalence among men.²⁴ Another 2004 survey in the coastal city of Mombasa found 49 percent of people who injected drugs to be HIV-infected,^{25,26} and a more recent (2008) UNODC-sponsored survey found a 43 percent HIV prevalence²⁷ in that group. High rates of sharing of needles and syringes were also found in several of these studies.

The consensus among people we spoke with was that IDU is continuing to increase along Kenya's coast; however, we could find no population-based national or regional estimates of the numbers of people who were using heroin or other illegal drugs. This extraordinary data gap is probably due at least in part to the criminalization and strong stigmatization of injection drug use that both keeps individuals' drug use relatively well hidden and discourages the kind of population-based surveys needed to better characterize these groups.

Of particular note, there was no available population-based information on the numbers or characteristics of women who inject drugs. In addition, although overlap has been described between the populations of male drug injectors and men having sex with men (MSM), representative HIV-related survey data were also unavailable for MSM.

Current HIV/AIDS control activities of the Government of Kenya (GoK) are guided by KNASP III, the *Kenyan National AIDS Strategic Plan 2009/10–2012/13: Delivering on Universal Access to Services*.²⁸ This plan was informed in part by the 2007 Kenya AIDS Information Survey, by the 2008 Kenya Modes of Transmission Study,²⁹ and by routine program monitoring data.

KNASP III acknowledges the lack of HIV-related population-based data on people who use drugs. It calls for the development by the government of new HIV prevention policies and, in what is apparently a significant government policy shift, KNASP III contains an explicit plan to “work with all [MARPs] and seek innovative ways to reduce HIV transmission.” In an August

²⁴ Maurice Odek-Ogunde et al., “Seroprevalence of HIV, HBC and HCV in injecting drug users in Nairobi, Kenya: World Health Organization Drug Injecting Study Phase II findings. Poster Exhibition: The XV International AIDS Conference (2004): Abstract no. WePeC6001,” accessed March 22, 2011, at <http://www.iasociety.org/Default.aspx?pageId=11&abstractId=2171540>.

²⁵ D.M. Ndeti, cited in Deveau et al., “Heroin Use in Kenya.”

²⁶ Several publications have cited rather startling HIV infection rates of 68 percent to 88 percent among people who injected drugs along Kenya's coast. However, the study cited as the source of those figures could not be located.

²⁷ Cited in Needle and Zhao, *HIV Prevention among Injection Drug Users*, p. 64.

²⁸ National AIDS Control Council, *Kenyan National AIDS Strategic Plan 2009/10–2012/13: Delivering on Universal Access to Services* (Nairobi, 2009), accessed March 22, 2011, at http://www.nacc.or.ke/index.php?option=com_content&view=article&id=112:knasp-iii-activities&catid=88:national-strategic-plan-overview&Itemid=87.

²⁹ Kenya National AIDS Control Council et al., *Kenya HIV Prevention Response and Modes of Transmission Analysis*.

2010 media report,³⁰ this important prevention policy shift by the Kenyan government was linked to the revised PEPFAR HIV prevention guidance that had been issued a month earlier. Finally, Kenya's most recent (2010) report to the UN General Assembly Special Session on AIDS (UNGASS) identified some of the outstanding legal and cultural obstacles to addressing the challenges of IDU and described efforts under way to overcome them.³¹

At the time of our visit, the Government of Kenya's responsibilities for responding to the public health, medical, and social aspects of HIV/AIDS and IDU in Kenya remained divided between four entities: the National AIDS Control Council, located in the Office of the President; two separate health ministries; and the country's criminal justice system, which has responsibility for demand reduction activities for illegal drugs and for care and treatment of incarcerated HIV-infected people who inject drugs. A new national constitution, when implemented, is intended to devolve greater responsibility to the local level and to consolidate the work of a number of current government ministries. While it is unclear how this new system will evolve, if well managed, it could help develop a more unified HIV/AIDS leadership and result in programs that are more responsive to local conditions.

