PATHFINDER INTERNATIONAL

Combination Prevention of HIV: A Technical Guide to Working with Key Affected Populations

FEBRUARY 2014

Pathfinder INTERNATIONAL
Sexual and reproductive health without fear or boundary

CONTENTS

ACKNOWLEDGEMENTS

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In addition to the references listed, this guide was informed by Pathfinder's implementation experience in Brazil, India, Kenya, and Mozambique. The task force wishes to acknowledge the hard work of implementers of the following projects: the Mukta Project in India (funded by the Avahan AIDS Initiative of the Bill and Melinda Gates Foundation, 2003–2013), APHIA II and APHIA*plus* in Kenya (funded by USAID, 2006–2011 and 2011–2013), HIV Prevention for Most-at-Risk Populations in Mozambique (funded by the Centers for Disease Control and Prevention, 2010–2013), the Inclusão Project in Mozambique (funded by UNFPA, 2009–2011), and the Encontros Project in Brazil (funded by USAID, 2002–2005).

The task force is also grateful to the following individuals for their contributions: Julio Pacca (Pathfinder HQ), Olivia Moseley (Pathfinder HQ), Godfrey Mwayuli (Pathfinder Kenya), Alden Nouga (Pathfinder HQ), Joseph Petraglia (Pathfinder HQ), Camille Collins Lovell (Pathfinder HQ), Claire Cole (Pathfinder HQ), Mengistu Asnake (Pathfinder Ethiopia), Sophia Ladha (Pathfinder South Africa), T. K. Jayrajan (Pathfinder India), Rohit Koul (Pathfinder India), Khurshid Bhalla (Pathfinder India), and Irene Benech (Centers for Disease Control and Prevention).

Finally, Pathfinder extends its gratitude to the members of key affected population communities we have worked and collaborated with around the world over the years.

The contents of this document are solely the responsibility of Pathfinder International and do not necessarily reflect the views of the abovementioned donors.

Suggested Citation: Pathfinder International. *Combination Prevention of HIV: A Technical Guide to Working with Key Affected Populations.* Watertown, MA: Pathfinder International, 2014.

ACRONYMS AND ABBREVIATIONS

ART	Antiretroviral therapy
ARV	Antiretroviral
CBO	Community-based organization
CDC	Centers for Disease Control and Prevention
FSW	Female sex worker
GBV	Gender-based violence
HTC	HIV testing and counseling
KAP	Key affected population
MSM	Men who have sex with men
NGO	Nongovernmental organization
N-PEP	Non-occupational post-exposure prophylaxis
OI	Opportunistic infection
PEP	Post-exposure prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief
PLHIV	People living with HIV
PMTCT	Prevention of mother-to-child transmission
PrEP	Pre-exposure prophylaxis
PWID	People who inject drugs
SRH	Sexual and reproductive health
STI	Sexually transmitted infection
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
VCT	Voluntary counseling and testing
WHO	World Health Organization

FOREWORD

Over the past decade, Pathfinder International has worked with key affected populations across a variety of regions, countries, and settings. We firmly believe that integrated approaches play an essential role in effective HIV prevention strategies among these populations. As we argued in our 2008 *HIV Prevention among Vulnerable Populations: The Pathfinder International Approach,* effective HIV prevention strategies should "identify, develop, and pursue effective interventions that promote individual behavior and social change; guarantee equal access to comprehensive quality health services; and promote respect of fundamental human rights."[1]

Today, the debate over effective HIV prevention strategies increasingly centers on questions of cost-effectiveness and on which approach—structural, biomedical, or behavioral—is best. Proponents of biomedical interventions argue for investment and advancement of technologies such as pre- and post-exposure prophylaxis, treatment as prevention, and vaccines. Defenders of behavioral strategies emphasize the value generated by peer education, behavior change, and communication efforts. Proponents of structural interventions insist that social, political, and other environmental factors influence the effectiveness of biomedical and behavioral interventions. Pathfinder, like PEPFAR, believes that all three approaches must be applied together to yield the maximal health improvement outcome.

Designing integrated structural, biomedical, and behavioral approaches that are tailored to address the specific drivers of key affected populations' risk is critical, particularly given the powerful role that vulnerabilities at the societal, programmatic, and individual levels play in defining individual and community risk of infection.[2] When applied with the necessary balance, intensity, quality, and coverage, these integrated approaches have the best chance for a sustainable impact.

This resource is meant to provide guidance to Pathfinder staff, our partners, local organizations, and public health systems working for HIV infection prevention with key affected populations. This resource is guided by three principles:

- **Respect for human rights** as the basis for all interventions, with special emphasis on sexual and reproductive rights;
- **Evidence-based programming** that is informed by global research and effective monitoring and evaluation;
- **Effective community engagement** as part of the design, implementation, and evaluation of all interventions, emphasizing the improvement of social cohesion, social capital, and social inclusion indicators.

We believe that this combined, human rights-based strategic vision has the potential to enable significant advances in HIV prevention, shifting the emphasis from individual behavior to a more balanced, gender-sensitive combined approach that addresses the societal, political, programmatic, cognitive, and behavioral elements that are determinants of the HIV epidemic.[3]

It is our hope that this guide will help implementers, donors, and policymakers to launch integrated biomedical, behavioral, and structural interventions for HIV prevention, in line with these core principles. Ultimately, we believe this kind of strategy is our best collective means of advancing HIV-related health outcome improvements for the key affected populations we serve.

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[1] Pathfinder International, *HIV Prevention among Vulnerable Populations: The Pathfinder International Approach, Technical Guidance Series,* No. 6 (Watertown, MA: Pathfinder International, 2008). Available at: http://www.pathfinder.org/publications-tools/HIV-Prevention-Among-Vulnerable-Populations-The-Pathfinder-International-Approach.html.
[2] UNAIDS, *At Risk and Neglected: Four Key Populations. Report on the Global AIDS Epidemic* (2006), 103.
[3] Pathfinder, *HIV Prevention among Vulnerable Populations*, 2008.

INTRODUCTION

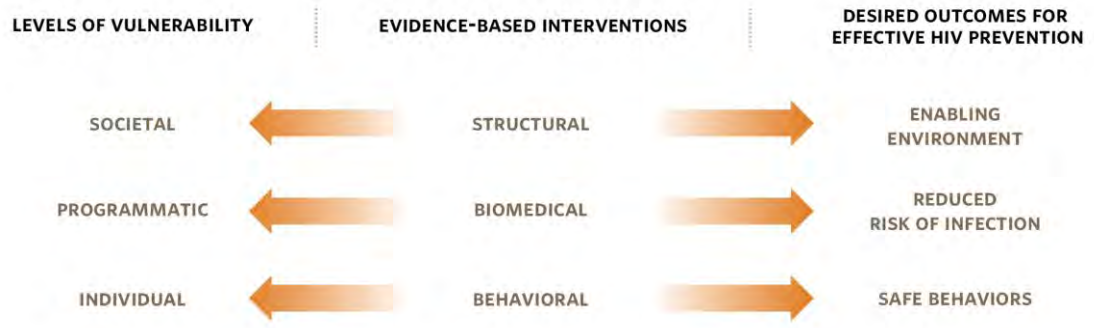
What is Combination Prevention of HIV?

It has long been established that HIV and AIDS programs should contain a combination of complementary, evidence-based interventions. Combination HIV prevention combines all three of the following types of interventions into a single integrated approach to HIV prevention.

- **Structural** interventions to promote an enabling environment by addressing the political, economic, and sociocultural factors that are the drivers of vulnerability to HIV infection.
- **Biomedical** interventions to block or diminish HIV infectiousness or reduce susceptibility to HIV infection.
- **Behavioral** interventions to promote and sustain safe behaviors among individuals and social units using a range of educational, motivational, peer education, and skills building interventions, focusing on knowledge, attitudes, skills, and beliefs.[4]

Three particular populations are most vulnerable to HIV infection: female sex workers (FSWs), men who have sex with men (MSM), and people who inject drugs (PWID).[5] Structural factors such as legal frameworks, social stigma and discrimination, police and gender-based violence, and homophobia have made these key affected populations susceptible to HIV infection and voiceless in the decision-making processes that affect their lives, including the ability to influence the larger political and societal factors that drive key affected populations' risk for infection. Availability of and access to quality biomedical care and commodities similarly play a critical role in key affected populations' ability to avoid infection. Finally, behavioral factors such as key affected populations' knowledge of modes of transmission and methods of prevention, and the personal will and agency to prevent infection are also key to prevention. Hence, program designers must recognize the role that vulnerabilities at the societal, programmatic, and individual levels can play in an individual's or community's inability to control risk of HIV infection.

The figure below shows the role of evidenced-based combination prevention interventions in addressing societal, programmatic, and individual levels of vulnerability, thus contributing to the achievement of desired outcomes for an effective impact on HIV prevention among key affected populations.



[4] TJ Coates, L Richter, and C Caceres, "Behavioural Strategies to Reduce HIV Transmission: How to Make them Work Better," *Lancet*, 2008, 372(9639): 669–684.

[5] Transgender people (TG) are a fourth key affected population, which is also highly vulnerable to HIV infection and subject to extremely high levels of the violence and stigma that fuel the epidemic (although their specific contribution to the HIV epidemic is less well understood). As this guide does not specifically address transgender people, please refer to *UNAIDS Action Framework: Universal Access for Men who have Sex with Men and Transgender People* (UNAIDS, 2009) for specific information on targeted preventions strategies for transgender people.

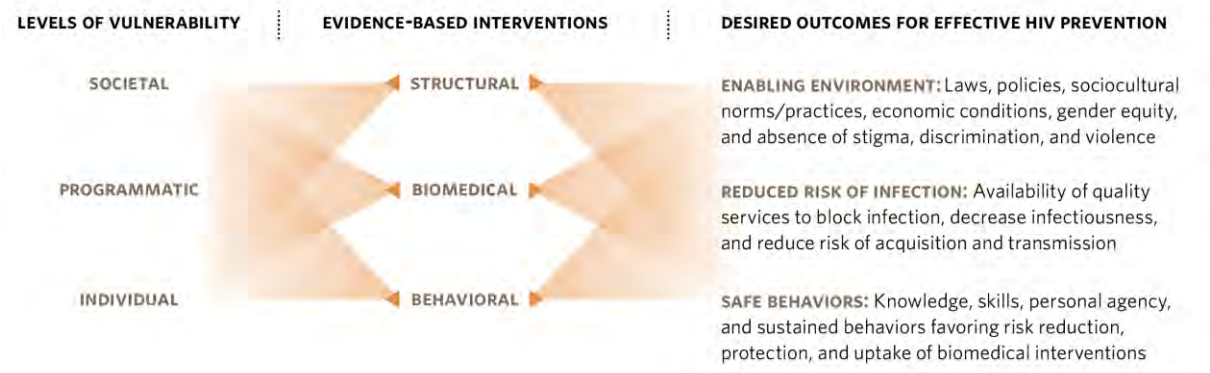
How Combination Prevention Works for Key Affected Populations

Structural, biomedical, and behavioral interventions are interdependent.[6] Because of this, approaches to combination HIV prevention for key affected populations must take into consideration: the interactions between these interventions, interactions with key affected populations' vulnerabilities, and the impact of these interactions on effective prevention. In other words, the relationship between interventions and vulnerabilities cannot be seen as one-directional as may be inferred from the figure above.

