



WHAT'S OUT THERE ON PrEP

A Literature Review

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ITPC

INTERNATIONAL TREATMENT
PREPAREDNESS COALITION

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About ITPC

The International Treatment Preparedness Coalition (ITPC) is a global network of people living with HIV and community activists working to achieve universal access to optimal HIV treatment for those in need. Formed in 2003 by a group of 125 HIV activists from 65 countries at a meeting in Cape Town, South Africa, ITPC actively advocates for treatment access in eight regions across the globe, including Africa, Asia, Latin American and the Caribbean, Eastern Europe, and the Middle East. ITPC believes that the fight for HIV treatment remains one of the most significant global social justice issues.

ITPC embarked on an initiative to develop and implement innovative community-led demand creation solutions for access to and use of oral pre-exposure prophylaxis (PrEP) for HIV by key populations. This initiative included conducting a preliminary literature review of global community perspectives on PrEP, hosting the Community-led Consultative Think Tank Meeting on PrEP, developing the Key Population Activist Toolkit on PrEP, and articulating key PrEP messages by key population networks and PrEP experts in this position statement.

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Acronyms

AVAC	AIDS Vaccine Advocacy Coalition	OPTIONS	Optimizing Prevention Technology Introduction On Schedule
ART	Antiretroviral therapy	PEPFAR	U.S. President's Emergency Plan for AIDS Relief
ARV	Antiretroviral	PrEP	Pre-exposure prophylaxis
FDA	US Food and Drug Administration	PWID	People who inject drugs
FTC	Emtricitabine	STI	Sexually Transmitted Infections
ITPC	International Treatment Preparedness Coalition	SW	Sex workers
INPUD	The International Network of People Who Use Drugs	TDF	Tenofovir Disoproxil Fumarate
KP	Key populations	TG	Transgender
LGBTQ	Lesbian, Gay, Bisexual, Transgender and Queer	USAID	US Agency for International Development
MAF	MAC AIDS Fund	UNAIDS	Joint United Nations Programme on HIV/AIDS
MSM	Men who have sex with men	WHO	World Health Organisation
MSMGF	Men Who Have Sex with Men Global Forum		

Definitions

SERODISCORDANT: a term to describe differing HIV infection status; in the case of sero-discordant couples, one partner is HIV-positive and the other is not.

DEMONSTRATION PROJECTS: small-scale pilots that provide information on how to deliver oral PrEP in real-world settings.

OPEN LABEL PROJECTS: a type of clinical trial in which both the researchers and participants know which treatment is being administered.

IMPLEMENTATION PILOT STUDIES: a form of research study which addresses implementation bottlenecks, identifies optimal approaches for a particular setting, and promotes the uptake of research findings—ultimately, leading to improved health care and its delivery.

Executive Summary

In its 2016 *Consolidated Guidelines on the Use of Antiretroviral Drugs for Treating and Preventing HIV Infection*, the WHO recommends the use of pre-exposure prophylaxis (PrEP), a pill taken daily, as an additional prevention option for people at substantial risk of HIV infection. Key populations (KPs) —sex workers, men who have sex with men, people who inject drugs and transgender people— collectively at higher risk of HIV infection than the general population, stand to benefit from PrEP. In 2015, 36% of new infections globally were among KPs and their partners.¹

Findings from concluded clinical research trials, and preliminary results from demonstration projects illustrate the efficacy and safety of PrEP and indicate the potential feasibility of the implementation of oral PrEP in real-world settings. The findings of four clinical research trials (*iPrEX*, *TDF2*, *Partners PrEP* and *Bangkok Tenofovir Study*) show efficacy ranging between 44 -75%, and preliminary results from on-going trials have so far been promising.

Within its mission to increase access to optimal HIV treatment, the International Treatment Preparedness Coalition (ITPC) has recognised that discussions about PrEP must be better integrated into overall dialogues and initiatives around treatment access. As a result, ITPC has initiated a community-led process to develop and implement innovative community-led demand creation solutions for access to and use of oral PrEP by key populations. This literature review falls within the initial stages of the process, involving consultations with communities on PrEP. This objective of this literature review is to provide a preliminary, but not exhaustive, overview of PrEP trial findings as well as key perspectives from KP populations. Follow-up stages in this process involve a global PrEP think tank meeting, the development of a community toolkit and global policy statement, and the roll-out of treatment education workshops on PrEP to build the capacity of KP organizations to support community-led demand creation for PrEP.

According to the findings from this review, KPs value and recognise PrEP as additional protection against HIV infection (part of combination prevention programme). However, the perceived benefits and concerns around PrEP were motivated by the specific needs and experiences of the different KP groups. A few cross-cutting issues emerged, highlighting areas which need to be addressed for easier PrEP uptake. Among the key issues raised were concerns around safety and potential side effects, effectiveness, cost, potential adherence challenges, and the need to address all forms of stigma, discrimination and criminalisation which act as barriers to HIV services. Concerns around potential risk compensation resulting from the introduction of PrEP were also raised, further highlighting the importance of messaging around PrEP as an integral part of a comprehensive prevention package for HIV prevention. Though willing to take PrEP, it is worth noting that knowledge and awareness of PrEP was generally low across KP groups suggesting that the potential for adoption of PrEP for prevention has not been maximised.

Despite these commonalities, KPs are not a homogenous group and any implementation or roll out of PrEP would be misguided if it does not adequately consider the distinct needs and experiences of KP subgroups, and even differences emerging within sub-groups. Hence, the role of community in the uptake of PrEP is vital as has been highlighted throughout this review. The discourse has been most prominent at global policy level, and as PrEP as a viable prevention strategy takes hold at country level, ensuring that PrEP is carefully integrated into existing HIV programmes in close partnership with KPs themselves will be the next challenge towards ensuring maximum community-led demand for PrEP. This literature review and subsequent steps in ITPC's community-led demand creation process upholds ITPC's efforts to integrate the voice of community in the discourse on PrEP implementation and rollout.

A. Background

1. What is oral pre-exposure prophylaxis (PrEP)?

As the world ramps up to meet the ambitious UNAIDS 90-90-90 targets, concerted efforts are required on multiple fronts to ensure that we reach these as planned, by 2020. These targets set out a platform to dramatically reduce HIV morbidity and mortality rates aiming to successfully identify 90% of people living with HIV globally, ensuring that 90% of which are initiated on ART and of which 90% are effectively virally suppressed. Further upstream on the prevention and treatment continuum, concomitant efforts are also required to prevent and ultimately reduce new HIV infections globally. More work is needed as current efforts are off-track to reach the target of fewer than 500,000 new HIV infections by 2020.¹

In addition to behavioural approaches to HIV prevention, emerging research has demonstrated that biomedical prevention approaches are also effective in reducing the risk of HIV infection². Among these, pre-exposure prophylaxis (PrEP) has generated interest and was approved for HIV prevention, in 2012, by the US Food and Drug Administration (FDA), based on the results of research studies carried out among a range of populations including serodiscordant couples, men who have sex with men (MSM), transgender women (TGW), sex workers (SW), and people who inject drugs (PWID).^{3,4,5} PrEP, as defined by the World Health Organisation (WHO) is the daily use of antiretroviral (ARV) drugs by HIV-uninfected people to block the acquisition of HIV.⁵ Although PrEP can be administered through different routes, namely topically (vaginal and rectal) and by injection, PrEP has been officially approved by the WHO and FDA in the form of a pill.⁶

When adherence to treatment is high (i.e. 70% and above drug detection) a significant level of protection is achieved despite age, sex, or mode of HIV acquisition (rectal, penile or vaginal exposure) or regimen (TDF versus FTC + TDF). However, drug detection levels of less than 40% have shown no discernible protection against HIV infection.⁷ Trial results lean heavily toward continuous daily use as most effective, in comparison to intermittent or on-demand use.