The United Nations Office on Drugs and Crime is a member of the Joint United Nations Team on AIDS in Kenya and supports the Kenyan government in implementing KNASP III. UNODC/Kenya has helped support HIV-related IDU care and treatment activities by facilitating the creation of a network of local NGOs working on similar issues, by increasing the capacity of NGO and government staff working on IDU issues, and by supporting the establishment of outreach capacity in NGOs. UNODC has also supported a national mapping exercise to identify areas where IDUs congregate so that outreach activities could focus their resources most effectively.

Additional civil society support for HIV/AIDS control activities in Kenya comes from various local and international NGOs and from the Kenya AIDS NGOs Consortium (KANCO), an umbrella organization with links to more than a thousand nongovernmental, community-based, faith-based, and other organizations.³²

Needles and syringes can be purchased legally in pharmacies without a prescription. However, needle and syringe sharing rates were said to be high. We were told that many pharmacists refuse to sell these items to persons suspected of injecting illegal drugs and that the possession of a syringe can be considered sufficient grounds for arrest and incarceration. At least in Kenya's coastal areas, a large proportion of the currently incarcerated population was said to be in jail because of illegal drug use.³³ Although we found no objective documentation, IDU is said

³⁰ "Kenya: Government changes tack on HIV prevention, treatment for drug users," IRIN, the humanitarian news and analysis service, accessed on March 22, 2011, at <http://www.irinnews.org/Report.aspx?ReportID=90266>.

³¹ National AIDS Control Council of Kenya, United Nations General Assembly Special Session on HIV and AIDS: UNGASS 2010 Country Report—Kenya, accessed on March 25, 2011, at http://www.unaidsrstes.org/sites/default/files/kenya_2010_country_progress_report_en.pdf.

³² Kenya AIDS NGOs Consortium (KANCO), accessed on March 24, 2011 at <http://www.kanco.org/web/guest/home;jsessionid=8600971D760DB0F7551C4A3A62DC7B24.node1>.

³³ Other illicit drugs associated with incarceration include cannabis and khat, the latter said to be arriving from Somalia.

to occur within Kenyan jails, and limited data suggest a high HIV prevalence among incarcerated Kenyans who inject drugs. Neither programs for treatment of IDU and/or AIDS nor HIV prevention programs (including condom provision) were available within Kenyan jails.

Several indigenous NGOs and community-based organizations, or CBOs, have established small IDU care and treatment programs at various sites that include public education, street outreach (usually but not always conducted by volunteer peer educators), HIV testing, referral of HIV-infected persons for care; family involvement where possible; and multi-month abstinence-based residential addiction treatment programs in therapeutic communities³⁴ followed by several months of residence in halfway houses. Access to MAT was not yet available in these programs.³⁵ We visited three such small programs. Outreach workers identified people in local communities who had been injecting drugs, educated them about the associated risks, and tried to recruit them to enter treatment. Several outreach workers we spoke with spontaneously commented about the extremely low levels of initial awareness among those using drugs of the risk of HIV infection through the sharing of needles and syringes. Each treatment program visited was functioning at capacity, and at least one had a waiting list for vacancies as they became available. In addition to the absence of residential IDU care and treatment facilities for women,³⁶ one other major gap identified by program staff was the absence of any specific capacity to provide recovering drug users with new job skills and/or post-treatment employment.

Although there have been no government-supported needle and syringe programs in the country, Kenya was recently successful in attracting external resources for MARPs work, including support for the government's first-ever syringe and needle programs. In February 2011, shortly after our team's visit, Kenya's National AIDS Control Council (NACC) announced details of their new action plan to address HIV prevention and treatment among people injecting drugs as part of a comprehensive national program of care and treatment of IDU. This plan was endorsed by a workshop for members of parliament that had been convened by NACC.³⁷

³⁴ Studies elsewhere have shown that therapeutic communities can be successful in reducing levels and frequency of drug use but that this approach is not effective for everyone. These findings underscore the need to link such programs to other approaches such as MAT to maximize the number of available treatment options. See World Health Organization, Department of HIV/AIDS, *Effectiveness of drug dependence treatment in preventing HIV among injecting drug users* (Geneva: WHO, 2005), accessed on March 30, 2011, at <http://www.who.int/hiv/pub/idu/drugdependencefinaldraft.pdf>.

