

# Values & preferences of MSM: the Use of Antiretroviral Therapy as Prevention

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The WHO is developing consolidated guidelines on HIV and key populations. The aim of this project is to bring together the existing WHO guidance for key populations and include important new material to fill in defined gaps. The consolidated guidance will consider a range of elements that are common across all key populations as well as highlighting the specific issues which are unique to the individual population groups.

As part of the development of these guidelines, to be released in 2014, the WHO department of HIV/AIDS has commissioned the Global Forum on MSM and HIV (MSMGF) to conduct a qualitative study into the values and preferences among men who have sex with men (MSM) globally. The study will be focused on values and preferences related to Pre-Exposure Prophylaxis (PrEP).

## 1 BACKGROUND

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Men who have sex with men (MSM) are 19 times more likely to be infected with HIV than the general population in low- and middle-income countries {Baral, 2007 #3392}. Prevalence among MSM is higher than that of the general population in nearly every country reliably collecting HIV and AIDS surveillance data. For example, compared with HIV prevalence in the adult general population, research conducted as early as 2002 suggested that infection levels among MSM in Latin America were seven times higher in Honduras, 10 times higher in Guatemala and Panama, 22 times higher in El Salvador and 38 times higher in Nicaragua {Soto, 2007 #3099}. This is a pattern that repeats itself in Africa, Asia, Eastern Europe and the Caribbean {Beyrer, 2012 #3374}.

Randomized controlled trials have shown the prevention potential of biomedical interventions like pre-exposure prophylaxis (PrEP) among MSM and early initiation of antiretroviral treatment to prevent forward transmission between serodiscordant heterosexual couples {Cohen, 2011 #3662; Grant, 2010 #3661}. These findings are consistent with observational and ecologic studies that have noted the association between HIV treatment and reductions in new HIV infections {Anglemyer, 2011 #3663; Das, 2010 #3664}.

Although these biomedical advances are promising, it is important to define the structural, interpersonal and individual factors that will affect access and uptake of these interventions. For example, MSM face widespread and ongoing human rights abuses and discrimination globally {Ottosson, 2007 #3660}. As of May 2010, 76 countries had criminal penalties for same-sex acts between consenting adults. Criminalization of and violence towards sexual minorities cause social dislocation, influence transnational migration, and fuel human rights abuses, heightening the risk for HIV transmission and driving those most at need away from prevention, care, treatment, and support services.

It is important to understand the values and preferences regarding the use of ART as prevention among MSM within the contexts in which they live. This report uses 1) secondary analyses of quantitative survey data; 2) focus group interviews with MSM from five cities in three countries in Africa; and 3) individual interviews with HIV service providers and advocates from 10 countries to explore values and preferences within diverse political and social environments.

## 2 METHODS

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The MSMGF project team, formed in January 2014, included Dr. Sonya Arreola, Mr. Keletso Makofane and Dr. George Ayala. Dr. Arreola and Mr. Makofane developed the protocols for the 1) secondary data analyses of the Global Men's Health and Rights (GMHR) study's survey data (collected in 2012); and 2) qualitative analyses of ART-related narratives from focus groups conducted in Africa as part of GMHR 2012, and 2014 individual qualitative interviews with MSM and HIV service providers. The WHO reviewed and made recommendations for revisions to the qualitative individual interview protocol. Upon approval of protocols by the WHO project team, secondary analyses and interviews began.

### 2.1 2012 GMHR Study

#### 2.1.1 Secondary Quantitative Data Analyses

GMHR 2012 included a global online survey to assess availability of and access to STI and HIV testing and prevention services among MSM across eight regions.

From 23 April to 20 August 2012, we recruited a global convenience sample of MSM to complete the 30-minute online survey. Survey participants were recruited via the MSMGF's networks of community-based organizations focused on advocacy, health, and social services for MSM. The MSMGF sent email blasts advertising the survey to its approximately 3,500 online members who represent 1,500 organizations in over 150 countries. Partner organizations also disseminated information about the survey through their respective regional and global listserves, as well as to local MSM through word of mouth. In addition, the MSMGF recruited participants from online social networking sites popular with MSM in Africa, Asia, Europe and Latin America. Participation in the survey was completely voluntary and anonymous.