2. Why is PrEP important for key populations?

MSM, PWID, SW and TG persons, collectively referred to as key populations (KPs) according to the PEPFAR definition, are among the most vulnerable to HIV infection.¹⁰ Compared to the general population, the risk of HIV infection is 10 times higher among sex workers and 24 times higher among people who inject drugs and gay men and other men who have sex with men.¹

More than 90% of new HIV infections in Central Asia, Europe, North America, the Middle East and North Africa in 2014 were among key populations and their sexual partners, who accounted for 36% of new HIV infections worldwide in 2015. UNAIDS notes further that new HIV infections among gay men and MSM are rising globally, and there have been no apparent reductions of new infections among sex workers, transgender people, people who use drugs or prisoners.¹

The risk of HIV infection is exacerbated among KPs due to criminalization, stigmatization and discrimination related to their identity or occupation. As a result, KPs are more likely to engage in risky sexual behaviours and generally have decreased access to HIV prevention services—thus increasing overall risk of infection.^{1,8,9} These and other risk factors for key populations are specific to each group and therefore an optimal prevention package should be tailored to the population, the location and age of the individual. KPs stand to benefit from access to PrEP as an additional HIV prevention option. To date, almost 60% of PrEP research has been focused on KP groups.

B. Literature Review: Objectives and Methodology

Over the past 15 years, ITPC’s work has uncovered glaring gaps along the HIV treatment cascade – pointing to persistent needs of people living with HIV in Africa, Asia, the Middle East, Eastern Europe, and Latin America and the Caribbean. In the context of ITPC’s overall work on treatment access, it has become clear that discussions about PrEP must be better integrated into the treatment access space. “Treatment as prevention” and similar frameworks reinforce that all steps of the cascade are linked and should be treated as such. As an extension of its existing work in community-led advocacy for HIV treatment, ITPC is uniquely placed to facilitate the engagement, mobilization and empowerment of PLHIV and KPs in discussions on, and where relevant, the operationalization and roll-out of PrEP.

1. Review purpose and objectives

This literature review has a two-fold objective that falls within ITPC’s community-led demand creation process. Firstly, the literature review intends to provide an overview of the scientific evidence and global recommendations that are guiding current PrEP policy development and implementation at country level. Secondly, it seeks to highlight key population perspectives on PrEP, documented from community consultations, where KPs articulate the concerns and barriers they have to PrEP access and sustained uptake while also proposing strategies to enhance the demand for PrEP in KP communities.

2. ITPC’s Community-led Demand Creation Model – PrEP for KPs

Formed in 2003, ITPC is a global network of community activists unified by the mission to enable people in need to access optimal HIV treatment. ITPC has been leading the charge on HIV treatment access issues through strategic treatment education initiatives, community-led monitoring projects, and evidence-based intellectual property and access to medicines campaigns. Identifying the need to engage community and with support from FHI360 (LINKAGES) and the MAC AIDS Fund, ITPC has initiated a community-led process to develop and implement innovative community-led demand creation solutions for access to and use of oral PrEP by KPs—thus contributing to the overall global efforts in HIV prevention. ITPC will proceed according to its proven Community-led Demand Creation Model which has worked effectively in introducing treatment issues (Figure 1).

Figure 1. ITPC’s six-step Community-led Demand Creation Model



Community-led demand creation is based on the understanding that supply-driven programming alone is insufficient and must be met with community demand. Communities will only access services that they themselves want, which meet their needs and aspirations and which involve them meaningfully. Creating community-led demand for PrEP by KPs, therefore requires that affected communities are educated about PrEP, empowered and involved in all aspects of PrEP policy, research and implementation, and their concerns are not ignored. Underpinning the community-led demand approach is ITPC’s belief that the purpose of meaningfully involving communities and enabling their leadership in the HIV discourse is as much about respecting the rights of those affected as it is about strengthening community systems, which is critical for meeting overall health care outcomes.

As illustrated in Figure 1, the following literature review fits within the initial stage of the model, which first seeks to gauge and understand the knowledge and acceptability of PrEP among KPs. In the same

vein, the findings from this review will be integrated into a think tank meeting on PrEP drawing together representatives of KP organisations, experts and program implementers. Building on this initial assessment stage, a community toolkit and global policy brief informed by community will be developed and form the foundation of treatment education trainings in four countries to build KP organisational capacity to engage in community-led demand creation for PrEP among KPs.

Despite the research and global policy calling for adoption of PrEP for KPs, KPs remain marginalised populations due to persisting criminalisation and stigma and discrimination, which act as obvious barriers to PrEP uptake.

ITPC strongly believes that in order to create community demand for PrEP and ensure sustainable access and uptake, it is critical to deliberate on perceptions and capacities around readiness to operationalize PrEP in different national contexts, paying close attention to addressing key barriers and gaps which may impede community demand for and sustained uptake of PrEP.

3. Methodology of literature review

In order to understand the varying perspectives of KPs on daily oral PrEP, this literature review sourced data from a variety of publications including policy documents on HIV prevention, treatment and care; peer-reviewed scientific literature and online grey literature publications, covering the period from January 2012 to April 2017. The review was conducted as follows:

1. PrEP research and implementation data summaries and technical updates published online through sites such as www.prepwatch.org (a clearinghouse for global PrEP information) and project resources such as USAID-funded OPTIONS project, were reviewed for basic and up-to-date data on PrEP and PrEP studies.
2. The latest global guidelines and policy and implementation guidance on PrEP were obtained from recent WHO and UNAIDS publications.
3. A search of peer-reviewed scientific articles in PubMed and Google Scholar was also carried out to identify published open-access articles on willingness and acceptability of PrEP among KPs. Additional relevant articles were identified from cited articles and were consulted for further insights.
4. The latest publications from community consultations led by KP networks of MSM, SW and PWID, and validated by oral interviews conducted by KP network lead staff, were consulted to derive the perspectives on PrEP deriving from KPs themselves. Policy briefs and technical updates from KP networks and KP support and service delivery organisations were also consulted for additional insights. Reports from other think tank meetings on PrEP were also reviewed.
5. Additional relevant documents shared with ITPC by its partners involved in PrEP research and implementation were also included in the review to supplement findings and obtain review of opinions.

4. Data considerations and limitations

While a thorough methodology was adopted for this literature review, the aim was not to provide a comprehensive review of PrEP reports or perspectives from KPs, but rather to identify general trends emerging and any notable nuances in KP perspectives on PrEP use, access to and concerns around PrEP. An effort was made to take KP-specific perspectives into account. However, the review relied primarily on freely available and open-access publications and the focus was on oral PrEP, primarily.