³⁵ We were told that MAT for persons injecting drugs is not prohibited by Kenyan law and that some MAT was occurring in Kenya's private medical sector. At the time of the team's visit, however, no MAT programs were being directly supported by GoK funds.

³⁶ At the time of our visit, a proposal to create a drug treatment center exclusively for women had been prepared by one local CBO and had been submitted for funding.

³⁷ United Nations Office on Drugs and Crime, "Kenya government to provide HIV services for people who inject drugs," accessed on March 30, 2011, at <http://www.unodc.org/unodc/en/hiv-aids/about-kenya.html>.

Recent Encouraging Policy and Program Developments in Kenya

In the past, consensus on national policies in Kenya to reduce the HIV/AIDS burden among people who inject drugs has been difficult to reach. However, a number of recent developments augur well for the development and scale-up there of comprehensive drug treatment programs that effectively address HIV prevention issues.

First, there was an obvious recognition by public health leaders that IDU and IDU-related HIV infections are growing national problems that need greater attention and more active support from the GoK. There seemed to be a consensus that the IDU transmission route is likely to become an increasingly important challenge for the ultimate success of Kenya's national HIV/AIDS control activities.

Second, Kenya's current five-year HIV/AIDS plan, KNASP III, lays out a comprehensive approach to control of HIV/AIDS that includes specific activities to address IDU challenges over both the short and long term. In that regard, the December 2010 Global Fund award to Kenya is an important milestone for increasing the access of people who inject drugs to comprehensive drug treatment programs. The February 2011 public announcement by the NACC of details of a comprehensive care and treatment program is another milestone.

The December 2009 partnership agreement between the governments of Kenya and the United States³⁸ incorporated numerous aspects of Kenya's KNASP III national strategic plan. Although that agreement does not mention explicitly either needle and syringe programs (NSPs) or MAT, it does discuss various programmatic aspects of reaching MARPs and calls for the progressive development of at least five new rehabilitation centers for people who inject drugs.

Finally, ongoing activities in Kenya that are linked to the U.S. Global Health Initiative, a program that includes an explicit focus on women's health, may help highlight the need to more directly address the difficult prevention, treatment, and care challenges facing Kenyan women who inject drugs.

The HIV/AIDS-IDU Situation in the United Republic of Tanzania

On both mainland Tanzania and the nearby semiautonomous island region of Zanzibar,³⁹ it was widely acknowledged by government staff and others we interviewed that there are few reliable population-based estimates of numbers of men or women who inject drugs. One estimate was that there may be as many as 25,000 people who inject drugs within Tanzania. Zanzibar was estimated to have 4,000. Data from more recent studies are currently being analyzed.

³⁸ *Partnership Framework between the Government of the Republic of Kenya and the Government of the United States of America to Support Implementation of the Kenya National HIV Response.*

³⁹ The United Republic of Tanzania includes mainland Tanzania and the semiautonomous island region of Zanzibar. The Zanzibar archipelago comprises the islands of Unguja and Pemba with a population of just over 1 million and its own health ministry and health policies.

More than half of the discarded syringes found in coastal Tanzania in a 2004 study held blood containing HIV antibodies indicative of infection with HIV. A small 2006 survey of 319 men and 98 women who injected drugs found that 58 percent of women were HIV-infected while only 27 percent of men were infected.⁴⁰ About a third of those surveyed reported sharing injection equipment, and nearly 85 percent of the women had recently traded sex for money. A 2010 study of people injecting drugs in Dar es Salaam found an HIV prevalence of 55 percent among women and 12 percent among men. A larger 2007 survey on Zanzibar found a 16 percent overall HIV prevalence among people injecting drugs versus a less than 1 percent prevalence among the general population.⁴¹ That same survey found an HIV prevalence of 14 percent among men injecting drugs compared with 74 percent among the smaller number of women injecting drugs. More than half of the survey respondents reported sharing syringes and needles. Finally, people who inject drugs are said to make up about half of those enrolled in Zanzibar's antiretroviral treatment (ART) programs.

In 2007, the government of Zanzibar issued a detailed strategic plan (2007–2011) for combatting substance abuse and HIV/AIDS that included a two year accelerated program to quickly begin addressing IDU-HIV issues.⁴² We were unable to find an interim evaluation of progress to date under that plan.