For example, the individual vulnerability related to not knowing the benefits of condom use is only fully addressed with: behavioral interventions (promotion of condom use), biomedical interventions (accessibility to condoms at health and other facilities), and structural interventions (public policies that include condoms as a key commodity in the response to the epidemic).

Likewise, the interface between combination approaches and desired outcomes cannot be seen as exclusively unidirectional. For example, a biomedical intervention (e.g., the availability of antiretroviral therapy [ART] at the health facility) does not result exclusively in reduced risk of infection, but also contributes to the sustainability of safe behaviors (in response to the promotion of adherence to treatment), and to an enabling environment at the health facility (as a result of the training of health workers to provide ART through a rights-based approach).

In other words, Pathfinder believes that every intervention—be it structural, biomedical, or behavioral—has a dimension that simultaneously addresses societal, programmatic, and individual levels of vulnerability. Likewise, every intervention—be it structural, biomedical, or behavioral—has a dimension that simultaneously contributes to the desired societal, programmatic, and behavioral outcomes. Taking this into consideration, the following is a better representation of the figure presented above:



This multi-directional understanding of how combined interventions interact with levels of vulnerability to yield desired outcomes is essential to the design, implementation, monitoring, and evaluation of HIV prevention programming for key affected populations.

Although this guide distinguishes between FSWs, MSM, and PWID and proposed certain interventions that target each group, Pathfinder is also cognizant that these groups—in terms of behaviors and/or identities—are often overlapping. Thus, it is important to be aware that interventions tailored to one group may also benefit the others, and that a client of a particular program may also be reached through varying strategies.[7]

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[6] S. Kippax, E. Reis and J. Wit, "Two Sides to the HIV Prevention Coin: Efficacy and Effectiveness" *AIDS Education and Prevention* 23, no.5 (2011): 393–396.

[7] Male sex workers, for example, can benefit from interventions that address the needs of MSM (e.g., fighting homophobia) as well as those that address the needs of FSWs (e.g., peer education reaching out to clients of male sex workers).

Designing Combination HIV Prevention Interventions for Key Affected Populations

The table below provides an overview of structural, biomedical, and behavioral interventions recommended for combination HIV prevention among FSWs, MSM, and PWID. The following sections discuss each intervention in greater detail, providing justification for its application. Each discussion is followed by a color-coded table presenting examples of activities that could be implemented under the intervention. The activities in grey are those that could be done with any of the three key affected population (KAP) communities. These are followed by activities that are best suited to a particular KAP community (yellow for FSWs, blue for MSM, and green for PWID).

Program designers should prioritize interventions and activities to implement by taking into consideration and balancing their available resources (both financial and human) and the specific needs of the key affected population(s) they are targeting.

	INTERVENTION	FSWs	MSM	PWID
STRUCTURAL	Promotion of social cohesion, social capital, social inclusion, and leadership skills	✓	✓	✓
	Advocacy interventions for policy, program, and/or service change	✓	✓	✓
	Addressing sexual and police violence, stigma, and discrimination	✓	✓	✓
	Fighting social and institutional homophobia		✓	
	Economic strengthening and supplementary income generation	✓		
BIOMEDICAL	Use of male and female condoms and lubricant	✓	✓	✓
	Diagnosis and treatment of STIs with anal, genital, and oral manifestations	✓	✓	✓
	Post-exposure prophylaxis (PEP)	✓	✓	✓
	Pre-exposure prophylaxis (PrEP)		✓	✓
	Client- and provider-initiated HIV testing and counseling	✓	✓	✓
	Prevention of mother-to-child transmission (PMTCT)	✓		✓
	HIV care and treatment	✓	✓	✓
	Harm reduction for PWID			✓
BEHAVIORAL	Individual-level behavior change through peer education and community-based counseling	✓	✓	✓
	Collective-level behavior change	✓	✓	✓
	Institutional-level behavior change through health providers	✓	✓	✓
	Media communication for behavior change	✓	✓	✓

I. STRUCTURAL INTERVENTIONS FOR HIV PREVENTION AMONG KEY AFFECTED POPULATIONS

1.1 Promotion of Social Cohesion, Social Capital, Social Inclusion, and Leadership Skills

Many recent scientific studies have documented the impact of economic, political, and social contexts on determining sexual behaviors and the spread of the HIV epidemic, especially among marginalized groups that experience discrimination and exclusion from public life.[8,9] Safer sexual behavior (including successful condom negotiation with all sexual partners) is clearly related not only to the acknowledgement of risk-taking and the economic factors that block access to prevention, but also to social factors such as gender inequality, discrimination, violence, and social marginalization. Politicized and empowered FSWs, MSM, and PWID can create an environment that is highly conducive to condom use and improved sexually transmitted infection (STI) prevention and care through collective bargaining with entities of power.[10] The goal of community development interventions is to facilitate improvement in indicators that represent social integration or cohesion (feeling part of a group and empowered by participation in that group), social capital (individuals and groups interacting in social networks in the service of shared pursuits for social benefits and rights), and social inclusion (individuals, groups, and networks gaining rights, benefits, participation in decision making about the rights and benefits that affect them, and inclusion in society with equal rights).

Although in some specific environments key affected populations still face individual and programmatic vulnerabilities that contribute to the increase of their exposure to HIV infection (e.g., lack of tailored information on prevention and inaccessibility of prevention commodities), it is the societal vulnerability faced by FSWs, MSM, and PWID that likely plays the most important role in shaping the epidemic among these groups.[11] Socio-structural interventions that focus on and transform social environments and empower communities are fundamental elements of effective HIV prevention programming among key affected populations. Programmers should implement interventions that: mobilize communities; create social cohesion; improve access to resources; identify and build the skills of community leaders;[12] promote social capital; establish and support networks; and ensure community participation in various decision-making forums.[13]

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[8] S. Lippman et al., "Social-Environmental Factors and Protective Sexual Behavior among Sex Workers: The Encontros Intervention in Brazil" *American Journal of Public Health* 99, no.11 (2009).
[9] T. Modie-Moroka, "Does Level of Social Capital Predict Perceived Health in a Community? A Study of Adult Residents of Low-income Areas of Francistown, Botswana" *Journal of Health, Population and Nutrition* 27, no.4 (2009): 462-476.
[10] M. Shahmanesh, V. Patel and F. Cowan, "Effectiveness of Interventions for the Prevention of HIV and other Sexually Transmitted Infections in Female Sex Workers in Resource Poor Settings: A Systematic Review" *Tropical Medicine and International Health* 13, no.5 (2008): 659–679.
[11] UNFPA, "HIV and Sex Work: Preventing HIV Risk and Vulnerability – Media Fact Sheet" (2010).
[12] Pathfinder International, "Module 3: Leadership" in *Organizational Development – Strengthening your Organization Series* (Watertown, MA: Pathfinder International). Accessed 1 Dec. 2013: http://www.pathfinder.org/publications-tools/Strengthening-You-Organization-A-Series-of-Modules-and-Reference-Materials-for-NGO-and-CBO-Managers-and-Policy-Makers-Leadership.html.
[13] Pathfinder International, *HIV Prevention among Vulnerable Populations.*

1.1 – EXAMPLE ACTIVITIES	
All KAPs	• Promote social cohesion among the KAP by facilitating community meetings (including entertainment activities to ensure wider participation) where they can freely discuss security, legal, health, social, and other issues that impact their families and their quality of life. • Facilitate community consultations for consensus on the need for and benefits of establishing a KAP CBO/NGO. • Provide appropriate information on local legal and administrative requirements for establishing a CBO/NGO. • Support design of CBO/NGO regulatory documentation (statutory documentation, letter of principles, etc.). • Facilitate critical consciousness among CBO/NGO members on issues related to human and sexual rights, gender-based and police violence, HIV & AIDS, human sexuality, vulnerability, community development, sexual exploitation of minors, reproductive health, etc. (See below for additional population-specific issues.) • Provide capacity building to CBO/NGO on issues related to organizational structure, strategic planning, human resource and financial management, leadership, program design, monitoring and evaluation, conflict resolution, sustainability, and computer literacy. • Establish community health fund mechanisms. • Promote linkages of CBO/NGO with government and private institutions for resource mobilization. • Promote community-based activities to increase KAP membership in CBOs/NGOs. • Facilitate networking of KAP CBO/NGO with human rights, HIV and AIDS, and other social movement CBOs/NGOs at regional, national, and international levels. (See below for additional population-specific CBOs/NGOs.) • Facilitate liaison of KAP CBO/NGO and their regional/national networks with international human rights organizations. • Support participation of KAP CBO/NGO at regional, national, and international conferences and similar venues addressing issues of HIV and AIDS and human rights. (See additional population-specific topics below.) • Facilitate meaningful participation of KAP group/CBO/NGO in local decision-making forums including community-facility discussion forums.
FSWs	• Facilitate critical conscience among FSW CBO/NGO members on above issues in addition to trafficking of persons and gender-based violence (GBV). • Support access of FSW to social entitlements (literacy, ration card, passport, identity card, voting card, bank account, etc.) and government welfare schemes. • Facilitate networking of FSW CBO/NGO with other FSW and women's CBOs/NGOs. • Support participation of FSW CBO/NGO at conferences addressing topics like GBV or sex work (in addition to above topics).
MSM	• Facilitate critical conscience among CBO/NGO members on above issues in addition to issues related to: sexual orientation, gender identity, social and institutional homophobia. • Facilitate networking of CBO/NGO with other MSM CBOs/NGOs. • Support participation of MSM CBO/NGO at conferences addressing sexuality (in addition to above topics).
PWID	• Facilitate critical conscience among PWID harm reduction CBO/NGO members on above issues in addition to GBV, trafficking of persons, harm reduction, and addiction. • Support PWID's access to social entitlements (literacy, ration card, passport, identity card, voting card, bank account, etc.) and government welfare schemes. • Facilitate networking among PWID harm reduction CBOs/NGOs • Support participation of PWID harm reduction CBO/NGO at conferences addressing issues of addiction and GBV (in addition to above topics).

1.2 Advocacy Interventions for Policy, Program, and/or Service Change

Advocacy is "a process whereby stakeholders at different levels raise issues of concern, participate in decision making, hold decision makers accountable for their actions, and work for resolutions to their problems through changes in policy, laws, regulations, or practices."[14] As a fundamental means of securing human rights—particularly for those groups most socially stigmatized and vulnerable to HIV infection—advocacy interventions can work toward three other interacting objectives: 1) a transformational objective to empower citizens and build citizenship; 2) a developmental objective to strengthen civil society, alter existing relations of power, and achieve specific policy outcomes; and 3) an instrumental objective to facilitate groups' (like FSWs, MSM, and PWID) application of advocacy techniques to influence decision makers with the ultimate goal of achieving a social, economic, or political policy goal or reform.[15]

Advocacy interventions that inform policy, programs, or services play a key role in ensuring and sustaining the efficacy of HIV prevention programs, especially when addressing the needs and interests of stigmatized and highly vulnerable groups. Advocacy is a particularly powerful tool when employed by the primary stakeholders themselves. Therefore, interventions should build the capacity of local civil society organizations that represent key affected populations (e.g., community groups, community-based organizations [CBOs], and nongovernmental organizations [NGOs]) so they can better analyze and advocate for HIV-related resources, human rights, sexual and reproductive health (SRH), and other rights-related policies, programs, and services. Programs can support FSW, MSM, and harm reduction civil society organizations to serve as champions or as a bridge between the members of the community they represent and decision makers at all levels by fostering the skills and mechanisms necessary to involve them in the policymaking and decision-making process.