#### 2.1.2 Secondary Qualitative Analyses: Focus Group Discussions

In 2012, the MSMGF worked with the African Men for Sexual Health and Rights (AMSHer) and local partner organizations in South Africa, Kenya, and Nigeria to conduct focus group discussions with MSM in Pretoria, Johannesburg, Nairobi, Lagos, and Abuja. A total of 71 MSM participated across 5 focus groups. In order to protect the confidentiality of the participants, demographic information was not collected.

For purposes of this overview, findings relevant to values and preferences regarding use of ART as prevention were reviewed and summarized.

## 2.2 2014 In-depth Individual Interviews

Together with the WHO, the MSMGF developed a verbal consent script and interview guide (see Appendix I) that was appropriate for use with MSM via Skype and telephone. Questions centered on general background and experiences as a MSM where they live; HIV testing experiences; and values and preferences regarding the use of ART for prevention (PrEP, PEP, early initiation of ART). Additionally, there were questions regarding discrimination, violence and legal issues.

Participants (randomly drawn from sub-categories in the MSMGF online database defined by HIV status, age group [ $\leq 24$  years old vs.  $> 24$  years old], and region) were recruited through individual email invitations. From February 24 to March 3, 2014, eleven individual interviews were completed with MSM and HIV service providers from Australia, England, Indonesia, Lebanon, Liberia, Mexico, Nigeria, Paraguay, United States and Zambia. One interview was conducted in Spanish and 10 in English.

**Table 1. Summary Table of Methods and Demographics**

	2012 GMHR 2ndary Analyses Quantitative	2012 GMHR 2ndary Analyses Qualitative	2014 In-depth Individual Interviews
<b>METHODS</b>			
<b>Criteria for participation</b>	Male MSM Consent to participate	MSM Consent to participate	MSM Consent to participate
<b>Recruitment</b>	<ul style="list-style-type: none"> <li>• Email blasts to MSMGF's networks of CBOs</li> <li>• Dissemination through partner organizations global list serves</li> <li>• Word of mouth.</li> <li>• Online social networking sites</li> </ul>	Invitations to community members in respective cities through MSMGF partner organizations	Individual email invitations
<b>Data source</b>	Survey data	Focus groups	In-depth individual interviews
<b>DEMOGRAPHICS</b>			

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<b>N</b>	4,005 participants	71 MSM across 5 focus groups	11
<b>Regions / Countries</b>	<ul style="list-style-type: none"> <li>• Western Europe, Northern Europe and North America=80%</li> <li>• Asia=25%</li> <li>• Eastern Europe and Central Asia =16%</li> <li>• Latin America =14%</li> <li>• Sub-Saharan Africa = 10%</li> <li>• Oceania 6%</li> <li>• Middle-East and North Africa = 2% Caribbean =2%</li> </ul>	<ul style="list-style-type: none"> <li>• Nigeria               <ul style="list-style-type: none"> <li>○ Lagos</li> <li>○ Abuja</li> </ul> </li> <li>• Kenya               <ul style="list-style-type: none"> <li>○ Nairobi</li> </ul> </li> <li>• South Africa               <ul style="list-style-type: none"> <li>○ Pretoria</li> <li>○ Johannesburg</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Australia</li> <li>• England</li> <li>• Ghana</li> <li>• Indonesia</li> <li>• Lebanon</li> <li>• Liberia</li> <li>• Mexico</li> <li>• Nigeria</li> <li>• Paraguay</li> <li>• United States</li> <li>• Zambia</li> </ul>
<b>Age:</b>	<ul style="list-style-type: none"> <li>≤ 24: 17%</li> <li>&gt; 24: 83%</li> </ul>	<ul style="list-style-type: none"> <li>Not collected</li> <li>Estimate: half ≤ 24</li> </ul>	<ul style="list-style-type: none"> <li>≤ 24: 4</li> <li>&gt; 24: 7</li> </ul>
<b>Sero-status</b>	18% HIV positive	<ul style="list-style-type: none"> <li>Not collected</li> <li>Estimate: 40% HIV positive</li> </ul>	35% HIV positive

## 3 MAIN FINDINGS

### 3.1 2012 GMHR Study Findings

#### 3.1.1 Secondary Quantitative Analyses Findings

There were 4,005 respondents included in this analysis. Of these, 17% were 24 years of age or younger and 81% had post-secondary education. There was a broad representation of regions, with 80% of respondents residing in Western Europe, Northern Europe and North America; Asia (25%); Eastern Europe and Central Asia (16%); and Latin America (14%). The rest of the participants resided in Sub-Saharan Africa (10%); Oceania (6%); Middle-East and North Africa (2%); and the Caribbean (2%). Half of the respondents reported having middle to high income, and one fifth (18%) had low or no income.