Data about KP perspectives on PrEP may be undermined by the scarcity of data and low levels of knowledge about PrEP among key populations. The PrEP landscape has developed rapidly since FDA

approval. The scientific advancements in PrEP research and now in the variety of implementation projects underway globally have been consistently and thoroughly monitored, documented and made readily available in the public sphere. On the other hand, two key factors may undermine the validity and reliability of available data about KP perspectives on PrEP. The first is the reported low levels of PrEP knowledge and awareness in all key population groups and across most parts of the world. The second is the scarcity of data documenting KP perspectives, concerns and barriers about PrEP. However, this limitation to the research is precisely why an initiative to strengthen community-led demand creation for PrEP is critical so as to promote PrEP knowledge and awareness by KPs and to enhance their influence in the operationalisation of PrEP that meets their needs.

C. Findings

1. PrEP study trials to date

Findings from concluded clinical research trials and preliminary results from demonstration projects illustrate the efficacy and safety of PrEP and indicate the potential feasibility of the implementation of oral PrEP in real-world settings. According to a summary provided in December 2016 by HIV prevention agency, AVAC, there were a total of 61 global trials that were either on-going ($n=36$), *completed* ($n=10$) or *planned* ($n=15$). **Table 1** shows the breakdown of these projects disaggregated by research participant population.

These were a combination of *Demonstration projects* (small-scale pilots that provide information on how to deliver oral PrEP in real-world settings); *Open Label Projects* (clinical trials in which both the researchers and participants know which treatment is being administered) and *Implementation Pilot Studies* (implementation research to address bottlenecks, identify optimal approaches for a particular setting, and promote the uptake of research findings to improve delivery of healthcare).

Table 1. On-going and planned PrEP open label, demonstration and implementation projects, disaggregated by research participant population

STUDY POPULATION	ONGOING PROJECTS	COMPLETED PROJECTS	PLANNED PROJECTS
Not KP-specific (includes young women, men and women of all ages, serodiscordant couples, adolescents, high-risk individuals, undefined)	5	2	10
Men who have sex with men	18	4	3
Transgender people or TG women	4	3	1
Female sex workers	7	0	0
Male sex workers	1	0	1
People who inject drugs	1	1	0
Total	36	10	15

Source: AVAC (As of December 2016)

i. Completed trials: A brief overview

The findings of four clinical research trials conducted among gay men and other MSM and transgender women (*iPrEX*), heterosexual men and women (*TDF2*), discordant and heterosexual couples (*Partners PrEP*) and people who inject drugs (*Bangkok Tenofovir Study*) have been particularly strong, with efficacy findings ranging between 44 -75%. **Table 2** summarises the key findings from the trials completed to date:

Table 2. Summary findings from completed studies to date

TRIAL NAME	LOCATION	STUDY POPULATION	SUMMARY FINDINGS
Bangkok Tenofovir Study	Thailand	PWID	<ul style="list-style-type: none"> ● Only study with PWID known to have been completed to date ● Daily oral TDF reduced the risk of HIV infection in PWID ● PrEP can now be considered for use as part of an HIV prevention package for PWID
Demo Project	United States	MSM and TG women	<ul style="list-style-type: none"> ● A high PrEP adherence and low HIV incidence rates among participants ● STIs were common; no increase in STI diagnosis over course of project
HPTN 073	United States	MSM only	<ul style="list-style-type: none"> ● High uptake of PrEP among black MSM utilising a highly acceptable coordinated counselling model
IPIRGAY	Canada, France & Germany	MSM	<ul style="list-style-type: none"> ● Use of PrEP reduced risk of HIV infection by 86%
iPrEX	Brazil, Peru, Ecuador, South Africa, Thailand, United States	MSM and TG Women	<ul style="list-style-type: none"> ● PrEP provides a high degree of protection against HIV infection, even for participants who miss daily doses; ● High interest in PrEP, long term evidence of safety and efficacy
iPrEX OLE	Brazil, Peru, Ecuador, South Africa, Thailand, United States	MSM and TG women	<ul style="list-style-type: none"> ● PrEP provides a high degree of protection even with missed doses ● High interest in PrEP ● Longer term safety and efficacy of PrEP ● No sign of increased risk behaviour among PrEP users

TRIAL NAME	LOCATION	STUDY POPULATION	SUMMARY FINDINGS
Partners PrEP	Kenya & Uganda	Serodiscordant couples	<ul style="list-style-type: none"> ● TDF and TDF/FTC efficacious (62% efficacy of TDF and 73% of TDF/TFC) ● Approximately 97% adherence
CDC 494	Botswana	Heterosexual men and women	<ul style="list-style-type: none"> ● Strong adherence ● High drug concentration levels ● No HIV infection
TDF2	Botswana	Heterosexual men and women	<ul style="list-style-type: none"> ● TDF/FTC taken once daily protective efficacy of 62%, when administered as part of comprehensive package of health services ● Efficacy higher with higher adherence
HPTN 067	South Africa/ Thailand & United States	Women/ MSM & transgender women	<ul style="list-style-type: none"> ● Results from South Africa showed daily dosing fostered better adherence, better coverage of sexual exposure and more sustained use by South African women ● Most study participants had higher coverage of sex events and better adherence when assigned to daily dosing arm

Source: AVAC site (As of December 2016)

ii. Ongoing trials: A brief overview

There are over forty on-going or planned PrEP Open Label, Demonstration and Implementation Projects to study the implementation of PrEP in real-life settings. The scope of population groups studied in on-going and planned projects has widened greatly and includes female, male and transgender SW, MSM, gay men, adolescent girls, men and women (age ranges differ across different studies but all between 15 - 30 years), young women and other people at high HIV risk, serodiscordant couples and people who have received non-occupational post-exposure prophylaxis on more than two occasions in last 12 months.

The preliminary results from demonstration projects, have so far been promising: *Partners PrEP* showed very high rates of drug efficacy of up to 96% among sero-discordant couples, *TAPS Demonstration Project* showed no change in condom use among female sex workers with the introduction of PrEP and *PrEPBrasil* showed that PrEP uptake was higher among MSM and transgender women at increased risk of infection and who have an awareness of PrEP. **Table 3** summarises preliminary findings from ongoing studies.

Table 3. Summary Preliminary Results from Ongoing Trials

TRIAL NAME	LOCATION	STUDY POPULATION	SUMMARY FINDINGS
TAPS Demonstration Project	South Africa	Female SW	<ul style="list-style-type: none"> ● No seroconversions ● No change in reported condom use over time
PrEPBrasil	Brazil	MSM & TG Women	<ul style="list-style-type: none"> ● High PrEP uptake, with higher uptake by those at increased risk & existing awareness of PrEP
PROUD	United Kingdom	MSM	<ul style="list-style-type: none"> ● Use of PrEP reduced risk of HIV infection by 86% when delivered in sexual health clinics
Project PrEPARE	United States	MSM	<ul style="list-style-type: none"> ● Initial uptake of PrEP high with majority reaching protective drug levels in first monthly study visit ● Adherence decreased with decreased frequency of visits ● Highest risks adhering; providing access to PrEP in youth-friendly settings with tailored adherence support may help maximise impact of PrEP

Source: AVAC site (As of December 2016)

iii. Reflections on prep trials/demonstration projects in relation to key populations:

- PrEP trials/demonstrations and their findings are at different stages in each population group. There have been several PrEP studies done with MSM, in comparison with any other population group. The majority of preliminary results and completed findings are also from trials among MSM.
- There is significant evidence to support programming that is not 'one size fits all' and is tailored to meet particular group needs. There is also significant evidence that where prevention services are provided matters, and that where services are provided in a friendly and supportive environment, there is greater success of sustained uptake.
- Beyond just showing that PrEP is proven to be effective, the MSM studies demonstrate the greatest evidence of effectiveness and efficacy of PrEP.
- The least attention has been given to studying the efficacy of PrEP with PWID, with one trial dedicated to PWID.