Plans are under way for new MARPs surveillance activities on Zanzibar that are designed to provide reliable estimates of the numbers and characteristics of people there using drugs. On the mainland, data now being analyzed from a large survey in Dar es Salaam, when available, will help clarify the resource needs for addressing IDU in that large city. Similar surveys are planned for other Tanzanian cities.

Tanzania's national Drug Control Commission (DCC), an interministerial body situated in the prime minister's office, led in the development of a national strategic HIV/AIDS framework for 2010–2014. In 2010, the DCC also published a detailed set of guidelines for implementation of new MAT programs and for outreach for HIV prevention among people who inject drugs. The Ministry of Health and Social Welfare has also published analogous guidelines for hospitals and primary care clinicians, with a focus on screening for substance abuse by primary care providers. As in Kenya, UNODC has worked in Tanzania with both the DCC and the Ministry of Health to improve overall evidence-based treatment policy and programs for drug dependence.

Reportedly, the DCC believes that both the numbers of people injecting drugs and the related HIV/AIDS burdens are growing. While the Tanzanian president sponsored the 2007 national HIV testing and counseling campaign, we also heard from several sources that many other national policymakers outside the public health arena still do not seem to consider IDU as an important issue.

⁴⁰ Sandra Timpson et al., "Substance abuse, HIV risk and HIV AIDS in Tanzania," *African Journal of Drug and Alcohol Studies* 5 (2006): 158–169.

⁴¹ Zanzibar AIDS Control Programme (ZACP), Ministry of Health and Social Welfare, "Integrated behavioral and biological surveillance survey among most at risk populations in Zanzibar, 2007" (Stone Town: ZACP, 2009).

⁴² Revolutionary Government of Zanzibar, *Zanzibar Substance Abuse—HIV & AIDS Strategic Plan (2007–2011)*.

Syringes and needles can be purchased at pharmacies in Tanzania without prescriptions although, as in Kenya, possession of a syringe or needle can be considered grounds for arrest and incarceration. Even discussion of the distribution of bleach and other materials for cleaning used syringes and needles has been controversial. However, a small needle and syringe program, or NSP, has recently begun in one area of Dar es Salaam,⁴³ and additional resources are likely to be available for other such programs to begin operation later in 2011. A national technical working group has been formed to carry out detailed NSP planning, including the drafting of operational guidelines. We were also told that PEPFAR's revised guidance had played a positive role in encouraging Tanzanian officials to expand their support for NSP programs.

The small drug treatment program we visited in Zanzibar is supported largely by volunteers and through small grants from indigenous NGOs and additional technical support from at least one international NGO. The program includes an outreach program, an abstinence-based residential treatment facility, a halfway house, and a training program for outreach peer educators who make up a large proportion of its volunteer staff. The program provides both mobile and "in-house" HIV testing and counseling. At the time of our visit, MAT was not available to program participants. Persons found to be HIV-infected are referred to medical facilities for evaluation and are often escorted to the medical facilities by program staff members who can help mitigate the stigma that some health workers display toward people who use drugs. We were told of the close involvement of the families of those in the recovery program, including how family pressure to get help with addiction was often a deciding factor in individuals' decisions to enter the recovery program. The outreach workers in Zanzibar specifically commented on how frequently their street clients seemed unaware of the HIV risks involved with sharing injection equipment. Another gap identified by program staff was the lack of programs or resources to provide job training or to help find paid employment for recovery program participants.

As recommended by WHO, methadone is on Tanzania's approved drug list, and the narcotic antagonist naloxone is already in use in hospital emergency rooms to treat drug overdoses and thereby prevent deaths.

A new MAT program, using directly observed methadone treatment and based at and supported by Muhimbili University Hospital, began operation in Dar es Salaam in February 2011. To improve patients' access to MAT, additional programs will be opened gradually at other sites on the mainland, and discussions have begun about opening a MAT program site in Zanzibar.

Tanzania has submitted three IDU-related proposals to the Global Fund for programs on the mainland, most recently a Round 10 proposal that would have included funding to address MARPs. These proposals have not been successful.