##### 3.1.1.1 Predictors of HIV Services Utilization

Adjusting for demographics and barriers and critical enabler variables, utilization of HIV sexual prevention services (condoms and condom-compatible lubricants), and HIV testing was positively predicted by higher Community Engagement and higher Connection to the Community. Utilization of HIV testing was also positively associated with comfort with healthcare provider. Utilization of condoms and condom-compatible lubricants was negatively associated with higher perceptions of homophobia.

Utilization of HIV treatment was positively related to comfort with provider, and was positively related with past experiences of provider stigma.

Utilization of behavioral interventions and information, education, communication services was positively associated with community engagement and connection to community. In addition, utilization of HIV education materials for gay men and other MSM was negatively related to perceptions of homophobia; and use of prevention-focused one-on-one sessions and self-help groups was positively associated with comfort with provider.

Use of services for substance use and the prevention of blood borne infection was positively associated with community engagement and use of substance abuse treatment was positively associated with comfort with provider.

Past experiences of provider stigma were associated with higher use of substance abuse treatment, higher use of HIV treatment, and higher use of in-person HIV behavioral interventions (risk-reduction program, one-on-one sessions and self-help groups). Past experiences of provider stigma were not associated with utilization of HIV education materials.

Finally, past experiences of gay/MSM-targeted violence were associated with

higher utilization of HIV risk-reduction programs and HIV education materials. Past experiences of gay/MSM-targeted blackmail was associated with higher utilization of prevention focused one-on-one or group sessions, but negatively associated with HIV risk-reduction programs.

### 3.1.1.2 PrEP Acceptability

The majority of respondents were comfortable with the idea of PrEP (See table below). Twenty six percent were somewhat or very uncomfortable with “using HIV medications to avoid becoming infected with HIV”. A quarter (24%) was neither comfortable nor uncomfortable and half were somewhat or very comfortable. More than half of the participants (52%) had low PrEP knowledge; they did not know what “PrEP” was and had never heard of taking ART medications to prevent HIV infection. 56% of respondents reported being likely to use PrEP if it were approved, 48% reported likely to use PrEP in a pill-a-day regimen, and 19% reported being likely to use it if it was associated with uncomfortable side effects. The sites which participant recommended as places where PrEP should be available were healthcare provider’s office (68%), Non-Governmental Organization (66%), Public Health Clinic (71%), HIV Clinic (70%), and STI Clinic (62%).

	N (Percent)
<b>PrEP Acceptability</b>	
Very Uncomfortable	307 (09)
Somewhat Uncomfortable	555 (17)
Neither Uncomfortable nor Comfortable	798 (24)
Somewhat Comfortable	875 (27)
Very Comfortable	764 (23)
<b>Would use PrEP if Approved</b>	
Very Unlikely	359 (11)
Somewhat Unlikely	423 (13)
Neither Unlikely nor Likely	678 (21)
Somewhat Likely	1048 (32)



<b>Very Likely</b>	790 (24)
<b>Would use PrEP in a pill-a-day regimen</b>	
<b>Very Unlikely</b>	562 (17)
<b>Somewhat Unlikely</b>	556 (17)
<b>Neither Unlikely nor Likely</b>	587 (18)
<b>Somewhat Likely</b>	836 (25)
<b>Very Likely</b>	757 (23)
<b>Would use PrEP if it had uncomfortable side-effects</b>	
<b>Very Unlikely</b>	1236 (37)
<b>Somewhat Unlikely</b>	907 (27)
<b>Neither Unlikely nor Likely</b>	553 (17)
<b>Somewhat Likely</b>	420 (13)
<b>Very Likely</b>	183 (06)
<b>*PreP Should be delivered at</b>	
<b>Health Care Provider's Office</b>	68 (2731)
<b>Non-Governmental Organization</b>	66 (2636)
<b>Public Health Clinic</b>	71 (2857)
<b>HIV Clinic</b>	70 (2789)
<b>STI Clinic</b>	62 (2468)