2. Current policy overview on PrEP

The WHO supports the use of PrEP for HIV and, already in 2012, recommended the use of PrEP for MSM, serodiscordant couples and transgender people on the basis of available evidence of PrEP efficacy and safety. In the *2016 Guidelines on the use of ART for Treatment and Preventing HIV Infection*, WHO recommends that a daily oral PrEP be offered as an additional option for preventing HIV infection for people at substantial risk of infection, integrated in combination HIV prevention approaches. Combination

HIV prevention approaches imply a combination of biomedical, behavioural and structural approaches, effectively addressing the various underlying risk factors for HIV infection, for greater impact.⁶

Although the recommendations have widened the range of populations targeted, KPs who remain at substantial risk of HIV infection have remained a primary focus. These recommendations are applicable to all KPs and no particular distinctions are made for KP sub-groups. However, the guidelines do highlight that additional research on PrEP efficacy among transgender women is required and if a PrEP regimen is adopted, TGW would benefit from adherence support.

The UNAIDS supports the WHO recommendation on providing PrEP for people at substantial risk of HIV infection. Two of the five HIV prevention targets listed in the 2016 Political Declaration on HIV and AIDS, and established by the United Nations General Assembly, relate to KPs and PrEP. These include ensuring that 90% of people at risk of HIV infection have access to comprehensive prevention services, including harm reduction and reaching 3 million people at higher risk of HIV infection with PrEP by 2020.¹

UNAIDS also emphasises that a myriad of structural and systemic barriers prevent access to and sustained uptake of HIV services, including prohibitive legislation, inadequate rights protections, stigma, discrimination and gender inequality.

Overall, UNAIDS and WHO assert the equal importance of extending the coverage of available prevention methods (including harm reduction programmes) and ensuring that these efforts are not compromised by the introduction of PrEP. It is also acknowledged that a purely bio-medical approach will not be sufficient and that a combination HIV prevention approach that involves biomedical, behavioural and structural components and encompasses *'advancements in terms of sexual and reproductive health rights, access to education and employment, social justice and gender equality'* is required.¹ Both WHO and UNAIDS highlight the need to ensure that KPs are involved, empowered and enabled to lead at all levels and stages of PrEP policy and program design and implementation.

3. Review of the scientific literature

Open-access scientific publications were reviewed to identify preliminary insights on the acceptability and willingness to use PrEP among KPs.

i. Sex workers

Sex workers expressed willingness to use PrEP and were willing to take it if available, as an additional prevention option. Overall, willingness to use PrEP among female sex workers (FSW) across Peru, Ukraine, India, Kenya, Botswana, Uganda and South Africa was high (around 50%) even it implied payment, frequent HIV testing or potential side effects. Interest in PrEP varied according regional and contextual factors, though. Compared to the other regions, FSW in Kenya, though, raised the most concerns citing frequent HIV testing and potential side effects as potential deterrents¹¹. PrEP was assessed to be a more convenient, discrete and socially acceptable HIV prevention option among Kenyan FSW.¹²

Although willing to take PrEP, sex workers across several studie raised a few notable concerns: the side effects of taking PrEP,^{11,12} adherence challenges and disruptions arising from travelling,^{11,12,13} possible interactions with alcohol and other substances,^{12,13,14} or transactional sex,¹⁵ social stigma, discrimination and misunderstandings from family and close ones,^{13,14} fear that PrEP uptake would lead to reduced condom use by clients or other sex workers,^{11,14} with some participants noting that, though useful, PrEP would not protect from STIs.¹⁴ Although not willing to sell, study participants in a multinational study indicated that they would share PrEP with others.¹¹

ii. Men who have sex with men

Young et al performed a systematic review of the literature on acceptability and willingness to use or participate in PrEP trials among KPs. The majority of the trials were carried out among MSM and predominantly in the US. Generally, knowledge of PrEP was low across the studies, however, acceptance of PrEP increased once information was provided, ranging around 40-60%.² In an earlier study, participants confused PEP with PrEP.¹⁵ Knowledge of PrEP among MSM increased over time but remained limited, according to an updated systematic review.¹⁶ The increase was predominantly observed among US-based MSM whereas knowledge remained low overall in global MSM—over 60% were unaware of PrEP. However, once informed, MSM were willing to use PrEP and willingness generally ranged from 40-70%, with MSM in the Global South expressing a greater willingness. Exceptionally high willingness to use PrEP were reported in a study among US-based MSM in sero-discordant couples (94%) and Chinese MSM (91.9%) provided it was safe and effective. MSM surveyed in Australia and Thailand, on the other hand, expressed a decrease in willingness to use PrEP.¹⁶

Despite willingness to use PrEP, MSM expressed concerns around safety and effectiveness. The cost of PrEP, stigma associated with taking PrEP and structural barriers and questions around PrEP access were also raised as possible deterrents by MSM across multiple studies.^{2, 15} Adhering to a daily pill regimen was also raised as an issue and possible deterrent and MSM reported a distrust of pharmaceutical companies and medical systems in a qualitative study.¹⁵ There was a fear that the introduction of PrEP would lead to higher risky sexual behaviour and that care should be given on the messaging and how it is introduced within the community.¹⁵ Across several studies, willingness to use PrEP was higher among MSM/associated with reporting low condom use, unprotected anal intercourse and high sexual risk behaviour.² In a US-based study across 20 cities, willingness to use PrEP was associated with younger age, recent risky sexual behaviour and having recently taken part in an HIV prevention intervention.¹⁷

Half of the MSM had knowledge of PrEP in a US-based study among MSM who reported using stimulants (crack/cocaine) and alcohol showed a high willingness to use PrEP (78%). However, stimulant users expressed more concerns about adherence to a PrEP regimen and a greater likelihood to engage in unprotected sex.¹⁸

iii. People who inject drugs

Global studies on acceptability of PrEP among PWID alone are scarce. However, Ukrainian PWID participating in a global study on PrEP among KPs, reported a willingness to use PrEP.¹¹ However, relative to the other key populations groups, willingness to use PrEP was lowest among PWID.¹⁹ A third of PWID surveyed in a Canadian study reported interest in PrEP. Younger age, lack of regular employment, needing help injecting, also engaging in sex work and having multiple sexual partners was associated with a greater willingness to use PrEP.²⁰