As the influence of coalitions over decision makers can be stronger than individual group efforts, programs should support and promote the establishment of advocacy networks and alliances between FSW, MSM, and PWID/harm reduction associations and other civil society groups (especially those concerned with human rights). Increasing the number of players taking action on issues of common interest strengthens advocacy interventions' impact.

Behavior change interventions aimed at making facilities and services friendly to key affected populations are discussed in Section 3.3, but advocacy interventions to address the structural side of facilities' friendliness and accessibility are also important. Relevant advocacy goals could include: opening hours that are convenient for key affected populations' schedules; creation of a non-discriminatory policy that is available and enforced at the facility; and regular feedback mechanisms and communication forums between facility staff and members of key affected population groups.

[14] Kathleen Selvaggio, Zie Gariyo and Patrick Oloya, *Advocacy in the Health and Education Sectors in Uganda: A Situational Analysis* (USAID and UMEMS, 2011).
[15] Leslie M. Fox and Priya Helweg, *Advocacy Strategies for Civil Society: A Conceptual Framework and Practitioner's Guide* (USAID, 1997).

1.2 – EXAMPLE ACTIVITIES	
All KAPs	• Train KAP community leaders on advocacy concepts and techniques. • Design and implement advocacy action plans focusing problems, themes, and targets that are perceived as priority issues for the specific KAP community (see population-specific details below).[16] Particular emphasis should be placed on advocacy efforts that may result in the provision of quality, integrated, friendly-services for KAPs. • Design and produce appropriate materials and documents for dissemination of advocacy messages (advocacy portfolio). • Establish advocacy partnership with supporting organization and individuals.
FSWs	• Advocacy action plans should focus on FSW-identified priority issues such as: police harassment and violence; attention to FSWs' needs in SRH, GBV, and other related health services; and legalization of the profession.
MSM	• Advocacy action plans should focus on MSM-identified priority issues such as police harassment and violence, sodomy laws, and homophobia in the school and health facility environment.
PWID	• Advocacy action plans should focus on PWID-identified priority issues such as police harassment and violence, harm reduction programs, and other related health services. Whenever possible, advocacy efforts should also address decriminalization of drug use.

[16] Simple tools like Pathfinder International's *Straight to the Point Advocacy Package* (2011) can be used to guide participatory workshops with KAP groups. *Straight to the Point: Setting Advocacy Priorities, Assessing the Political Environment,* and *Mapping an Advocacy Strategy* are available at http://www.pathfinder.org/publications-tools/publication-series/Straight-to-the-Point-Advocacy.html. Pathfinder's *Straight to the Point: Workplanning* tool can be used to help KAP CBOs/NGOs put their plans into action (http://www.pathfinder.org/publications-tools/straight-to-the-point-workplanning.html).

1.3 Addressing Sexual and Police Violence, Stigma, Discrimination, and Social and Institutional Homophobia

Local empowerment of key affected populations and anti-violence initiatives, as well as efforts to increase access to public health services, social entitlements, and grievance-redress programs, are key aspects of structural interventions for key affected populations. Programs should support initiatives led by key affected populations themselves to address sexual and police violence, stigma, discrimination, and social and institutional homophobia. These initiatives actively seek to foster a sense of community ownership to counter self-stigma and marginalization; create an enabling environment for social cohesion; and strengthen community agency. Interventions can facilitate community groups' activities and support formally registered FSW, MSM, and harm reduction CBOs/NGOs, engaging issues beyond HIV prevention alone.

Violent or forced sex can increase the risk of HIV transmission, especially because being a victim of sexual violence and being susceptible to HIV share a number of risk factors.[17] Power structures (particularly police and thugs) play an important role in perpetrating physical and psychological violence against FSWs, MSM, and PWID. In many countries, sex work, homosexuality, and drug use lack social sanction and are punishable by law. Sex workers and MSM are therefore harassed, stigmatized, and disempowered. Violence is a key manifestation of this stigma and discrimination.[18] Programs therefore need to be designed and implemented at different levels: with key affected populations as the primary stakeholders; with police, lawyers, service providers, the media, and the general population as secondary stakeholders; and through advocacy to transform the policy environment.

In the case of MSM, homophobia not only presents a huge obstacle to HIV prevention efforts but also serves to increase the stigma and isolation experienced by people living with HIV (PLHIV), just as MSM with HIV suffer a double stigma. HIV prevention programs should pursue a variety of avenues to challenge the homophobia that exists in societal attitudes and organizational behaviors. Prevention programs gain credibility in the eyes of the community when community members are involved at multiple levels—from peer outreach workers to supervisory field staff. Developing outreach and community mobilization efforts within pre-existing community networks can be successful as long as consistent and prejudice-free support is provided to the community.[19]

[17] World Health Organization (WHO), *World Report on Violence and Health* (Geneva: 2002).
[18] WHO, *Addressing Violence against Women and HIV/AIDS: What Works* (Geneva: 2010).
[19] Avahan India AIDS Initiative, *Breaking through Barriers: Avahan's Scale-up of HIV Prevention among High-risk MSM and Transgenders in India* (Avahan and Bill & Melinda Gates Foundation, 2010).

1.3 – EXAMPLE ACTIVITIES	
All KAPs	• Promote regular interaction of KAP community members and the police force to discuss ways of reducing violence against the KAP. • Establish community-led violence response groups, and buddy systems for prevention. • Establish legal support mechanisms for victims of violence, with referral to legal, health, psychological, and other services. • Advocate with local officials to take measures that contribute to violence prevention (e.g., improved street lighting).
FSWs	• Train police on issues related to human and sexual rights, gender issues, and GBV. • Establish self-regulatory boards among owners of bars, hotels, and other venues to combat sexual exploitation of minors. • Promote meaningful participation of FSW groups and CBOs/NGOs in social networks that support human and sexual rights and combat trafficking of people and sexual exploitation of minors. • Facilitate participation of FSW groups and CBOs/NGOs in public events celebrating the key days of activism (World AIDS Day, International Women's Day, Human Rights Day, International Day to End Violence Against Sex Workers, 16 Days of Activism, etc.). • Promote development and use of internet platforms for sharing information about abuse and abusers.
MSM	• Train police on issues related to human and sexual rights, sexual orientation, and gender identities. • Promote meaningful participation of MSM groups and CBOs/NGOs in social networks that support human and sexual rights and combat social and institutional homophobia. • Facilitate participation of MSM groups/CBOs/NGOs in public events celebrating the key days of activism (World AIDS Day, Human Rights Day, International Day Against Homophobia, etc.).
PWID	• Train police on issues related to human rights, drug use, and gender equality. • Promote meaningful participation of harm reduction groups and CBOs/NGOs in social networks that support human and sexual rights and combat trafficking of people and sexual exploitation of minors.

1.4 Economic Strengthening and Supplementary Income Generation

A common approach to preventing HIV among FSWs is to direct huge amounts of effort at "social rehabilitation," usually through "alternative skills training." This approach has often been justified by equating all sex work with "trafficking of women and children," which appeals to moralism of and condemnation of sex work. This approach has significant pitfalls as it does not recognize the women who choose sex work. Likewise, the social rehabilitation offered is most often not a workable or desirable alternative. The idea that sex workers need to be rehabilitated stems from a perception of sex work as "immoral." The struggle of sex workers around the world should be centered on gaining respect for their rights, not on gaining sympathy or pity for them. Sex workers do not want to be condemned as "sinful" or "vectors of disease," but want instead to live safe, satisfying lives with a supportive community around them. Pathfinder supports preventative activities related to sexual and reproductive health and rights but not does not involve itself in any income generation activity, except when a lack of a buffer (a second, supplementary source of income) reduces sex workers' capacity to refuse to have sex without a condom or enter unsafe situations. Pathfinder understands sex work as a profession and Pathfinder does not suggest any nurse, doctor, clerk to change their jobs based on risks—all jobs have risks and, just as sex workers can acquire HIV on the job, health providers can also be occupationally infected by HIV.

1.4 – EXAMPLE ACTIVITIES

FSWs	• Facilitate the establishment of FSW self-help groups for thrift and credit. • Train FSWs on specific skills for supplementary income (paramedics, community kitchen, children's crèche, catering, fashion design, beauty class etc.). • Link FSW groups/communities to existing microfinance schemes benefitting vulnerable women.

II. BIOMEDICAL INTERVENTIONS FOR HIV PREVENTION AMONG KEY AFFECTED POPULATIONS

2.1 Use of Male and Female Condoms and Lubricants

Since the beginning of the HIV epidemic, the use of condoms has remained the most effective method for preventing transmission of HIV. Condoms are a dual-purpose method, offering protection against HIV and other STIs and preventing unintended pregnancy. International literature has shown that the correct and consistent use of latex male condoms is highly effective in preventing the sexual transmission of HIV, providing protection against male-to-female and female-to-male transmission.[20,21,22] Correct and consistent use of condoms in all anal and vaginal sex is recommended to prevent HIV transmission (as well as for oral sex to prevent transmission of other STIs).

Making good quality condoms available and accessible both in clinical and community settings, either free or at a low cost, should be a top priority in all HIV prevention programs focusing on FSWs, MSM, and PWID. To ensure the quality of condoms meets the recommended specifications,[23] appropriate procurement, purchase, and storage must be an integral part of all such programs. The first step to ensuring correct and consistent condom use is establishing easy access to them. However, this will only be effective if linked to individual-, collective-, and institutional-level behavior change approaches that prioritize condom promotion.

Internationally, MSM and FSWs are two groups that have shown great commitment to the effective adoption of condom use. Beyond protecting against HIV infection, condom use among these groups has contributed to a decrease in overall rates of STIs. Although some qualitative studies among FSWs have shown that condom use is less likely to occur in regular relationships than in commercial relationships, there is a strong body of evidence regarding the high levels of condom use by FSWs and MSM.

Pathfinder International's experience introducing female condoms into programs promoting male condoms has shown an associated increase in the rates of protected sexual acts, especially in areas or among populations with high rates of STIs. Although there is not enough evidence of the cost-effectiveness of the female condom, it is an important measure to empower women to prevent HIV and STIs.[24]

The use of condom-compatible lubricants (i.e., water-based or silicone-based lubricants) with condoms is another important measure for preventing the sexual transmission of HIV. Condom-compatible lubricants contribute to a decrease in condom breakage, especially during anal sex, and are also a method of avoiding vaginal dryness and possible trauma. It is essential to educate key affected populations on the appropriate types of lubrication and to make condom-compatible lubricants available at community- and health-facility level.

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[20] S. Pinkerton and P. Abramson, "Effectiveness of Condoms in Preventing HIV Transmission" *Social Science & Medicine* 44, no.9 (1997): 1303-1312;
[21] K. Davis and S. Weller, "The Effectiveness of Condoms in Reducing Heterosexual Transmission of HIV" *Family Planning Perspectives* 31, no.6 (1999): 272-279.
[22] UNPFA, WHO, and UNAIDS, "Position Statement: Condoms and HIV Prevention" (2009). Retrieved 19 Mar. 2013 from http://www.who.int/hiv/pub/condoms/20090318_position_condoms.pdf.
[23] WHO, UNFPA and Family Health International, *Male Latex Condom: Specification, Prequalification, and Guidelines for Procurement* (WHO, 2010).
[24] UNFPA, *Comprehensive Condom Programming: A Guide for Resource Mobilization and Country Programming* (UNFPA, 2010).