\*the responses to this question were not mutually exclusive

In the multivariable analysis, acceptability of PrEP was negatively associated with community engagement (OR=0.83, 95%CI: 0.71 – 0.97), and negatively associated with perceived stigma against the use of PrEP (OR=0.47, 95%CI: 0.43 – 0.51) adjusting for demographics, barriers and critical enablers, and PrEP knowledge. Knowledge about PrEP was independently associated with PrEP acceptability with respondents who had the lowest score on knowledge, had

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higher acceptability of PrEP than those with medium knowledge (OR=0.77, 95%CI: 0.63 – 0.93) and those with high knowledge (OR=0.71, 95%CI: 0.58 – 0.87).

### **3.1.1.3 Conclusions: 2012 GMHR Survey Findings**

The 2012 GMHR quantitative findings suggest that most MSM around the world are excited about the promise of PrEP and find it an acceptable strategy for HIV prevention. However, as with other healthcare services, the implementation of PrEP has to account for barriers and critical enablers that shape utilization of healthcare services by MSM. The finding that PrEP acceptability decreases with greater PrEP knowledge and more community engagement may appear paradoxical. However the findings make sense in the context of the findings on barriers to HIV services. It is likely that as men learn more about PrEP, the implications of implementing PrEP become evident; and that community engagement serves as a proxy for increased knowledge. In local environments with varying degrees of criminalization of homosexuality, sexual and HIV stigma, provider stigma toward MSM, and lack of knowledge about ARVs, it makes sense that MSM are hesitant to endorse PrEP without caveats.

The quantitative findings also hint at ways to maximize the impact of PrEP: by enhancing other healthcare services, strengthening MSM communities creating safe spaces for care. The qualitative findings help to explain these findings further.

### **3.1.2 Secondary Qualitative Analyses: Focus Group Discussions Findings**

All focus group participants were MSM. During the course of the five focus group discussions, it also became evident that all focus groups included some men living with HIV. Participants came from a broad range of age groups and education level, as well as from both urban and rural settings.

Structural barriers of access to HIV services included criminalization of homosexuality, high levels of stigma and discrimination, homophobia in health care systems, and poverty. These barriers create an environment where blackmail, extortion, discrimination, and violence against MSM are allowed to persist. MSM are forced to hide their sexual behavior from health care providers, employers, landlords, teachers, and family in order to protect themselves and maintain a minimum livelihood.

The inability of MSM to reveal their sexual behavior to health care providers was associated with misdiagnosis, delayed diagnosis, and delayed treatment, leading to poor health prognosis and higher risk of transmitting HIV and other sexually transmitted infections to partners.

Conversely, negative consequences of structural barriers were moderated by the existence of safe spaces to meet other MSM, safe spaces to receive services, access to competent mental health care, and access to comprehensive health care.

Participants described the community-based organizations where the focus groups took place as examples of safe spaces where they could be themselves, receive respectful and knowledgeable health care, and in some cases receive mental health services—all of which bolstered their self-esteem and increased their motivation to take care of themselves and each other.

PEP and PrEP discussions revealed that men had little knowledge about either one. Where knowledge existed, there was often confusion about the distinction between them and when or why to use them (except one physician and one researcher). After a brief definition of PEP, most participants noted never having been offered PEP and expressed a high desire to have it made available through gay-friendly CBOs. Most said they would take it if it were available and free or low cost, and if offered in a safe location, such as the CBOs where the consultation took place. They also highlighted the need for strong education campaigns regarding PEP in the context of other prevention strategies.