Side-effects were identified as a possible barrier to taking PrEP, with PWID expressing a preference for intermittent rather than daily dosing.^{11, 20} Possible side effects and a reported efficiency less than 100% emerged as possible deterrents among PWID.²⁰ Knowledge of PrEP was low in US based PWID and knowledge was higher among PWID who also involved in transactional sex or were more likely to engage in condom-less sex.²⁰ In another study, only 10% had heard of PrEP but half of participants were willing to use PrEP, particularly those who believed they were at higher risk of HIV infection. Potential cost,^{20, 23} the reduced efficacy if daily adherence was poor and fear that the introduction of PrEP would encourage more risky behaviour were among the main barriers.²³

iv. Transgender people

The majority of the studies involving transgender people focused on transgender women, usually studied in conjunction with MSM. Knowledge of PrEP was low among TGW surveyed across multiple studies¹⁵ and

in Brazil,²⁴ San Francisco,²⁵ Chicago and Boston.²⁶ However, interest and willingness to use PrEP increased with knowledge.^{15, 26, 27, 28} Offered as part of a comprehensive HIV prevention package, TGW were interested in taking PrEP as it would be a means to link them to care.¹⁵ PrEP was seen as an additional protection should a condom break, for example.²⁹ Acceptability of PrEP varied: TGW in Peru²¹ and Argentina³⁰ showed high acceptability and while TGW in Thailand showed 66% awareness but low willingness to use PrEP.²⁷ Acceptability of PrEP was higher among TGW engaging in risky sexual behaviour.³⁰

A distrust and fear and discrimination of health professionals was commonly expressed among TGW and would act as a deterrent (i). Other possible deterrents to PrEP use included: cost,²⁹ potential side effects^{15, 29} less than 100% PrEP efficiency,²⁹ having to take a daily pill not consistent with a spontaneous lifestyle²⁹ and concerns that condom use would decrease with the introduction of PrEP. Also of great concern to TGW was fear of possible interactions between PrEP and feminising hormones.^{27, 28, 31} Deutsch et al found that blood levels of PrEP in TGW who participated in iPrEX study was not protective suggesting that participants were not adhering to dosing as prescribed.³¹ Theoretically, PrEP and hormones are metabolised differently, however, additional research is needed to elucidate on the nature of any potential interactions. Demand for PrEP in TGW is generally low and Sevelius et al note a role for community engagement²⁸.

4. Key population perspectives on PrEP

The review also set out to evaluate acceptability, willingness to use and perspectives on PrEP, through the consultation of publications produced by KP organisations to hear directly from KPs themselves.

SEX WORKERS

In 2016, Global Network of Sex Work Projects (NSWP) published a briefing note to articulate their position on PrEP, to discuss perspectives of sex workers on PrEP and provide key recommendations³². The brief was based on consultations with sex workers, including focus group discussions with over 300 individuals at country level. NSWP is an organization that connects regional networks advocating for the rights of female, male, and transgender sex workers. It is a membership organization with 240 registered members in 72 different countries and is committed to amplifying the voices of sex workers both in the global North and South. Generally, participants in the NSWP consultations believed that PrEP has the potential to be useful to sex workers by reducing their risk of HIV infection. However, there are numerous challenges, concerns, risks and barriers raised which they felt need to be dealt with if PrEP is going to be an effective prevention tool for sex workers.

i. PrEP acceptability among sex workers

Generally, sex workers welcomed PrEP as a useful HIV prevention tool (if proven safe, effective and affordable), offering additional protection to condoms, a sense of security and reducing risk of infection. Sex workers who are unable to negotiate condom use due to demand for unsafe sex from clients or their employers, who are subject to sexual violence (rape) or in the event that condom tears would feel safer using PrEP. Additionally, it would give sex workers a greater sense of agency, as it provides a means of protection that can be used without the knowledge of clients or partners. As a prevention tool that requires less attention, PrEP could benefit sex workers who find it difficult to consistently use products that must be used shortly before sex. This could be especially beneficial to street-based sex workers who have limited privacy and little control over their working environments. PrEP could also be useful for sex workers who want to reduce their risk of HIV with clients but do not want to eliminate the possibility of pregnancy with partners. Overall, the participants felt that PrEP would be beneficial in enhancing sex workers' overall sense of security by offering additional protection.

ii. Sex workers' awareness & knowledge of PrEP

Sex workers felt that there was a need for more information and education about PrEP including for instance the minimum time PrEP must be taken before it affords protection or the different PrEP regimens available.

The consultation revealed that the level of awareness about PrEP and PrEP trials varied across regions and countries, ranging from no knowledge (Macedonia, El Salvador) to some knowledge (Canada, France, Thailand Kenya and Zimbabwe) among sex workers prior to the consultation. It was noted that even in some countries where PrEP had been approved for use, awareness was fairly low. NSWP's brief indicated that the lack of knowledge in some cases was systemic, owing to barriers to accessing health services linked to discrimination against sex workers on the basis of their work or gender.

iii. Barriers, risks, concerns and challenges around PrEP among sex workers

Stigma, discrimination, coercion and criminalisation of sex work. The NSWP brief highlights stigma, discrimination and legal barriers, notably the criminalisation of sex work, as a pervasive hindrance to SW rights and general health. SW experience stigma and discrimination when accessing HIV services and SW expressed fear of similar stigma and discrimination around accessing PrEP.

Sex workers participating in this consultation also feared that coercive strategies from government health authorities, such as mandatory HIV testing or 'directly observed therapy' by a health professional, would be used to force sex workers to use PrEP, particularly in countries where sex work is legalised—thus undermining their health rights and choices. Criminalisation of sex work hinders access to PrEP through stigma and discrimination and SW feared that use of PrEP would be used to prosecute them, in the way police have used condoms to prosecute sex workers.

Concerns about possible decrease in or inconsistent condom use. It was well accepted amongst the SW consulted that PrEP would need to be used in conjunction with consistent condom use in order to be effective. However, the majority felt this would be a challenge believing that condom use would decrease on demand of clients, and for a small proportion, on demand of employers. Only one group thought that there would be no change in condom use. Potential decrease in condom use was also a major concern, as SW highlighted that PrEP protects only against HIV and not STIs or pregnancy.

Drug safety concerns: long-term effects of PrEP usage, side effects and resistance. The majority of focus group participants expressed concerns on the long-term effects of Truvada® on the body, in light of less risky HIV prevention options such as condoms. Sex workers/participants recognised that pharmaceutical companies have suggested that side-effects get pronounced the longer it is taken although these are reversible once Truvada is discontinued, with the exception of fat distribution. Among others, the following were cited: acute kidney failure and liver damage (both potentially fatal), lactic-acid build up, decrease in bone mineral density and fat redistribution and accumulation (less than 2% of cases) and headache, abdominal pain and decrease in weight in (more than 2% of cases). PrEP also, reportedly, made hepatitis worse for those with hepatitis B (HBV). Participants were also concerned about resistance to PrEP occurring, citing PrEP trials in Kenya where 59 cases of TDF resistant HIV was recorded in 2016.

Fears about inconsistent availability and affordability of PrEP. Availability and affordability of PrEP was another concern raised, potentially undermining sustained access by sex workers. Respondents worried that PrEP will be difficult to obtain in many countries and, even where available, may be prohibitively expensive. It was noted that in many countries ARVs for those living with HIV were not always available even in countries where they are free. Similarly, there is a fear that access to PrEP will be sporadic, with frequent stock out issues and difficult access in rural areas where all types of HIV treatment and testing services are already limited.