2.1 – EXAMPLE ACTIVITIES	
All KAPs	• Estimate the condom requirement for both clinical and community settings distribution for KAP. • Ensure condom and lubricants procurement and logistics for distribution for KAP. • Train health providers and peer educators on correct condom and lubricant use by KAP. • Conduct distribution of condoms and lubricants to KAP at health facility and community levels.
FSWs	• Conduct above activities, but with the female condom as well as male.
PWID	• For female PWID, conduct above activities, but with the female condom as well as male.

2.2 Diagnosis and Treatment of STIs with Anal, Genital, and Oral Manifestations

The appropriate management of STIs is a known, cost-effective strategy for HIV prevention interventions, especially in resource-constrained and high-incidence settings.[25] The presence of other STIs increases the probability of both transmitting and contracting HIV, making STI risk assessment, diagnosis, and treatment and building client capacity to prevent future STIs essential components of a combination prevention approach. STI management qualifies not only as a key biomedical combination prevention approach, but can also contribute to the behavioral dimension of combination prevention by supporting individual behavior change through individual health education and counseling on disease prevention and partner notification. STI services present an opportunity to learn self-risk assessment skills for prevention of future sexual risk, as well as offering a point of access (through partner referral) to other people at high risk for HIV and STIs. Community peer educators working on HIV prevention provide a perfect platform for routing STI services, which have both a field component (information, education, and communication [IEC], condom distribution, referrals) and a clinical component (static clinics, mobile clinics, NGO and government health facilities). When supported by local policies, it is important to work with pharmacies and drug stores to ensure correct drugs, doses, information, and referral for those seeking self-treatment.

As with all clinical services for key affected populations, service providers and other staff must be skilled in providing services in an environment in which: FSWs, MSM, and PWID do not feel discriminated against; services address their real needs in a tailored manner; and quality is sustained and improved with significant and ongoing inputs from the communities the providers are supposed to serve. For STI services for key affected populations to be effective, stigma and discrimination at health care settings must be reduced. Developing an accepting, inclusive environment for key affected populations contributes to ensuring the quality of services and long-term retention. Providers of clinical services for key affected populations must be highly sensitive to the rights and cultures of the communities so that they can listen and respond to the real needs of their clients. All STI services should be characterized by acceptance and respect so that clients' human rights are upheld, including the right to sexual and gender expression, identity, and equity.

STI outreach services that reach the members of the FSWs, MSM, and PWID communities who are most difficult to access should also be established. STI services should always include: comprehensive counseling on risk reduction; condom provision; contraception and emergency contraception counseling and supplies; and identification of other health and non-health needs and referrals to relevant services.

[25] This section was informed by the following sources: Steen R., Dallabetta G. "Sexually Transmitted Infection Control with Sex Workers: Regular Screening and Presumptive Treatment Augment Efforts to Reduce Risk and Vulnerability" *Reproductive Health Matters*. 11(22): 74-90, 2003; Behets F. M. T. F., Rasolofomanana J.R., et al. "Evidence-based treatment guidelines for sexually transmitted infections developed with and for female sex workers" *Tropical Medicine & International Health* 8(3): 251-258, 2003; Desai V. K.,Kosambiya J. K., et al. "Prevalence of sexually transmitted infections and performance of STI syndromes against etiological diagnosis, in female sex workers of red light area in Surat, India" *Sexually Transmitted Infections* 79(2): 111-115, 2003; Kaul R., Kimani J., et al. "Monthly Antibiotic Chemoprophylaxis and Incidence of Sexually Transmitted Infections and HIV-1 Infection in Kenyan Sex Workers: A Randomized Controlled Trial" *JAMA* 291(21): 2555-2562, 2004; Mayaud P., D. McCormick. "Interventions against Sexually Transmitted Infections (STI) to Prevent HIV Infection" *British Medical Bulletin* 58(1):129-153, 2001.

2.2 – EXAMPLE ACTIVITIES	
All KAPs	• Conduct needs assessment exercise on health facilities. • Produce STI management protocols and guidelines. • Train public, private, and outreach providers and lab technicians on STI diagnosis and management, including human sexuality, gender issues, human rights, and other related topics. • Conduct outreach STI diagnosis and management with key affected populations. • Support facility renovation and equipment and ensure availability of commodities. • Support operational management information systems.
FSWs	• As STIs are often asymptomatic in women, promote regular voluntary STI screening for FSWs.
PWID	• As STIs are often asymptomatic in women, promote regular voluntary STI screening for female PWID.

2.3 Post-exposure Prophylaxis (PEP)

The use of antiretroviral (ARV) drugs as a prophylaxis measure following HIV exposure has been recommended in many countries, especially for occupational hazards concerning medical and laboratory personnel. According to WHO and International Labor Organization guidelines, PEP refers to the set of services to manage the specific aspects of exposure to HIV and to help prevent HIV infection in a person exposed to risk of infection. These services may include: first aid, counseling (including the assessment of risk of exposure to infection), HIV testing, and (depending on the outcome of the exposure assessment) the prescription of a 28-day course of ARV drugs, with appropriate support and follow-up.[26]

Effectiveness of PEP for non-occupational exposure to HIV (N-PEP) has been studied a great deal in recent years. Although the international literature does not offer conclusive findings on PEP's effectiveness, a broad range of evidence is available attesting to the benefits of PEP in preventing HIV transmission.[27,28] In light of the existing evidence, N-PEP should be included in all national policies, in accordance with the latest international guidelines, prescribing its administration for up to 72 hours after exposure over a period of 28 days. Usually, triple ART is recommended for N-PEP in an HIV-negative individual to ensure that if prophylaxis fails and HIV infection is confirmed, there will be little chance of developing ARV resistance.[29]

Behavior change is not a "one shot" process and throughout the continuum of behavior change individuals may be exposed, unwillingly or not, to risky situations. Thus, N-PEP should be readily available to everybody, including survivors of sexual assault and people who engage in high-risk consensual sexual relationships (e.g., non-condom use and condom breakage).[30] In some countries, FSWs and MSM are often not considered survivors of sexual assault due to ingrained social stigma and prejudice. N-PEP should not replace the key to prevention (consistent and correct condom use) and efforts to make condom use the norm for everyone who is vulnerable to HIV infection must remain a strong primary strategic focus.

A comprehensive and effective program focusing on HIV prevention among FSWs, MSM, and PWID must include the provision of information on PEP/N-PEP and how to access it, alongside a strong referral and linkage system between communities, health facilities, and other social support services (e.g., GBV services, police stations, and psychological support services).

Although there has been concern that the availability of N-PEP may promote unprotected sexual behavior and therefore reduce effectiveness of HIV prevention interventions, some studies have shown that accessing N-PEP services after HIV exposure through risky sexual behavior has actually contributed to the adoption of preventive measures and to a decrease in high-risk sexual practices.[31] This can be boosted when good counseling, information, and risk assessment are offered alongside N-PEP.

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[26] WHO and International Labor Organization, *Post-exposure Prophylaxis to Prevent HIV Infection: Joint WHO/ILO Guidelines on Post-exposure Prophylaxis (PEP) to Prevent HIV Infection* (Geneva: WHO, 2007).
[27] M. Schechter, R. Do Lago, A. Mendelsohn, et al., "Behavioral impact, acceptability, and HIV incidence among homosexual men with access to postexposure chemoprophylaxis for HIV" *Journal of AIDS* 35 (2004): 519--25.;
[28] Centers for Disease Control and Prevention (CDC), *Antiretroviral Postexposure Prophylaxis after Sexual, Injection-drug Use, or Other Non-occupational Exposure to HIV in the United States: Recommendations from the US Department of Health and Human Services* (CDC/MMWR, 2005).
[29] J. Weber, R. Tatoud and S. Fidler, "Postexposure Prophylaxis, Preexposure Prophylaxis or Universal Test and Treat: The Strategic Use of Antiretroviral Drugs to Prevent HIV Acquisition and Transmission" *AIDS* 24, suppl. 4 (2010): S27-39.
[30] WHO, *Prevention and Treatment of HIV and other Sexually Transmitted Infections among Men who have Sex with Men and Transgender People: Recommendations for a Public Health Approach* (Geneva: WHO, 2011).
[31] J. Martin et. al., "Use of Postexposure Prophylaxis against HIV Infection Following Sexual Exposure does not Lead to Increases in High-risk Behavior" *AIDS* 18 (2004): 787–792.

2.3 – EXAMPLE ACTIVITIES	
All KAPs	• Support development/revision of protocols and guidelines on PEP. • Train health providers on using PEP protocols and guidelines, sexuality, sexual orientation, gender identity, sexual violence, and human rights issues. • Promote availability of PEP drugs at facility level, ensuring access to KAP in cases of sexual violence, serodiscordant couples, and condom breakage. • Raise awareness of the availability of PEP among police, social services, peer educators, and communities.
FSWs	• Facilitate linkage of FSW survivors of sexual violence with GBV services. • Promote provision of emergency contraception with PEP services.
MSM	• Facilitate linkages with other health services of interest to MSM (e.g., urologist, proctologists).
PWID	• Promote availability of PEP drugs at facility level, ensuring access to PWID in cases of sharing injecting equipment. • For female PWID, promote provision of emergency contraception with PEP services. • Facilitate linkages with other health services of interest to PWID (e.g., mental health services).

2.4 Pre-exposure Prophylaxis (PrEP)

The use of ARV drugs to prevent HIV infection, used either as a pill or lubricant gel, is a promising new biomedical prevention measure that may be appropriate for certain circumstances and groups at risk, such as key affected populations.[32] Oral PrEP offers women and men an HIV risk reduction option that could be used without negotiating with their partners. With good adherence to a daily dose, this drug has been shown to be very effective (up to 90%, but 44% overall).[33] Studies have shown that with poor adherence, there is no effect, however. The data comes from trials in which participants were counseled to take either one tablet of oral TDF/FTC (brand name Truvada) or oral TDF (brand name Viread) every day. Participants in oral PrEP studies have included serodiscordant couples, MSM, and transgender women.

Any future roll-out of PrEP interventions must be part of a balanced consideration of the benefits and challenges of PrEP. Significant challenges include: ongoing adherence by clients on PrEP, management of side effects, and ensuring HIV testing services before initiating clients on PrEP. Moreover, PrEP should only be offered in the context of a comprehensive combination prevention package, complete with risk reduction counseling and support for consistent and correct condom use. In resource-constrained settings, special attention must be paid to PrEP's technical and financial feasibility, which requires considering issues including: PrEP commodity supply; continuous, high-quality HIV risk reduction counseling; HIV testing systems; ART delivery systems for clients who test positive; and medical follow-up systems.

PrEP brings to the fore the important debate on the medicalization of HIV prevention.[34] Recently, efforts in HIV prevention have been moving away from empowerment of individuals and communities to change behavior and better safeguard their own health, toward dependency on medical doctors, hospitals, and the pharmaceutical industry. PrEP should be integrated into national guidelines for HIV prevention among MSM and PWID,[35] alongside a renewed commitment to advancing behavioral programs and interventions that are already taking place and working.