⁴³ C. Debaulieu and N. Luhmann, "Starting comprehensive harm reduction in Temeke District, Dar-es-Salaam, Tanzania," presentation at *Harm Reduction 2011* Conference, April 3–7, 2011, Beirut, Lebanon, accessed on March 6, 2011, at www.ihraconference.com/2011/index.php?page=browseSession.

Recent Encouraging Policy and Program Developments in the United Republic of Tanzania

Although challenges clearly remain, some recent developments in Tanzania bode well for progress toward the development of comprehensive injection drug treatment programs that can help address HIV prevention issues.

Tanzania's IDU-related information gap is at least as great as Kenya's and much of the limited published data is now several years old. However, when the team visited in December 2010, there was already a clear awareness in Tanzania of the need for better data. Initial plans were under way to develop population-based survey work on Zanzibar and to complete an analysis of a recent large survey in Dar es Salaam and representative surveys in several other Tanzanian cities.

The team saw an apparent new willingness in Tanzania to consider evidence-based approaches to more effectively address IDU, particularly the use of medication-assisted treatment (MAT). The policy approval and early February (2011) start-up of Tanzania's first MAT program, the advanced planning for additional MAT program sites, and the beginning of the country's first needle and syringe program as part of a comprehensive IDU treatment program are clearly signs of both policy and operational progress. This new attitude is also reflected by the placement of the national Drug Control Commission within the Office of the Prime Minister, by the high level of awareness and interest we discerned within that office, and by the rapid creation and publication of the MAT guidelines produced by that office.

Although the recently signed partnership agreement between the governments of Tanzania and the United States did not mention IDU explicitly, the existence of that agreement does provide an opportunity to continue to address the HIV/AIDS aspects of IDU in a collaborative and evidence-based manner.

The Way Forward: Emerging Opportunities and Challenges in East Africa

Although unique in certain respects, the IDU epidemics in Kenya and Tanzania also share a number of common characteristics that offer significant opportunities for joint learning and that could play a foundational role in developing model approaches both for those two countries and more broadly throughout the region.

1. PEPFAR's revised guidance on HIV prevention for people who inject drugs has helped catalyze important changes in both Kenya and Tanzania. Considerable stigma remains in both countries against people infected with HIV/AIDS and/or people who use illegal drugs. IDU-related policy changes have come slowly. However, as suggested by Kenya's current KNASP III plan, its recent successful Global Fund application, and the recent start-up in Tanzania of new MAT and needle and syringe programs, the important policy shifts in both countries appear to signal a growing willingness to focus on evidence-based approaches to preventing HIV transmission. As has been the case elsewhere, HIV risk reduction through the provision of access to uncontaminated injection equipment has been politically controversial in both countries, with

until recently a certain reluctance to move forward with government support of needle and syringe programs. However, even that barrier now appears to have been overcome—in Kenya by the successful country application for external resources to support needle and syringe programs and in Tanzania by the actual start-up of such a program in Dar es Salaam in early 2011. A technical working group in Tanzania is now considering standardized national guidelines for those programs.

2. Both Kenya’s and Tanzania’s responses to the HIV-IDU epidemic would benefit from additional population-based data on IDU and IDU-related HIV infections. In both countries, injection drug use did not begin to increase substantially until the late 1990s.⁴⁴ As overall national HIV incidence continues to stabilize—or even shrink, as the most recent UNAIDS data for both countries suggest⁴⁵—the growing number of new HIV infections associated with IDU will become an ever larger proportion of their national HIV/AIDS burdens, putting each country’s goals for HIV/AIDS control at risk.

Although concentrations of IDU exist in some urban areas away from the Indian Ocean coast, the available data in both countries suggest that IDU is more common along the coast than further inland and that it is increasing. Although the data do indicate generally where those concentrations are located and that their numbers are sizable and appear to be growing, additional and more specific population-based data (e.g., estimated numbers of people injecting drugs, including their age groups, gender, needle sharing practices, awareness of risks from such sharing, etc.) will be needed in each country to allow effective planning and evaluation of comprehensive intervention programs.