Community demand and engagement. Sex workers expressed, in this consultation, the need to be actively engaged and involved at all levels of PrEP programming, including inputting in clinical trials, thus ensuring

that the final conclusions and recommendation are appropriate for sex workers. Although recognised as useful, some concern was expressed that the push for PrEP was originating from outside the community, being promoted by HIV treatment and MSM activists, the scientific community, medical professionals, pharmaceutical companies and donor organisations. If PrEP were to be offered to sex workers, participants preferred that it be offered through sex worker-led organizations.

The most important requirement highlighted this NSW's Brief (2016) was that, *'whatever decision was made in regards to the availability of PrEP among sex workers, sex workers' voices must be heard and listened to and sex workers must be involved at all levels and at all times when trials of PrEP are being considered or if PrEP is to be made available.'*

iv. Sex workers' recommendations

The NSW Brief articulated a number of key recommendations, an abbreviated excerpt of which is provided below:

- Policy makers must consult with local SW-led organisations regarding planned trials or introduction, ensuring that the latter are aware of the surrounding issues
- SW organisations should be equipped with the tools to educate and inform their communities about PrEP so as to ensure that sex workers can make fully informed decisions about whether or not to take PrEP.
- Sex workers must fully understand and have control and input over all processes, including dissemination about PrEP, side effects and treatment regime.
- If introduced, PrEP must be voluntary and affordable.
- Community-led, participatory research is needed to better understand the structural barriers faced by sex workers in accessing health services where they live.
- Mandatory HIV testing must be prohibited, including for use to initiate sex workers on PrEP. HIV testing must be voluntary at all times.
- Testing, treatment and assessment of sex workers must be confidential and must prioritise the needs and wellbeing of sex workers.
- Sex work must be recognised as work. The possession of ARVs, PrEP medication and condoms must not be used as evidence to convict sex workers.
- The decriminalisation of sex worker must take place, in line with the overwhelming support of global human rights and development partners.

MEN WHO HAVE SEX WITH MEN

In 2012, the Global Forum on MSM and HIV (MSMGF), a network of gay and MSM sexual health and rights advocates, published a study entitled *Access to HIV Prevention and Treatment for Men Who Have Sex with Men* which detailed MSM perspectives on PrEP at the time.³³ The study consisted of a global online survey, completed by 4083 men, and focus group discussions with 71 men across 165 countries; almost all of participants identified as either gay or bisexual. The results of the study were variable, with MSM showing ranges of knowledge and awareness of PrEP. The general feeling at the time was that introducing PrEP for MSM was premature, and that attention needed to be focussed on existing plans and programs for HIV prevention with MSM.

However, it appears the tide may have changed. 72% (i.e. 25 of 33) of all PrEP studies conducted or planned to date have focussed on MSM. Evidence of effectiveness of PrEP for MSM is strong, with almost 100% protection reported in some studies. It is not a surprise then, that there have been strong calls for PrEP for MSM by organisations that support MSM. MSMGF in particular strongly supports PrEP and calls for the widespread availability of and access to PrEP as an integral part of comprehensive sexual health programs for MSM. However, since the 2012 study, there does not appear to have been as comprehensive a study to assess, first hand from MSM themselves, if the call is collectively felt in the MSM community. The key findings from the 2012 study are highlighted below:

i. MSM knowledge and awareness about PrEP

The 2012 study revealed that almost half of participants had high level of knowledge about PrEP, with the other half almost evenly split between medium and low levels of knowledge. In the focus groups conducted in person, the overwhelming majority of participants had no knowledge of PrEP prior to the focus group.

ii. Acceptance of PrEP among msm

Although prior knowledge was absent, after being introduced to PrEP there was a marked interest in PrEP as possibly beneficial to MSM to prevent HIV infection. However, participants expressed the need for more real-world implementation studies on how best to implement PrEP for MSM and additional research to compare the effectiveness of PrEP to other forms of HIV prevention methods. Study participants also felt that PrEP access should be prioritised for sex workers and discordant couples, but that PrEP should be available to anyone at risk without discrimination. Others felt that PrEP was premature, in consideration of the current low uptake of HIV services by men in general globally, and that there needs to be more focus placed on improving and scaling up existing prevention programs that have been proven to work and are cost-effective. Were PrEP provided to MSM, participants stated that it should be included as part of a comprehensive sexual health approach that supports the well-being of MSM at multiple levels. Participants in the MSMGF study stated that if PrEP were to be made available to MSM, that it would require additional counselling and testing to be able to identify those who are eligible, to follow up with those on PrEP and to educate about adherence and importance of using condoms.

iii. Barriers, risks, concerns and challenges that msm associate with PrEP

MSM who attended focus groups were concerned about introducing PrEP in their respective cities and countries without seriously considering the implications on existing HIV program needs. Participants highlighted, for instance, an urgent need to focus attention on the issue of unsatisfactory access to existing prevention tools such as condoms and lubricants and address this prior to—or at least parallel with—the introduction of new HIV prevention strategies like PrEP. There was a worry that money will be diverted away from life-saving ARVs for people living with HIV in need of treatment. Concerns were raised about PrEP adherence in the real world. MSMGF highlighted the potential challenge of adherence to PrEP in the real world which could jeopardize its effectiveness, noting that adherence proved difficult in controlled trial settings with trained staff. They also stated that PrEP takers may be unaccustomed to seeing a provider at least 3 - 4 a year for monitoring which could in turn disrupt uptake, adherence and retention. Discrimination and criminalization were also raised as factors that would likely hinder access and adherence to PrEP, and similar to NSW, assert that legislative changes are necessary.

iv. Concerns and related recommendations by MSMGF

- **PrEP must not divert much needed resources from existing HIV prevention and treatment services:** In alignment with the 2012 MSMGF publication, MSMGF's 2015 website state entitled, PrEP for MSM Cannot Wait,³⁴ affirmed support for PrEP not as a stand-alone option, however, but integrated in a comprehensive approach including unfettered access to condoms and lubricants, routine HIV testing, risk-reduction counselling, adherence coaching and routine STI screening.

- **Ensure that most vulnerable and least-resourced populations have access to PrEP.** Given the high cost of PrEP, the populations most at risk and in need of PrEP (e.g. low income MSM) may be targeted but also be the ones lacking the means to afford PrEP or pay for health insurance to cover PrEP. As health systems consider PrEP roll out, country level and multinational donors will need to cater to the most vulnerable and low resource populations.
- **Encourage future studies to continue monitoring adverse PrEP-related side effects and drug resistance in various populations.**
- **Ensuring community engagement, awareness and identification of needs is necessary** - MSMGF emphasizes that local MSM communities need to take a lead role in PrEP implementation, through mobilization, awareness-raising and participation in social research to determine community sexual health needs and barriers—and ensuring that efforts addressing these needs are well resourced and sustainable. Considerable efforts are needed to improve overall understanding, awareness and knowledge about PrEP within MSM communities.
- **PrEP should be delivered to MSM in safe and culturally competent manner,** buttressed by organised and well-informed communities with access to effective health systems. Health systems and providers must understand the unique needs of the populations that they serve. MSM must feel safe accessing services which is only possible through multilateral and country level support of policies and legislations that decriminalise homosexuality, mitigate stigma and address homophobia.