After a brief definition of PrEP, many men responded favorably to the idea of using PrEP. However, as men inquired further about the evidence for efficacy, safety and use, their enthusiasm declined. Narratives regarding PrEP in all five focus groups turned toward concerns about introducing PrEP in the contexts of their respective cities where homophobia is rampant, HIV service providers treat MSM poorly, access to basic HIV services is limited, and fear of disclosure is high. Men in the focus groups concluded that it was inappropriate to offer PrEP without first addressing concerns about: **Safety** (MSM disclosure by association and stigma), **Disinhibition** (“men will over-rely on PrEP and stop using condoms”); **Cost** (“Not enough money for ART for PLWH, let alone PrEP”); **Resistance** (“people who seroconvert will have one fewer ART regimen option”); **Adherence** (“men already share ART with other PLWH, or run out of pills, or spread out the dosage so it will last longer”); and **Lack of Awareness and Knowledge** (“there is too much confusion about ART, PEP and PrEP”; “people do not know one from the other”, “Some people think “ART is a cure”).

Nonetheless, most men noted that if PrEP were to become available, AND if structural and social issues were addressed, they would consider taking PrEP themselves or recommending it to others. Few men asserted that there was nothing that would convince them to take PrEP.

### **3.1.2.1 Conclusions: 2012 GMHR Focus Group Study Findings**

Findings from the qualitative analysis of the 2012 focus groups suggest that most MSM in Africa have no, inaccurate, or limited knowledge about PrEP. Excitement about the idea of taking a daily pill that would protect men from HIV infection was very high. However, as they learned more about PrEP, and considered issues of safety, disinhibition, cost, resistance, adherence, and lack of knowledge, they expressed concern about introducing prep in their respective cities and countries without seriously considering the numerous barriers and facilitators to accessing HIV-related services.

As excited as participants were about the idea of PrEP, they strongly recommended that PrEP be considered only in the context of a comprehensive sexual health approach that addresses the barriers to accessing basic HIV services in safe, MSM-friendly settings.

## **3.2 2014 In-depth Individual Interviews Findings**

Participants in the individual interviews lived in urban cities; had high levels of education; and were, or had previously been involved in MSM-HIV service provision, advocacy or research. All participants had had HIV testing more than once and three men were living with HIV. Most had traveled extensively for HIV-prevention related work and, therefore, could compare values and preferences across political, cultural and social contexts that varied by country or region. Although personal experiences varied, overall, differences in values and preferences varied only in degree (or salience).

### **3.2.1 HIV Services**

Barriers to accessing HIV services included the following:

- Policy and Legal
  - Criminalization of homosexuality
  - Lack of legal protections for MSM
- Institutional
  - Police harassment independent of legal rights
  - Legal authorities' failure to protect MSM from violence or discrimination
  - Provider sexual stigma and discrimination
  - Provider HIV stigma
  - Provider lack of knowledge regarding MSM sexual health
  - Provider lack of training regarding HIV
  - Meta messages portraying MSM as HIV disease
  - Lack of safe spaces to socialize
  - Lack of safe spaces to have sex

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- Social / interpersonal
  - Societal sexual stigma and discrimination
  - Societal HIV stigma and discrimination
  - Family rejection
  - Sexual violence (targeting young boys deemed to be MSM)
- Individual
  - Fear of disclosure—sexuality or HIV status
  - Internalization of societal homophobic attitudes towards MSM
  - Psychological distress (depression, anxiety, shame, low self-esteem)
  - Suicidality

Facilitators to accessing HIV services included the following:

- Policy and Legal
  - Laws that protect rights of MSM
  - Policies that recognize and provide equal rights and privileges to MSM
- Institutional
  - Safe spaces where men can socialize
  - Safe spaces where men can express their sexuality with another man/men
  - Comprehensive health services that include but are not limited to HIV services
  - Mental health care services provided by trained psychologists or other mental health providers to address, psychological distress, histories of sexual violence & suicidality
  - Trained and non-judgmental health providers
- Social / interpersonal
  - Community engagement
  - Freedom to be open about homosexuality in public
  - Accepting sexual norms
  - Family reunification programs
- Individual
  - Feeling free to be “out”
  - Knowledge about HIV services and resources
  - Self esteem regarding sexuality

### 3.2.2 Values and Preferences Regarding Use of ARVs as Prevention

All participants indicated that ART was readily available in urban settings where they lived, and less so in rural settings. Barriers to accessing ART was related primarily to fear of disclosure to family, co-workers or friends about HIV positive serostatus and, in some case, disclosure of being MSM.

Participants noted that early initiation of ART as a prevention strategy was endorsed by all their respective countries and in most, this policy was implemented. However, in countries with limited investment in HIV services, participants stated that it was difficult enough to provide ART for patients with CD4 counts of 250 or lower, such that providing ART at 500 CD4 counts was rare.