3. Existing programs for HIV prevention and addiction care and treatment are under-resourced, overburdened, and cannot yet provide access to all components of a comprehensive approach. All treatment programs for people who inject drugs that we saw were said to be operating at full capacity, with waiting lists for openings in their residential treatment facilities. Although a government-supported MAT program has begun in a single site in Tanzania and is in various stages of planning for other sites in both countries, none of the residential program sites we saw had access to MAT. Other major weaknesses identified by program staff included a lack of job-training or employment opportunities for program participants, a gap that will only increase participants’ risk of relapse, and the lack of prevention or treatment programs for incarcerated people who use drugs.

4. Women and girls who inject drugs have unique vulnerabilities that are not being well-addressed. Another major weakness identified by staff in the treatment programs we visited was the virtual absence of addiction care and treatment programs for women. The programs we visited and others we heard described had only a few female outreach workers, a major constraint. The programs had limited capacity for attention to women’s health issues, including drug care and treatment during pregnancy and lactation and the difficulties of participation in addiction treatment and/or antiretroviral treatment programs while carrying out child care. The programs had no capacity to address the women’s social and economic circumstances that increase their

⁴⁴ Deveau et al., “Heroin Use in Kenya.”

⁴⁵ UNAIDS, *Report on the Global AIDS Epidemic 2010*, p. 181.

risk of gender-based violence, lack of access to legal services, and broader stigma and discrimination.

Compared with men who inject drugs, women who inject are even more hidden and more stigmatized, and their numbers are even less well known. Information that we received in Kenya and Tanzania supports what has been learned about men and women who inject drugs in other countries. Women who inject drugs have additional challenges that complicate their treatment efforts—e.g., pregnancy, child care, their possible involvement in transactional sex, their often subordinate position vis-à-vis their husbands or other primary sexual partners, and their higher rates of HIV infection than men in similar settings. Each challenge only adds to the complexity of providing women with comprehensive drug treatment programs. According to program staff with whom we spoke, there are currently no residential addiction treatment facilities for women in either country. Anecdotally, few if any such programs exist anywhere in sub-Saharan Africa.⁴⁶

Discussion and Conclusions

Because the sharing of needles and syringes among people who inject drugs is a highly efficient method for spreading HIV, transmission through this route is a growing HIV prevention challenge in Kenya and Tanzania. However, a number of recent developments, including but clearly not limited to the issuance of the new PEPFAR HIV-IDU guidance, suggest reasons for some cautious optimism about the ability of host governments and NGOs in these two countries to make additional progress in slowing the spread of HIV related to IDU. For the immediate future, this progress is likely to require continued external support.

Despite having been in place for only five months at the time of our visit, the recently revised U.S. policy guidance for preventing HIV transmission among people who inject drugs is having an important impact in these countries. Policies and practices in both Kenya and Tanzania are moving in a positive direction. These shifts have occurred simultaneously with changes to U.S. policy approaches, which have created new incentives for partner governments to become more active and forward leaning in this area. In this more receptive environment, even modest additional U.S. investments could have relatively large impacts on existing community-based drug treatment and prevention programs and could provide incentives for new or larger investments by other donors in the future.

To be most effective, U.S. and other external support for HIV-related IDU programs should include measures to help address the key challenges noted above, such as

- Strengthening the epidemiological data base necessary to effectively plan, implement, monitor, and evaluate intervention programs for people who inject drugs, including, for example, population-based estimates of numbers of people who are injecting drugs, their demographics and sites of concentration, their HIV risks and HIV prevalence, their access to comprehensive programs, including ART when required, etc. In this regard, every opportunity should be taken to gather data relevant to IDU and IDU-related HIV/AIDS, including gender-disaggregated data, during the process of other data collection activities in

⁴⁶ The Omari program in Kenya has recently submitted an application for funding such a program.

Kenya and Tanzania. For example, future HIV-related surveys in these countries, including U.S. government-supported AIDS Indicator Surveys and Demographic and Health Surveys, should collect IDU-related risk and awareness information whenever possible.