[32] For ongoing and planned PrEP trials and demonstration projects (as of Dec. 2013) see AVAC – Global Advocacy from HIV Prevention at http://www.avac.org/ht/a/GetDocumentAction/i/3113.

[33] WHO, *Guidance on Pre-exposure Oral Prophylaxis (PrEP) for Serodiscordant Couples, Men who have Sex with Men and Transgender Women at High Risk of HIV in Implementation Research* (Geneva: WHO, 2012).

[34] Vinh-Kim Nguyen, Nathalie Bajos, Françoise Dubois-Arber, Jeffrey O'Malley, and Catherine M. Pirkle, "Remedicalizing an Epidemic: From HIV Treatment as Prevention to HIV Treatment is Prevention" *AIDS* 25 no.3 (2011): 291–293.

[35] CDC/National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention , "Bangkok Tenofovir Study: PrEP for HIV prevention among people who inject drugs" (CDC, 2013). Retrieved 10 Feb. 2014 from http://www.cdc.gov/nchhstp/newsroom/docs/PrEP-IDU-factsheet-508.pdf.

2.4 – EXAMPLE ACTIVITIES	
MSM	• Support development and/or revision of protocols and guidelines on PrEP. • Train health providers on using PrEP protocols and guidelines. • Promote availability of PrEP drugs to MSM at facility-level (if supported by national guidelines).
PWID	• Support development/revision of protocols and guidelines on PrEP. • Train health providers on using PrEP protocols and guidelines. • Promote availability of PrEP drugs to PWID at facility-level (if supported by national guidelines).

2.5 Client- and Provider-initiated HIV Testing and Counseling

Although HIV testing has increased over the years, in many of the countries most affected by the HIV epidemic the number of individuals who have been tested for HIV and received their results is still very low.[36] This is due in large part to the fact that HIV testing and counseling (HTC) services have historically been a client-initiated process, in which individuals must actively seek testing at a health facility (also known as voluntary counseling and testing [VCT]). A lack of appropriate skills for self-assessment of risky behavior, reduced provision of VCT services, and the ingrained social stigma associated with HIV infection and AIDS have collectively presented a significant barrier to a wider population's access to HTC services.[37]

Taking this into account, program planners for interventions with key affected populations must prioritize early provision of information, treatment, and support to PLHIV to improve their quality of life and reduce their risk of transmitting the virus to others. Likewise, HTC can also serve key affected populations who are not infected with HIV by counseling them on maintaining safe behaviors that avert HIV infection (e.g., correct and constant condom use, not sharing equipment for injecting drugs).

Additional approaches to actively promote HTC are crucial, principally to increase access to HTC among key affected populations and limit the risk of missed opportunities to diagnose HIV and promote behavior change. Program planners should incorporate provider-initiated HIV testing and counseling services into program design for all key populations. It is essential to note that the rights of the clients must always be respected—nothing justifies mandatory or compulsory HIV testing for any person, and testing must never be done coercively or without the person's knowledge. Provider-initiated testing must never mean that testing is not voluntary.

An important aspect of tailoring client- or provider-initiated HTC services for key affected populations is developing specific risk assessment guidelines to be used by health providers during pre- and post-test counseling. The guidelines should include information on unprotected anal sex, correct condom use, sexual violence, and use of alcohol and other drugs (including sharing of syringes and needles). Risk assessment should be conducted with a non-judgmental attitude.

Program planners should support the design and implementation of integrated SRH and HIV prevention, treatment, and care services. For FSWs, HTC should be integrated into services and venues that make it accessible, affordable, and a normalized component of comprehensive, FSW-friendly prevention services, which also ensure confidentiality and respect for FSWs' behavior. These services should not be restricted to health facilities, but rather should reach FSWs where they can be found (e.g., brothels, street hotspots) through "midnight" mobile services, with the support of peer educators and other community resource persons. Integration efforts should guarantee appropriate referral of FSWs to contraceptive and other reproductive health services, as well as to services addressing non-sex-related illnesses.[38]

For MSM and PWID, who are often more clandestine than FSWs, the means of accessing HTC should respond to their specific needs and interests. Peer educators well trained in interpersonal communication and comprehensive HTC and support are the best people to promote increased use of HTC by MSM and PWID. Again, hotspot testing (bars, train stations, known cruising places where MSM gather, gay parades, places where drug users gather, etc.) are potential venues to promote and offer HTC to MSM and PWID.

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[36] WHO, UNAIDS, and UNICEF, *Global HIV/AIDS Response 2011: Epidemic Update and Health Sector Progress toward Universal Access* (Geneva: WHO, 2011).
[37] WHO and UNAIDS, *Guidance on Provider-Initiated HIV Testing and Counseling in Health Facilities* (Geneva: WHO, 2007).
[38] Edward Scholl and Daniel Cothran, "Integrating Family Planning and HIV Services: Programs in Kenya and Ethiopia Lead the Way," in *AIDSTAR-One Case Study Series* (Alexandria, VA: John Snow, Inc./AIDSTAR-One, 2011) .

2.5 – EXAMPLE ACTIVITIES	
All KAPs	• Support definition of protocols and guidelines, including specific risk assessment for each KAP. • Support for procurement and logistics of HIV rapid tests. • Train health providers, peer educators, and lay counselors on HTC techniques. • Advocate for and promote community-based HTC through outreach workers and peer educators, using rapid tests where available. • Facilitate linkages and referrals with care and treatment programs and other social programs for those testing positive. • Establish post-test positive and negative support groups. • Support for point-of-care CD4 testing in places with large numbers of key affected populations.
FSWs	• Provide HIV testing and counseling for FSWs and their regular partners. • Provide mobile HTC at community level (e.g., brothels, street “hotspots”).
MSM	• Provide HIV testing and counseling for MSM couples. • Provide mobile HTC at community level (e.g., cruising spots, bars).
PWID	• Provide HIV testing and counseling for PWID and their sexual partners. • Provide mobile HTC at community level (e.g., in areas where PWID congregate).

2.6 Prevention of Mother-to-Child Transmission (PMTCT)

High HIV prevalence among FSWs underlines the importance of ensuring proper access of FSWs who become pregnant to the full PMTCT cascade. A study of reproductive health practices among FSWs in India showed that antenatal HIV testing remains low in the context of ongoing sex work during pregnancy.[39] Pregnant PWID with HIV have been shown to have worse clinical status, poorer access to PMTCT prophylaxis and highly active ART, more adverse pregnancy outcomes, and higher risk of mother-to-child transmission than women who do not inject drugs. Improving access to PMTCT services by FSWs and PWID and their partners is therefore a necessary programmatic element even in countries without concentrated HIV epidemics among key affected populations.

Community sensitization around PMTCT services as an approach to HIV prevention is generally aimed at the general population, and is infrequently included in FSW or PWID programming, despite the fact that these groups are highly vulnerable to HIV infection. Structural, programmatic, and individual determinants act as important barriers to these specific groups' access to effective PMTCT programs, especially in resource-limited settings.[40]

The WHO PMTCT Strategic Vision 2010–2015, addressing the issue of equitable access, states that national programs should ensure that antenatal care, labor and delivery, and postpartum services are offered in a user-friendly environment for women living with HIV who are drug users or sex workers.[41] As such, the comprehensive four-pronged approach to PMTCT, developed by the UN in 2001 and implemented worldwide, is equally applicable in addressing the specific needs of key affected population, with each prong representing a strategic stage to be included in effective KAP programming.

[39] Marissa Becker, Satyanarayana Ramanaik, Shiva Halli, James Blanchard, T. Raghavendra, Parinita Bhattacharjee, Stephen Moses, Lisa Avery, Sharmistha Mishra, "The Intersection between Sex Work and Reproductive Health in Northern Karnataka, India: Identifying Gaps and Opportunities in the Context of HIV Prevention". *AIDS Research and Treatment* (2012).
[40] UNAIDS and WHO, *Prevention of Mother-to-Child Transmission of HIV: Technical Guidance Note for Global Fund HIV Proposals* (2011).
[41] WHO, *PMTCT Strategic Vision 2010–2015 – Preventing Mother-to-Child Transmission of HIV to Reach the UNGASS and Millennium Development Goals* (WHO, 2010).

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2.6 – EXAMPLE ACTIVITIES	
FSWs	• Include reproductive health topics (antenatal care, PMTCT, contraception, etc.) in the training agenda for FSW peer educators. • Train reproductive health service providers in issues related to FSWs. • Ensure appropriate integration of HIV issues into the delivery of reproductive health services, as well as the integration of reproductive health issues in the delivery of HIV and AIDS services.
PWID	• Include reproductive health topics (antenatal care, PMTCT, contraception, etc.) in the training agenda for PWID peer educators. • Train reproductive health service providers in issues related to PWID. • Ensure appropriate integration of HIV issues into the delivery of reproductive health services, as well as the integration of reproductive health issues in the delivery of HIV and AIDS services.

2.7 HIV Care and Treatment

Antiretroviral therapy has served to significantly decrease the morbidity and mortality from HIV in the past decade ("treatment as prevention"). While treatment protocol remains the same regardless of sex work, sexual orientation, and substance abuse, it is important to review the continuum of care as it affects FSWs, MSM, and PWID. Stigma and social alienation associated with HIV infection are amplified for these groups. Many FSWs, MSM, and PWID who are infected with HIV may avoid or delay seeking health care services due to service provider bias and disclosure of HIV-positive status without informed consent. MSM are likely to avoid or delay seeking sexual health-related services due to fear of institutional homophobia and health care workers' insensitivity.

Services offered to key affected populations may include: counseling to reinforce secondary prevention and to serve as an entry point for care and psycho-sexual counseling; promotion of ART adherence; screening for tuberculosis; testing for and vaccination against Hepatitis B; STI management; Hepatitis C screening and treatment for MSM and PWID; provision of contraception; provision of condom and lubricant; harm reduction; and management of opportunistic infections (OIs). PLHIV peer educators have proven effective in giving health talks and facilitating community-facility linkages. This intervention can be expanded to include PLHIV from the FSW, MSM, and PWID communities.

At the health facility level, it is strongly recommend that programs focusing on key affected populations monitor the "reach–test–treat–retain" cascade. This has been successfully done for the general population for years, but—because it is not done regularly for key affected populations—it is often not known how many individuals of those groups are actually identified as HIV positive and whether the referrals into care and treatment services are actually successful or not.[42]

At the community level, peer educators can facilitate the formation of support groups for FSWs, MSM, and PWID living with HIV for psychosocial counseling and support, while continuing to make referrals for treatment of STIs and OIs, contraceptive and reproductive health services, PMTCT for FSWs and female PWID, and other health needs. It is equally important to train members of these communities as peer paralegals, community counselors, and community health workers, serving both the community and facility. These cadres offer counseling on ART adherence, help FSWs, MSM, and PWID to disclose their status, embrace positive living, and facilitate support for children of PLHIV.

Programs should work to form and strengthen PLHIV associations and organizations that are managed by FSWs, MSM, and PWID. These associations constitute avenues for their participation in and linkage with other PLHIV networks at local, regional, and national levels. These bodies also promote behavior change, positive living, and care and support, in addition to providing training and services to PLHIV.

[42] Ronald Valdiserri, "HIV/AIDS Treatment Cascade Helps Identify Gaps in Care and Retention" AIDS.gov Blog (19 July 2012). Retrieved 1 Dec. 2013 at: http://blog.aids.gov/2012/07/hivaids-treatment-cascade-helps-identify-gaps-in-care-retention.html#sthash.104pyJIC.dpuf.