PEOPLE WHO INJECT DRUGS

Community perspectives by PWID is taken from the official position paper on PrEP of The International Network of People who Use Drugs (INPUD) entitled, *Pre-Exposure Prophylaxis (PrEP) for People who Inject Drugs: Community voices on pros, cons, and concerns*,³⁵ only document in this review documenting PWID perspectives directly from a community perspective. INPUD is a global peer-based organization that promotes the health and defends the rights of PWID.

The position paper is based on international consultations and interviews with PWID from Eastern European and Central Asian and Asian regions. During the consultations, representatives of UNAIDS presented available knowledge on PrEP and answered questions, after which participants discussed their hopes, fears, and opinions. Approximately 75 people from 33 different countries participated in the process. Approximately 30% of participants were women.

i. Pwid knowledge and awareness about PrEP

Participants recognized PrEP as a useful tool for HIV prevention and expressed belief in the equal right to choose it as a prevention tool.

ii. Acceptance of PrEP

Participants were not convinced that there was adequate data to proving that PrEP would be an effective tool in preventing HIV transmission through sharing injecting equipment in real-world settings. Though they believe that PrEP may be useful in preventing sexual transmission of HIV, they believed that it probably was not the best means for preventing infection in drug users.

Similar to reports from the MSMGF 2012 study, participants pointed out that although they believe that PWID have the same right access PrEP as anyone else, it may be a good option for certain people. Participants felt that that scale-up of access to harm reduction tools and services should be prioritized over introduction of PrEP for PWID.

iii. Barriers, risks, concerns and challenges that pwid associate with PrEP

Adherence. Participants noted that adherence would be a challenge, similarly to antiretroviral therapy.

Diverting from other prevention methods. Participants had serious misgivings about the ethics and the feasibility of promoting PrEP for PWID highlighting challenge situations, where: ART and harm reduction services are limited, and where drug use is criminalized. There was substantial mistrust of pharmaceutical companies and fear that this push for PrEP will divert funds from communities and hand them over to the pharmaceutical industry. Reservations were also expressed for scaling up PrEP in a context where comprehensive harm reduction and ARV services that are proven effective for PWID have yet to be scaled up.

Participants also states that they believed it to be unethical and a poor use of resources to introduce PrEP when many PWID who were living with HIV and in need of ARVs for treatment were not receiving them. They questioned whether it is even possible to extend PrEP to PWID when HIV-related services and community-based counselling are already severely limited. Proven harm reduction interventions, like needle exchanges, are politically unpopular and fear that introducing a biomedical approach could threaten already limited funds. However, participants who were in areas where there is better access to harm reduction services and ARV therapy felt that PrEP could be added as another option to prevention.

Potential side effects. Participants were also concerned about side effects and drug interactions with substitution drugs like methadone and buprenorphine. They also raised concerns about how PrEP would affect people living with Hepatitis C noting that although PrEP prevents HIV, it does not prevent the transmission of Hepatitis C, abscesses and endocarditis. There were concerns about 'bio-medicalizing' the HIV/AIDS response in a way that does not address the underlying causes of risk.

Fear of human rights violations and coercion. Participants voiced their concerns about possible human rights violations perpetrated by governments with a history of denying rights to PWID, including the rights to informed consent and confidentiality. They also feared that governments would force PWID to use PrEP.

iv. Recommendations from PWID on PrEP

- The introduction of PrEP should not be divert away from other proven methods of preventing HIV including expanding ART access and harm reduction initiatives.
- If offered to PWID, PrEP should be provided in a friendly setting accustomed to serving PWID and sensitive to the specific needs of PWID.

TRANSGENDER PEOPLE

This literature review did not identify a community consultation report equivalent to the ones identified for SW, MSM and PWID perspectives on PrEP. However, a brief, provided by partners and published by the National Centre for Innovation in HIV Care, which caters to the transgender population, provides a good overview of the perspectives and challenges of TGW around PrEP.³⁶ Overall, TGW in particular are at a greater risk of HIV infection due to sexual risk-taking, violence, and discrimination, including from healthcare providers with TGW reporting having to educate their providers on their healthcare needs. TGW also face high unemployment rates and are also often involved in sex work.

i. Prep knowledge and acceptability in transgender people

Community perspectives on PrEP are not available however the level of participation of TGW in PrEP studies suggest interest and willingness to use PrEP.

ii. Barriers, risks, concerns around PrEP in transgender people

The brief echoes findings in the literature which highlight stigma and discrimination from healthcare providers as barriers to HIV services and PrEP and further confirms that the fear of interactions between PrEP and feminising hormones is of major concern to TGW. Blood concentrations of PrEP were low in TGW involved in PrEP trials suggesting possible challenges with adherence or other biomedical interactions between PrEP and hormones. The potential contribution of social factors such as unemployment, housing and barriers to care, to low PrEP adherence should be addressed for successful PrEP uptake among TGW.

iii. Recommendations on PrEP for transgender people

- Further research is required to investigate possible interactions between TDF and FTC and cross-sex hormones
- Transgender women should be actively recruited in PrEP studies and studied separately from MSM to identify the unique needs and concerns around PrEP among TGW.
- Guidelines issued by WHO and other policy-making organisations on PrEP use should provide additional information about PrEP in relation to TGW, outlining the most effective means to deliver PrEP and how best to introduce PrEP while address the specific barriers raised among TGW namely access to health insurance (addressing cost) and “competent, affirming” care (addressing stigma and discrimination).
- Health care providers should be willing to discuss and present PrEP as an HIV prevention tool, discussing the pros and cons, addressing any barriers or concerns to ensure that TGW can make an informed decision on PrEP. If adopted, the importance of adherence should be highlighted.

OTHER KEY CONSIDERATIONS FOR PREP ACCESS

The pricing of medicines has continued to be a major factor enabling or hindering access and illustrated how the registration of cheaper generic drug formulations at country level facilitates greater affordability and thus greater access. On the other hand, the registration of drug patents, the exclusion of voluntary licenses and research data exclusivity which effectively blocks the registration of generics were highlighted as key factors hindering drug access and affordability.

i. Affordability of PrEP Medicines

While a full exploration of affordability and cost of PrEP is outside the scope of this review, the cost of PrEP emerged clearly from the point of view of community as a major determinant of access to PrEP and merits discussion. Additionally, as national and multinational health providers consider the implementation and scale up of PrEP, the issue of cost-effectiveness in relation to existing HIV prevention methods will be an important consideration.