- Leveraging commitments in principle and in fact from the governments of Kenya and Tanzania to commit resources and to continue reform of current policies that may inhibit access to effective, evidenced-based, comprehensive interventions for injection drug use. While the recent progress in introducing both Tanzania’s first MAT program, its first NSP, and the planned introduction of NSPs in Kenya are each very encouraging developments, providing large-scale access to these IDU treatment and HIV prevention interventions is probably the most effective way to maintain low HIV prevalence among people who inject drugs. Ongoing high-level support and leadership from U.S. country teams and modest increases in IDU-related resources can help encourage those governments’ slow but steady policy evolution toward a comprehensive approach to HIV-related IDU issues that includes assessment of community needs and adequate access for people who use drugs to comprehensive prevention, care, and treatment programs.
- Ensuring that a special effort is made by U.S. programs and by both of these national governments to address the prevention, treatment and care challenges facing women who inject drugs, including the planning and implementation of comprehensive interventions that take account of the particular vulnerabilities of these women. For example, a small proportion of the new U.S. resources intended to support five new drug treatment centers noted in the 2009 U.S.-Kenya Partnership agreement⁴⁷ could be directed toward the creation of a women’s IDU care and treatment “Center of Excellence” that addresses in a comprehensive way the complex needs of women who inject drugs. As another example, the U.S. GHI’s programs could include specific attention to—and metrics for addressing—the challenges facing women who inject drugs.
- Engaging directly to ensure that U.S. and other donor-supported IDU programs are well-coordinated and mutually supportive. Directly encouraging and supporting the coordination and development of future Global Fund proposals, especially in Tanzania, where coordination was noted to have been a problem, could be an important step toward creating a sustainable national policy and planning capacity for control of HIV/AIDS and of IDU.
- Ensuring that U.S. country health teams in Kenya and Tanzania regularly exchange information and lessons learned about addressing IDU-related HIV/AIDS issues, including both problem assessment information and the progress and lessons learned during intervention program planning and implementation. PEPFAR’s host government counterparts in each country should be encouraged and supported to do the same with counterparts in the other country. These steps are particularly important because of the similarity of the IDU challenge(s) and the obstacles to effective interventions in these two countries and throughout the region.

⁴⁷ *Partnership Framework between the Government of the Republic of Kenya and the Government of the United States of America to Support Implementation of the Kenya National HIV Response.*

A number of other important IDU-related concerns that were raised during our visit cannot be addressed in this brief report but remain as important challenges that will ultimately need to be addressed as coverage of comprehensive prevention, care, and treatment programs increases in Kenya and Tanzania.⁴⁸

Final Comments

AIDS remains a fatal disease if the underlying HIV infection is not treated successfully with a life-long course of antiretroviral treatment. Because access to such treatment is likely to remain limited in many countries, new HIV infections will result in the premature deaths of many people. These early deaths will be particularly tragic if they occur as a result of missed opportunities to prevent HIV transmission through widespread implementation of affordable evidence-based interventions.

PEPFAR's recent guidance supporting a comprehensive approach to the use of evidence-based interventions to prevent HIV infections among people who inject drugs comes at a critical juncture in growing efforts in Kenya and Tanzania to slow the spread of HIV and to thereby reduce the numbers of preventable premature deaths in highly vulnerable populations. As noted previously, Kenya and Tanzania are each making progress toward more effective prevention of IDU-related HIV infections. Because of the relatively low cost and proven efficacy of the interventions being planned, even modest additional U.S. investments in this context could have substantial benefits. In particular, investments in the near term could help leverage longer-term engagement and support from the respective national governments and from other external donors to provide people who inject drugs with access to comprehensive HIV and IDU prevention, care and treatment programs.

⁴⁸ Some of these concerns include (1) strong stigma remaining among the general population and among some health care workers against people who use drugs; (2) prevention of infection with hepatitis C, a virus that is also transmitted through sharing of needles and syringes and that can lead to fatal illness; (3) how new and expanding MAT programs should be coordinated with (or integrated into) existing abstinence-based treatment programs; (4) the possibility that increasing use of auto-destruct syringes will reduce access to unused standard needles and syringes for people who inject drugs but who are not yet able to access comprehensive drug care and treatment programs; (5) HIV prevention challenges faced by people who use drugs and who are incarcerated and without access to uncontaminated injection equipment.

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