2.7 – EXAMPLE ACTIVITIES

All KAPs	• Make facility friendly to KAPs so they can access ART of the same quality as the rest of the population. • Promote the availability of ARVs at facility level to KAPs living with HIV. • Support management information systems. • Support availability of laboratory equipment and commodities. • Train providers on ART and management of OIs, with special attention to the needs and interests of KAPs. • Promote access to Cotrimoxazole for KAPs who are not yet eligible for ART. • Implement positive prevention packages and facilitate referral and linkage systems between ART services and other key health and social services (see below). • Form PLHIV associations and organizations that are managed by FSWs, MSM, and PWID. • Strengthen and support KAP PLHIV organizations through technical and financial capacity building, to increase their visibility and ability to address the sociocultural and legal issues facing their communities. • Work with peer educators to form community-level support groups for KAPs living with HIV to provide psychosocial counseling and support, as well as referrals to health and other services. • Increase ART literacy among KAPs living with HIV.
FSWs	• Implement positive prevention packages and facilitate referral and linkage systems between ART services and other key health and social services (mental health, reproductive health, social support, PMTCT, contraception, etc.). • Support creation of PLHIV advocate groups made up of FSWs to provide health and sexuality talks and prevention with positive messages in health facilities and community venues.
MSM	• Facilitate referral and linkage systems between ART services and other key health and social services (mental health, social support, etc.). • Support creation of PLHIV advocate groups made up of MSM to provide health and sexuality talks and prevention with positive messages in health facilities and community venues.
PWID	• Facilitate referral and linkage systems between ART services and other key health and social services (mental health, social support; and reproductive health, PMTCT, and contraception for female PWID). • Support creation of PLHIV advocate groups made up of PWID to provide health, sexuality, and harm reduction talks and prevention with positive messages in health facilities and community venues.

2.8 Harm Reduction for PWID

Implementing harm reduction interventions means prioritizing reducing harm above all else, including following laws, policies, and current norms. In the case of injecting drug use, harm reduction means providing people who inject drugs with the means to prevent HIV infection even though their drug use may be illegal and socially condemned. There is strong evidence supporting the effectiveness of medication-assisted therapy (most notably with methadone and/or buprenorphine) and needle and syringe exchange programs in preventing HIV.[43] It is highly recommended that these services be offered to address concentrated epidemics where injection drug use is a key driver. Low dead space needles and syringes, which reduce the risk associated with needle and syringe sharing, should also be promoted and distributed.[44] National policies that embrace these harm reduction strategies play an important role in prevention of HIV transmission among PWID. In the absence of such policies, enlisting peer educators in monitoring disinfection of equipment for injecting drugs can reduce chances of transmission of HIV, as well as Hepatitis B and C. Finally, harm reduction policies should consider the benefits of including heroin overdose treatment with Naloxone, an opioid antagonist, as overdose is the highest cause for mortality among PWID, including PLHIV.[45]

The two main routes of transmission of HIV among PWID are: sharing contaminated (unsterilized) needles and syringes, and engaging in related risky sexual behavior (either to sustain drug use or due to impaired judgment as a result of drug use). Alcohol and substance use and dependence are generally associated with decreased ability to keep preventive practices in mind and increased sexual risk due to decreased sexual inhibitions. While there is strong evidence showing the link between injecting drug use and HIV infection, more research is needed that addresses the link between use of non-injecting drugs and HIV.

Strategies to reach PWID must address the stigma they face that can make them "invisible." Peer outreach remains the key to any successful outreach program with PWID.[46] In addition, PWID can be reached at community level through integrated medical outreach conducted by friendly health providers. It is critical to use addiction counselors who are trained in relevant cultural and sexual issues as they can be effective behavior change agents when they build trust with their clients. Enrollment of recovering PWID in peer recovery and other support groups and social networks helps to improve and sustain gains made through peer education and outreach. These groups also provide a platform for PWID to discuss ongoing health and other concerns specific to them and their community.

Note: The key components of harm reduction interventions are biomedical (discussed here). However, it should also be evident that harm reduction efforts also occur at the structural (e.g., advocacy for supportive policies) and behavioral (e.g., peer outreach for adoption of safer practices) levels and, as such, harm reduction is addressed in various other sections.

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[43] Bradley Mathers et al., "HIV Prevention, Treatment, and Care Services for People who Inject Drugs: A Systematic Review of Global, Regional, and National Coverage" *Lancet*, Vol. 375, Issue 9719 (2010): 1014 - 1028.

[44] William Zule, "Can we change the needles and syringes that people use, and if we could, would it reduce hiv transmission among people who inject drugs?" Presentation at the International AIDS Conference, Washington, DC, 2012.

[45] Matt Curtis and Nabarun Dasgupta, "Why Overdose Matters for HIV" (Eurasian Harm Reduction Network and Open Society Foundations, 2010). Accessed 1 Dec. 2014 at: http://www.opensocietyfoundations.org/publications/why-overdose-matters-hiv.

[46] National Treatment Agency for Substance Misuse, *Building Recovery in Communities: A Summary of the Responses to the Consultation* (London: May 2012).

2.8 – EXAMPLE ACTIVITIES

PWID

- Define harm reduction policies, norms, and guidelines (including the distribution of bleach and injecting equipment to PWID).
- Train health providers in harm reduction for PWID.
- Provide free sterile injecting equipment to PWID (using both community- and facility-based approaches).
  - Particularly in places where syringes are sold at relatively low cost, pharmacists can be engaged as distributors.
  - Promote and distribute low dead space needles and syringes.
- Establish community outreach programs in the identified PWID "hotspots" to provide information on sexuality, drug addiction, the relationship between substance abuse and HIV and AIDS, and strategies for prevention.
- Conduct integrated medical outreach using friendly health providers to offer: HIV testing and counseling; treatment of STIs, abscesses, and infections; and referral for ART and community-based services.
- Use peer educators to: deliver prevention messages (clean needles and syringes, condom use); distribute condoms; promote behavior change; and make necessary referrals for health services, drug detoxification, rehabilitation, and other services.
- Establish user-friendly drop-in centers where PWID can receive: information on HIV and AIDS, STIs, and contraception; clean needles and condoms; counseling; and referrals to health facilities for other services.
- Support formation of peer support groups for recovering PWID to improve and sustain gains made through peer education and outreach.
- Support the implementation of studies on interaction between ART and drug use, and use findings to train health providers on correct counseling of PWID with HIV.

III. BEHAVIORAL INTERVENTIONS FOR HIV PREVENTION AMONG KEY AFFECTED POPULATIONS

3.1 Individual-level Behavior Change through Peer Education and Community-based Counseling

Models of education and health promotion are frequently based on the assumption that individuals will avoid risky behaviors if they are simply fully informed and sufficiently motivated. However, it must be recognized that change is frequently a matter of helping people assimilate knowledge into their daily lives in diverse ways, which requires careful discussion and critical engagement. Peer interventions effectively provide such engagement in the field of HIV prevention.[47]

Peers must be active members of communities (practicing sex workers, MSM who are open about their sexuality and practices, current or previous users of drugs), who are directly engaging with issues of major importance to their community. As members of the target group who are ideally selected by the group itself, peer educators acting as role models within the group can establish a level of trust and comfort with their peers that allows for more open discussions on sensitive topics.[48] Peer educators have physical and sociocultural access to their hard-to-reach FSW, MSM, and PWID peers, allowing them to reach them in their environments without being conspicuous. Peers are effective and credible communicators who have inside knowledge of the target group and use appropriate language and terminology, which allows their peers to openly discuss and get real information on issues like sexuality, HIV and AIDS, and human rights.

Peer educators can also serve as a bridge between program beneficiaries and providers of health and social services. Peer education facilitates the proactive involvement of target groups in program planning, implementation, and evaluation and helps to foster community agency at the broader state, national, and international levels.

Peer education should be pursued intensively—detailed planning helps to establish a viable system of selecting peer educators, providing initial and follow-up training, and sustaining their interest and skills with close supervision, support, and skills upgrading. It is important to think about strategies for retaining peer educators from the outset to avoid high turnover rates. As peer educators encourage their peers to organize themselves into community groups and expand their work, further planning will be needed to incorporate and manage those community groups.

In addition to peer education, community-based counseling can play a vital role in the overall behavioral approaches to HIV prevention. Community-based counselors who are not FSWs, MSM, or PWID can promote behavior change by addressing specific risk behaviors and vulnerabilities through door-to-door risk assessment and counseling. These services, when provided by non-peers with tailored messages for different key affected populations and supported by effective linkages with comprehensive health and social services, can not only reach large number of FSWs, MSM, and PWID, but also provide a cost-effective and non-stigmatizing behavior change approach to HIV prevention.

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[47] J. Simoni, K. Nelson, J. Franks, S. Yard, K. Lehavot, "Are Peer Interventions for HIV Efficacious? A Systematic Review" *AIDS and Behavior* 15(8): 1589-95 (2011); K. Ford, et al., "Evaluation of a Peer Education Programme for Female Sex Workers in Bali, Indonesia" I*nternational Journal of STD and AIDS,* 11(11):731-3 (2000); V. Strange, S. Forrest, A. Oakley, Ripple Study Team, "Peer-led Sex Education: Characteristics of Peer Educators and their Perceptions of the Impact on them of Participation in a Peer Education Programme, *Health Education Research,* 17(3):327-37, 2002; G. Turner, J. Shepherd, "Method in Search of a Theory: Peer Education and Health Promotion," *Health Education Research* 14 (2): 235-247 (1998).

[48] UNAIDS, *Peer Education and HIV/AIDS: Concepts, Uses, and Challenges* (Geneva: UNAIDS, 1999).

3.1 – EXAMPLE ACTIVITIES

All KAPs

- Support qualitative and quantitative needs assessment studies (e.g., community needs, communication needs, sexual and other harmful behaviors) and hotspot mapping.
- Implement peer education for the KAP through:
  - Participatory selection of peer educators
  - Comprehensive training of peer educators
  - Production and provision of job aids
  - Provision of peer education at community level
  - Distribution of prevention commodities
  - Referrals for HTC, STI testing, and other health and legal services (see below)
  - Regular supervision/feedback system from KAP community
  - On-the-job technical updates and refresher training
  - Re-motivation and retention of KAP community members by training them to be trainers/resource persons
  - Ensuring quality improvement by establishing mechanisms for regular feedback from the community on peer educators
- Support non-peer community-based counseling through:
  - Training for non-peer individuals on considerations for specific KAP
  - Using HTC lay counselors to conduct community counseling and risk assessment
  - Referrals to health and legal services (see below)
  - Health talks and one-to-one counseling by harm reduction (for PWID) and PLHIV advocates

FSWs

- FSW peer educators and non-peer counselors should also provide referrals for contraceptive and other reproductive health services.
- Conduct peer education with clients and regular partners of FSWs.

PWID

- PWID peer educators and non-peer counselors should also provide referrals for harm reduction services and mental health services.

3.2 Collective-level Behavior Change

Some of the most powerful and long-lasting effects on HIV prevention among key affected populations can be achieved through collective action to address social practices and norms that perpetuate risky behaviors or are the key barriers to individual behavior change. Interventions should foster the development of new relationships within the community so that its members can: develop cohesive and empowered groups; mobilize and address their own problems through community dialogue and civic participation; benefit from collective knowledge; and act on perceived risks and benefits associated with particular behaviors and ways of being.