To assess the cost-effectiveness and potential cost savings of PrEP for HIV prevention, a systematic literature reviewed by Gomez et al identified 13 studies, up to 2013, across Southern Africa, US, Ukraine and Peru that considered PrEP in MSM and PWID, among other sub-populations. The overall cost of PrEP programme costs was largely determined by the cost of PrEP drugs, differing depending on how much the drug cost in each region—ranging from high in the USA (between US\$8,000 and US\$12,000 per person-year) to low in South Africa (between US\$80 to US\$250). Due to different settings, nature of the epidemic and target populations, it is not possible to generalise, however PrEP was shown to be cost-saving when introduced in high-risk populations for HIV prevention. However, to effectively assess PrEP cost-effectiveness, individual adherence, epidemic context, PrEP programme coverage and prioritisation strategies will need to be accounted for to assess if PrEP rather than another HIV prevention option (expanding ART access or providing methadone treatments) will not be more cost-effective.^{37,38}

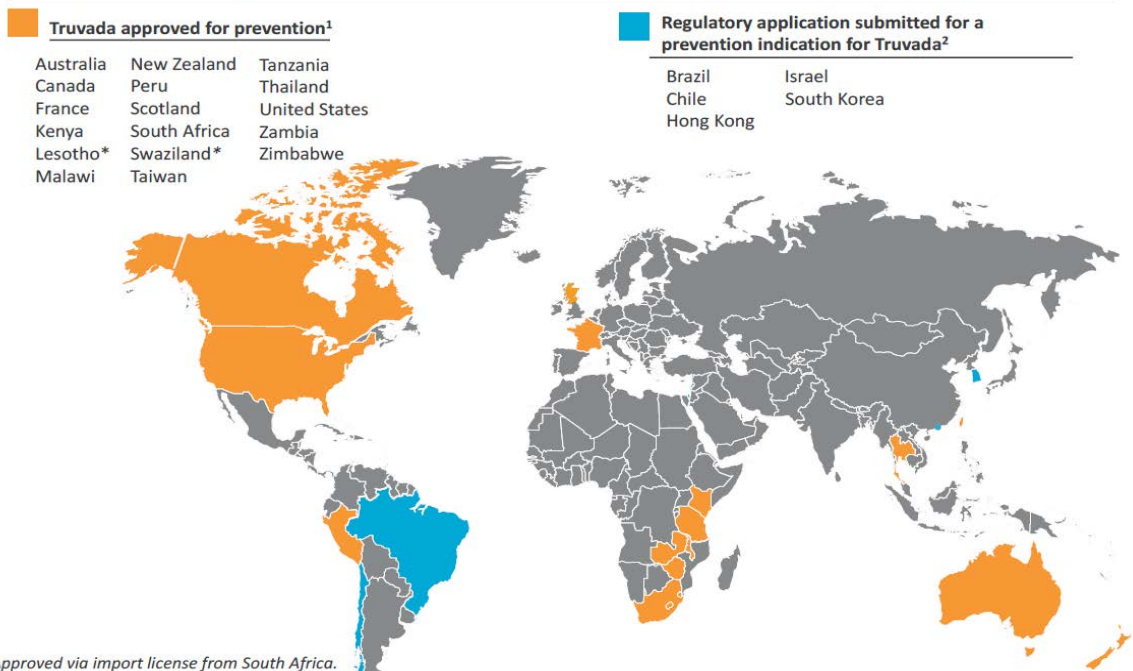
ii. Availability of PrEP: Patent registration worldwide

A review by ITPC of countries globally where patents for TDF and FTC have been filed, rejected or granted revealed that a vast majority of countries have not had patents filed for TDF, notably sub-Saharan Africa and Eastern European countries. India rejected the filing of a TDF patent and Indonesia granted a TDF patent which will expire in 2018. The search also revealed that FTC patents had all either not been filed or had expired. While several TDF/FTC patents have not been filed in several countries, patents have been filed in Botswana, Kenya, Malawi, Mozambique and Swaziland, that Indonesia and Tajikistan have granted TDF/FTC patents and Kazakhstan and Kyrgyzstan had extended the terms of their patents.

Very few of the countries in which LINKAGES is working have TDF/FTC patents registered, however, all of them have been included in voluntary licenses between the pharmaceutical company Gilead and the Medicines Patent Pool (MPP). MPP licenses enable the manufacturing of generic ARVs and their sale in countries where between 87% and 94% of people living with HIV in the developing world live. This includes all low-income countries and 50-80% of World Bank classified middle-income economies.³⁹ Voluntary licenses are voluntary agreements between the licensor and licensee about the regulation of the production and sale of patented drugs at country level, a process that is sometimes managed by the MPP. There are no major patent barriers in LINKAGES countries to access affordable versions of FTC/TDF and in most countries this drug is already registered to treat HIV infection.

Figure 2. Regulatory status of Truvada for PrEP (Source: AVAC)

Regulatory Status of Truvada for PrEP



*Approved via import license from South Africa.

1. India, SA and Kenya have generic PrEP approval.

2. The European Commission granted Gilead marketing authorization for Truvada as PrEP in Q3 2016. This should encourage countries within the EU to make PrEP available within their national health systems, based on cost factors and individual country regulatory requirements.

Updated May 2017

Conclusion

PrEP is now established as a biomedical HIV prevention approach with the potential to contribute significantly to global HIV prevention efforts and decreased HIV incidence rates. Today, UNAIDS and WHO policy recommendations call for PrEP to be made available to individuals at substantial risk of acquiring HIV. This includes, among others, KPs who due to a number of legal, social and structural barriers to HIV prevention and treatment services, are at high risk of getting HIV. However, these recommendations come with a clear call for greater community engagement and involvement in all PrEP decisions and processes for successful uptake among KPs.

A review of studies and consultations around the acceptability of PrEP among KPs reveal an interest and recognition of PrEP as a valuable tool, offering additional protection against HIV infection. Motivations for or concerns around PrEP were driven by the specific needs and experiences of the different KP groups. A few cross-cutting issues emerged, highlighting areas which need to be addressed for easier PrEP uptake. Concerns around safety and potential side effects, effectiveness, cost, potential adherence challenges, and the role of stigma, discrimination and criminalisation in denying access to HIV services, were among the key issues raised. Concerns around potential risk compensation with the introduction of PrEP further highlight the importance of messaging around PrEP – best offered within a comprehensive prevention package and not perceived as a replacement or diversion from other HIV prevention methods. The low knowledge about PrEP across all KPs was striking and undoubtedly contributed to the concerns and issues raised around PrEP.

Despite these commonalities, KPs cannot be considered as one homogeneous and any implementation or roll out of PrEP should account for the distinct needs and experiences of KP subgroups, and differences emerging even within sub-groups. While potential prosecution and fear of coercion to take PrEP were major concerns among SW, for example, PWID were more concerned about the impact of introducing PrEP on harm reduction programmes. Additionally, unique to TGW were concerns about potential interactions between PrEP and feminising hormones.

In line with its demand creation model, and in alignment with the findings from the literature, it is important that ITPC's initiatives around PrEP are grounded in community perspectives. Hence the findings from this review will be further discussed and contextualised in a think tank meeting involving community and KP group representatives across the globe. Similar consultative meetings with community on PrEP have been held recently but have focused primarily on MSM: the PrEParing Asia (September 2015) and PrEP for MSM in Africa (April 2016) meetings. The APCOM meeting established PrEP as a viable tool to scale up prevention efforts in the Asian region by both community and health service providers. Meanwhile, discussions held at the PrEP for MSM in Africa meeting focused around best practices for PrEP delivery given the social, legal and structural barriers affecting MSM, transwomen and other key and vulnerable population groups in Africa. Expanding beyond the insights derived from these consultations and this literature review, the ITPC's global think tank meeting will include focus on acceptability and roll out of PrEP among KPs as well as other populations, such as young people or women, who are vulnerable to HIV infection and would also benefit from PrEP. The policy brief and community activist toolkit to be derived from this meeting will ensure that in rolling out its demand creation process for PrEP, ITPC adequately takes into consideration all contexts and the diversity of needs and opinions around PrEP.

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