Guaranteeing the meaningful participation of a large number of FSW, MSM, and PWID community members in such groups/networks can be a lengthy process and demands continuous motivational efforts (see table of activities below). Nevertheless, once established, these groups engage in constructive dialogue to find concrete ways to support behavior change as well as social cohesion and inclusion.

Group discussion meetings can generate a wealth of personal stories (or fictional narratives based on real stories) that can play a much stronger role in contextualizing the group's vulnerabilities than simple dissemination of impersonal behavioral messages like "use a condom" or "visit a health facility." These narratives make explicit many risky norms that people do not often speak or think about directly. Personal and group stories provide realistic content to the learning process that triggers expression of collective identity and facilitates informed behavior change. Collective empowerment for behavior change depends not only on trust, confidence, emotion, and the motivational factors associated with being part of a group, but most importantly on facilitating people's informed intellectual analysis of their circumstances and norms that do not support healthy choices.[49] In other words, communities can increase their competencies and problem-solving ability through increased group identification and promotion of critical consciousness.[50]

Among adolescent and young MSM, collective discussion meetings are particularly effective in promoting safe behaviors. As these groups generally experience high levels of stigma and discrimination at school and even at home from an early age, the collective sharing of individual experiences and personal stories is an important complement to individual-level behavior change approaches. The sharing of experience through stories not only reveals conventional perceptions of cause and effect but also highlights value hierarchies, ideals, and social norms that require closer scrutiny.

In the realm of sex work, collective discussion to analyze circumstances that affect sexual partners of FSWs (regular partners, regular clients, and casual clients) can also be used to generate critical awareness of how seemingly individual choices may be shaped by stigma and social convention among these men and thus contribute to sustainable behavior change related to condom use and alcohol and other drug abuse. This is a critical component to support FSWs in their own behavior change to prevent HIV.

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[49] C. Campbell, et al., "Peer Education, Gender and the Development of Critical Consciousness: Participatory HIV Prevention by South African Youth" *Social Sciences and Medicine,* 55 no.2 (2002): 331-345.

[50] M. Mustakova-Possardt, "Is there a Roadmap to Critical Consciousness? Critical Consciousness: A Study of Morality in Global, Historical Context" *One Country*, 15 no.2 (2003).

3.2 – EXAMPLE ACTIVITIES

All KAPs	• Promote KAP community discussions to identify barriers to and facilitators of behavior change through participatory approaches like sharing experiences and storytelling. • Support champions and community role models from the KAP.
FSWs	• Support FSW community activities in safe havens/drop-in centers through: ○ Sister-to-sister clubs ○ Games and infotainment programs ○ Guest speakers on themes of interest to FSW (e.g., police violence, legal rights, child care, reproductive health, HIV prevention) ○ Short-term workshops (e.g., fashion, cooking, make-up, body massage, yoga) • Promote HIV prevention among FSW clients and partners, through the establishment of regular partner and client clubs to discuss prevention of HIV infection and GBV. • Promote sensitization on HIV prevention and FSW human rights among bar and brothel owners, pimps, security guards, DJs, and taxi drivers.
MSM	• Support MSM community activities in safe havens/drop-in-centers through: ○ Issue-based groups/workshops ○ Games and infotainment programs ○ Guest speakers on themes of interest to MSM (e.g., police violence, homophobia, HIV prevention).
PWID	• Support PWID community activities in safe havens/drop-in-centers through: ○ Games and infotainment programs ○ Guest speakers on themes of interest to PWID (e.g., police violence, legal rights, harm reduction, substitution therapies, HIV prevention). • Promote HIV prevention among sexual partners of PWID, through the establishment of partner clubs to discuss HIV prevention.

3.3 Institutional-level Behavior Change through Health Providers

Collective- and individual-level behavior change interventions must be complemented and reinforced by interventions at the institutional level. As health facilities are an important point of contact with key affected populations, programs should encourage them to actively and continuously promote providers' application of behavior change methods for HIV prevention, particularly among groups most vulnerable to HIV infection. Behavior change promotion should be incorporated into the work of a diverse range of health providers (e.g., doctors, nurses, nurse auxiliaries, laboratory technicians, pharmacy clerks).

For providers' behavior change efforts to be effective, the facilities' policies and procedures should be reviewed and amended to ensure marginalized groups are not discriminated against. Innovative models such as training paramedics from key affected population communities to work in facilities can not only create a welcoming atmosphere for FSWs, MSM, and PWID, but also creates a link between the communities and health facilities, thus promoting increased service uptake.

Learning sites can be important training venues that offer exposure/immersion programs to peers and community leaders. They represent another platform from which behavior change approaches can be successfully rolled out to key affected populations. Such learning sites can offer training, technical assistance, and peer support to strengthen capacities of community organizations and serve as resource centers for successful prevention approaches.

3.3 – EXAMPLE ACTIVITIES	
All KAPs	• Establish community learning sites and training centers for health providers, ensuring that the following topics are included in the training agenda (see below for additional population-specific topics): human rights; sexual rights; human sexuality; GBV; HIV and AIDS; vulnerability and vulnerable groups to HIV infection; HTC; STI prevention and syndromic treatment; physical examination for oral, genital, and anal STIs; ART; ethics; HIV integration with SRH; positive prevention, adherence to treatment, serodiscordant couples. • Train health providers to conduct comprehensive counseling on safer behaviors, including health-seeking behaviors among KAPs, with special attention to: correct and constant condom use; HTC; adherence to treatment; abuse of alcohol and other drugs. (See below for additional population-specific topics.)
FSWs	• Ensure the following FSW-related topics are included in the training agenda at learning sites and training centers for health providers: reproductive rights, contraception (including emergency contraception), and PMTCT. • Ensure health providers are trained to counsel FSWs on reporting sexual and physical violence of police, partners, and clients.
MSM	• Ensure the following MSM-related topics are included in the training agenda at learning sites and training centers for health providers: sexual orientation, gender identity, homophobia, and stigma. • Ensure health providers are trained to counsel MSM on reporting incidents of social and institutional homophobia, including police violence.
PWID	• Ensure the following PWID-related topics are included in the training agenda at learning sites and training centers for health providers: harm reduction and addiction. • Ensure health providers are trained to counsel PWID on risks of sharing of injecting equipment and on harm reduction.

3.4 Media Communication for Behavior Change

Media interventions can complement other effective behavior change approaches. Education and sensitization of media personnel is critical as they play a key role in shaping the specific and general communities' perceptions of FSWs, MSM, and PWID. Key affected populations should directly participate in sensitization of media personnel (as well as in actual programming) to provide accurate, relevant information about their communities and to humanize their situation, ultimately influencing the quality and content of reporting. This is particularly relevant to efforts to counteract social stigma, discrimination, gender-based and police violence, and homophobia against these highly vulnerable groups and to promote their social inclusion.

Media communications must be tailored (in term of their content, format, and placement/distribution) to each specific key affected population community, taking into consideration factors that affect the groups' access to HIV-related information and services (e.g., the hidden nature of many MSM and PWID communities, or opportunities for reaching FSWs in their places of work).

Channels of media communication that can be used to reach key affected population communities and individuals include: helplines/hotlines, text messaging (SMS), internet-based social networks, television, film, radio, newspapers, and street plays. Because it permits a degree of anonymity and privacy that other media may not afford, the internet has been shown to be a particularly effective forum for providing tailored information and creating a safe communicative environment for marginalized groups. (However, it must be noted that many individuals may not have access to computers or web-ready mobile phones). Small media (posters, pamphlets, and flyers), mostly distributed locally, can also help reinforce messages. The use of drama, song, dance, magnet theatre, or video screenings that are followed by discussion sessions furthers knowledge and attitude change, inducing self-reflection and behavior change. Whatever form of media communication is used, FSWs, MSM, and PWID must participate in message development, pre-testing, and roll-out.

3.4 – EXAMPLE ACTIVITIES	
All KAPs	• Develop mHealth interventions for the KAP using SMS messaging on issues such as: follow-up on STI treatment; condom use and other safer sexual behaviors; alcohol and drug abuse; police harassment and violence; HTC; and adherence to treatment for PLHIV. (See additional population-specific topics below.) • Establish telephone hotlines/helplines for the KAP. • Develop radio (including community radio) and television spots. • Use social media platforms (e.g., Facebook, Twitter, MSN messenger, blogs, chat rooms, etc.) to promote safer behaviors in the KAP. • Disseminate prevention messages to KAP through email listservs. • Support the participatory production of issue-based videos addressing topics of particular interest to the KAP.
FSWs	• Conduct street-plays and puppet shows addressing issues of interest to FSWs. • Implement focused campaigns at the community level.
MSM	• SMS messaging for MSM could also address issues including voluntary male medical circumcision. • Use existing MSM online forums (e.g., chat rooms, dating/hook-up websites and mobile applications) to disseminate information about HIV prevention and services. • Develop websites and chat rooms for MSM to disseminate information about prevention and services.
PWID	• SMS messaging for PWID could also address issues such as sharing of injecting equipment and voluntary male medical circumcision. • Conduct street-plays addressing issues of interest to PWID. • Implement focused campaigns at the community level.

REFERENCES

Avahan India AIDS Initiative. *Breaking through Barriers: Avahan's Scale-up of HIV Prevention among High-risk MSM and Transgenders in India.* Avahan and Bill & Melinda Gates Foundation, 2010.

Becker, Marissa, Satyanarayana Ramanaik, Shiva Halli, James Blanchard, T. Raghavendra, Parinita Bhattacharjee, Stephen Moses, Lisa Avery, Sharmistha Mishra. "The Intersection between Sex Work and Reproductive Health in Northern Karnataka, India: Identifying Gaps and Opportunities in the Context of HIV Prevention." *AIDS Research and Treatment*, Volume 2012 (2012). DOI: http://dx.doi.org/10.1155/2012/842576.

Behets, F. M. T. F., Rasolofomanana, J. R., Van Damme, K., Vaovola, G., Andriamiadana, J., Ranaivo, A., McClamroch, K., Dallabetta, G., van Dam, J., Rasamilalao, D., Rasamindra, A. and the Mad-STI Working Group. "Evidence-based Treatment Guidelines for Sexually Transmitted Infections Developed with and for Female Sex Workers." *Tropical Medicine & International Health* 8(3): 251-258, 2003.

Campbell, C. et al. "Peer Education, Gender and the Development of Critical Consciousness: Participatory HIV Prevention by South African Youth" *Social Sciences and Medicine*, 55 no.2 (2002): 331-345.

CDC. *Antiretroviral Postexposure Prophylaxis after Sexual, Injection-drug Use, or Other Non-occupational Exposure to HIV in the United States: Recommendations from the US Department of Health and Human Services.* CDC/MMWR, 2005.

CDC/National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. "Bangkok Tenofovir Study: PrEP for HIV prevention among people who inject drugs." CDC, 2013. Accessed 10 Feb. 2014 at: http://www.cdc.gov/nchhstp/newsroom/docs/PrEP-IDU-factsheet-508.pdf.

Coates, TJ, L Richter, and C Caceres. "Behavioural Strategies to Reduce HIV Transmission: How to Make them Work Better." *Lancet*, 2008, 372(9639): 669–684.

Curtis, Matt and Nabarun Dasgupta. "Why Overdose Matters for HIV." Eurasian Harm Reduction Network and Open Society Foundations, 2010. Accessed 1 Dec. 2014 at: http://www.opensocietyfoundations.org/publications/why-overdose-matters-hiv.

Davis, K. and S. Weller. "The Effectiveness of Condoms in Reducing Heterosexual Transmission of HIV" *Family Planning Perspectives* 31, no.6 (1999): 272-279.

Desai, V. K., et al. "Prevalence of Sexually Transmitted Infections and Performance of STI Syndromes against Etiological Diagnosis, in Female Sex Workers of Red Light Area in Surat, India." *Sexually Transmitted Infections* 79(2): 111-115, 2003.

Ford, K., D.N. Wirawan, S.S. Suastina, B.D. Reed, P. Muliawan. "Evaluation of a Peer Education Programme for Female Sex Workers in Bali, Indonesia" *International Journal of STD and AIDS*, 11(11):731-3 (2000).

Fox, Leslie and Priya Helweg. *Advocacy Strategies for Civil Society: A Conceptual Framework and Practitioner's Guide* (USAID, 1997).

Kaul, R., et al. "Monthly Antibiotic Chemoprophylaxis and Incidence of Sexually Transmitted Infections and HIV-1 Infection in Kenyan Sex Workers: A Randomized Controlled Trial." *JAMA* 291(21): 2555-2562, 2004;

Kippax, S., E. Reis and J. Wit. "Two Sides to the HIV Prevention Coin: Efficacy and Effectiveness" *AIDS Education and Prevention* 23, no.5 (2011): 393–396.

Lippman, S., et al. "Social-Environmental Factors and Protective Sexual Behavior among Sex Workers: The Encontros Intervention in Brazil" *American Journal of Public Health* 99, no.11 (2009).

Martin, J., et. al. "Use of Postexposure Prophylaxis against HIV Infection Following Sexual Exposure does not Lead to Increases in High-risk Behavior" *AIDS* 18 (2004): 787–792.

Mathers, Bradley, et al. "HIV Prevention, Treatment, and Care Services for People who Inject Drugs: A Systematic Review of Global, Regional, and National Coverage." *Lancet*, Vol. 375, Issue 9719 (2010): 1014-1028.

Mayaud, P. and D. McCormick. "Interventions Against Sexually Transmitted Infections (STI) To Prevent HIV Infection." *British Medical Bulletin*. 58(1):129-153, 2001.

Modie-Moroka, T. "Does Level of Social Capital Predict Perceived Health in a Community? A Study of Adult Residents of Low-income Areas of Francistown, Botswana" *Journal of Health, Population and Nutrition* 27, no.4 (2009): 462-476.

Mustakova-Possardt, M. "Is there a Roadmap to Critical Consciousness? Critical Consciousness: A Study of Morality in Global, Historical Context" *One Country,* 15 no.2 (2003).

National Treatment Agency for Substance Misuse. *Building Recovery in Communities: A Summary of the Responses to the Consultation.* London: May 2012.

Nguyen, Vinh-Kim, Nathalie Bajos, Françoise Dubois-Arber, Jeffrey O'Malley, and Catherine M. Pirkle. "Remedicalizing an Epidemic: From HIV Treatment as Prevention to HIV Treatment is Prevention." *AIDS* 25 no.3 (2011): 291–293.

Pathfinder International. *Straight to the Point: Workplanning.* Watertown, MA: Pathfinder International, 2013. Accessed 1 Dec. 2013 at: http://www.pathfinder.org/publications-tools/straight-to-the-point-workplanning.html.

Pathfinder International. *Straight to the Point: Advocacy Package.* Watertown, MA: Pathfinder International, 2011. Accessed 1 Dec. 2013 at: http://www.pathfinder.org/publications-tools/Straight-to-the-Point-Setting-Advocacy-Priorities.html.

Pathfinder International. *HIV Prevention among Vulnerable Populations: The Pathfinder International Approach, Technical Guidance Series,* No. 6. Watertown, MA: Pathfinder International, 2008. Accessed 1 Dec. 2013: http://www.pathfinder.org/publications-tools/HIV-Prevention-Among-Vulnerable-Populations-The-Pathfinder-International-Approach.html.

Pathfinder International. "Module 3: Leadership." In *Organizational Development – Strengthening your Organization Series* (Watertown, MA: Pathfinder International). Accessed 1 Dec. 2013: http://www.pathfinder.org/publications-tools/Strengthening-You-Organization-A-Series-of-Modules-and-Reference-Materials-for-NGO-and-CBO-Managers-and-Policy-Makers-Leadership.html.

Pinkerton, S. and P. Abramson. "Effectiveness of Condoms in Preventing HIV Transmission." *Social Science & Medicine* 44, no.9 (1997): 1303-1312.

Schechter, M., et al. "Behavioral Impact, Acceptability, and HIV Incidence among Homosexual Men with Access to Postexposure Chemoprophylaxis for HIV." *Journal of AIDS* 35 (2004): 519--25.

Scholl, Edward and Daniel Cothran. "Integrating Family Planning and HIV Services: Programs in Kenya and Ethiopia Lead the Way." *AIDSTAR-One Case Study Series.* Alexandria, VA: John Snow, Inc./AIDSTAR-One, 2011.

Selvaggio, Kathleen, Zie Gariyo and Patrick Oloya. *Advocacy in the Health and Education Sectors in Uganda: A Situational Analysis.* USAID and UMEMS, 2011.

Shahmanesh, M., V. Patel and F. Cowan. "Effectiveness of Interventions for the Prevention of HIV and Other Sexually Transmitted Infections in Female Sex Workers in Resource Poor Setting: A Systematic Review." *Tropical Medicine and International Health* 13, no.5 (2008): 659–679.

Simoni , J.M., K.M. Nelson, J.C. Franks, S.S. Yard, K. Lehavot. "Are Peer Interventions for HIV Efficacious? A Systematic Review" *AIDS and Behavior* 15 no.8 (2011): 1589-95.

Steen, R. and G. Dallabetta. "Sexually Transmitted Infection Control with Sex Workers: Regular Screening and Presumptive Treatment Augment Efforts to Reduce Risk and Vulnerability." *Reproductive Health Matters* 11(22): 74-90, 2003.

Strange, V., S. Forrest, A. Oakley, Ripple Study Team. "Peer-led Sex Education: Characteristics of Peer Educators and their Perceptions of the Impact on them of Participation in a Peer Education Programme." *Health Education Research*, 17(3):327-37, June 2002.

Turner, G. and J. Shepherd. "A Method in Search of a Theory: Peer Education and Health Promotion." *Health Education Research*, vol. 14, issue 2, pp. 235-247, 1998.

UNAIDS. *UNAIDS Action Framework: Universal Access for Men who have Sex with Men and Transgender People.* Geneva: UNAIDS, 2009. Accessed 1 Feb. 2014 at: http://www.undp.org/content/undp/en/home/librarypage/hiv-aids/unaids-action-framework-universal-access-for-men-who-have-sex-with-men-and-transgender-people.html.

UNAIDS. *At Risk and Neglected: Four Key Populations – Report on the Global AIDS Epidemic.* Geneva: UNAIDS, 2006.

UNAIDS. *Peer Education and HIV/AIDS: Concepts, Uses, and Challenges* (Geneva: UNAIDS, 1999).

UNAIDS and WHO. *Prevention of Mother-to-Child Transmission of HIV: Technical Guidance Note for Global Fund HIV Proposals.* 2011. Accessed 1 Feb. 2014 at: http://www.unaids.org/en/media/unaids/contentassets/documents/programmes/programmeeffectivenessandcountrysupportdepartment/gfresourcekit/20110905_Technical_Guidance_Food_Nutrition_en.pdf.

UNFPA. *Comprehensive Condom Programming: A Guide for Resource Mobilization and Country Programming* (UNFPA, 2010).

UNFPA. "HIV and Sex Work: Preventing HIV Risk and Vulnerability: Media Fact Sheet." UNFPA, 2010. Accessed 1 Dec. 2013 at: https://www.unfpa.org/webdav/site/global/shared/factsheets/media_fact_sheet_sexwork.pdf.

UNPFA, WHO, and UNAIDS. "Position Statement: Condoms and HIV Prevention" (2009). Accessed 19 Mar. 2013 at: http://www.who.int/hiv/pub/condoms/20090318_position_condoms.pdf.

Valdiserri, Ronald. "HIV/AIDS Treatment Cascade Helps Identify Gaps in Care and Retention." AIDS.gov Blog. 19 July 2012. Accessed 1 Dec. 2013 at: http://blog.aids.gov/2012/07/hivaids-treatment-cascade-helps-identify-gaps-in-care-retention.html#sthash.104pyJIC.dpuf.

Weber, J., R. Tatoud and S. Fidler. "Postexposure Prophylaxis, Preexposure Prophylaxis or Universal Test and Treat: The Strategic Use of Antiretroviral Drugs to Prevent HIV Acquisition and Transmission" *AIDS* 24, suppl. 4 (2010): S27-39.

WHO. *Guidance on Pre-exposure Oral Prophylaxis (PrEP) for Serodiscordant Couples, Men who have Sex with Men and Transgender Women at High Risk of HIV in Implementation Research.* Geneva: WHO, 2012.

WHO. "Voluntary Medical Male Circumcision for HIV Prevention: Fact sheet" (July 2012). Retrieved 19 Mar. 2013, from http://www.who.int/hiv/topics/malecircumcision/fact_sheet/en/index.html.

WHO. *Prevention and Treatment of HIV and other Sexually Transmitted Infections among Men who have Sex with Men and Transgender People: Recommendations for a Public Health Approach.* Geneva: WHO, 2011.

WHO. *PMTCT Strategic Vision 2010–2015 - Preventing Mother-to-Child Transmission of HIV to Reach the UNGASS and Millennium Development Goals*. Geneva: WHO, 2010. Accessed 1 Feb. 2013 at: http://www.who.int/hiv/pub/mtct/strategic_vision/en/.

WHO. *Addressing Violence against Women and HIV/AIDS: What Works.* Geneva: WHO, 2010.

WHO. *World Report on Violence and Health.* Geneva: WHO, 2002.

WHO and International Labor Organization. *Post-exposure Prophylaxis to Prevent HIV Infection: Joint WHO/ILO Guidelines on Post-exposure Prophylaxis (PEP) to Prevent HIV Infection.* Geneva: WHO, 2007.

WHO and UNAIDS. *Joint Strategic Action Framework to Accelerate the Scale-up of Voluntary Medical Male Circumcision for HIV Prevention in Eastern and Southern Africa 2012–2016* (2011).

WHO, UNAIDS, and UNICEF. *Global HIV/AIDS Response 2011: Epidemic Update and Health Sector Progress toward Universal Access.* Geneva: WHO, 2011.

WHO and UNAIDS. *Guidance on Provider-Initiated HIV Testing and Counseling in Health Facilities.* Geneva: WHO, 2007.

WHO, UNFPA, and Family Health International. *Male Latex Condom: Specification, Prequalification, and Guidelines for Procurement.* Geneva: WHO, 2010.

Zule, William. "Can we change the needles and syringes that people use, and if we could, would it reduce hiv transmission among people who inject drugs?" Presentation at the International AIDS Conference, Washington, DC, 2012.

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