Similarly, participants were enthusiastic about the use of PEP. PEP was available in all countries, mostly through National AIDS programs. However, in some countries it was accessible to very few, primarily hospital and clinic health providers. In these settings, PEP knowledge is very low among MSM and accessing it is very difficult unless one pays for it and knows someone who will provide it. Additionally, in some countries where PEP is available, presumably for all who might need it, PEP providers judge MSM harshly if they ask for it and sometimes refuse to provide PEP. In countries where it is widely available, participants recommend accessing it through MSM-friendly CBOs and clinics to avoid judgment.

Participants had mixed thoughts about the use of PrEP. Although all participants were hopeful about PrEP as an added prevention tool among others, they all harbored serious concerns about implementing it in contexts with:

- high levels of sexual and HIV stigma,
- poor provider training regarding MSM sexual health and HIV,
- high provider stigma toward MSM and PLWH,
- poor access to HIV services generally,
- infrastructures that are suffering to provide basic services and treatment,
- limited knowledge about ART generally,
- lack of social support, and
- lack of legal protections for MSM

As a result, participants advised against its use in current settings unless these concerns were addressed. In particular, participants advocated for improvements for the availability of and access to:

- Comprehensive health care provision including:
  - Sexual health services
  - HIV-specific services
  - Mental health services

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- Inclusion of LGBTQ- or MSM-specific CBO expertise in designing programs
- ART- and PrEP-specific education campaigns
- Infrastructure development and capacity building to support PrEP implementation
- Follow-up protocols to address adherence to ART and eventually PrEP
- Safe spaces for community engagement and social programs for MSM

### **3.2.3 Conclusions: 2014 In-depth Individual Interviews Findings**

The findings from the in-depth individual interviews further elucidate the quantitative and qualitative 2012 GMHR study findings. Consistent with the GMHR findings, the individual interviews reflected a high level of enthusiasm for ART-based prevention strategies, including early ART initiation, PEP and PrEP. However, as with the GMHR results, participants had serious concerns about implementing PrEP without careful consideration of the contexts where PrEP might be introduced. Participants stressed the importance of assessing and, based on results, addressing: local levels of sexual and HIV stigma; provider attitudes and knowledge about MSM sexual health needs; availability accessibility and use of basic HIV services; knowledge about ART-based prevention strategies; community engagement, safety, and legal protections for MSM. Overall, participants were between willing and eager to support PrEP implementation to the extent that these concerns are addressed.

## **4 LIMITATIONS**

As with all cross-sectional observational data, GMHR 2012 survey data findings are limited in their ability to show evidence of causality. Additionally, generalizability of findings is limited because online survey participants self-selected to participate in the survey (qualitative methods seek depth of understanding, not generalizability, by design). For example, the data are biased toward men who have access to the internet, and they may have different experiences from those who do. Another limitation is that men who participated in focus groups and interviews were predominately from urban cities. It is possible that men from rural settings have different concerns about the use of ARVs for prevention. Nonetheless, the consistency of findings across two time points and three different methodologies, suggests that the findings reported in this report are valid and robust.

## **5 OVERALL CONCLUSIONS and KEY MESSAGES**

Together, the GMHR Study and individual interview findings underscore the need to improve global efforts to ensure that MSM have access to basic HIV prevention and treatment services before we can fully realize the potential of

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well thought-out, locally-relevant combination prevention strategies that include use of ART as prevention. Structural, community, and individual-level barriers and facilitators to HIV service access must be addressed at multiple levels.

Gay men and other men who have sex with men, as well as HIV service providers, advocates and researchers, find PrEP an acceptable strategy for HIV prevention in theory. The finding that PrEP acceptability wanes as PrEP knowledge increases suggests an urgent need for the dissemination of more and better information about HIV prevention strategies generally as well as about PEP and PrEP specifically. Adequately addressing MSM knowledge and perceptions of ART will be critical to MSM's ability to make informed decisions regarding acceptance and use of these approaches as part of combination HIV prevention.

As with other HIV services, the implementation of PrEP also has to account for barriers and critical enablers that shape utilization of healthcare services by MSM. Given the positive impact of community engagement and comfort with service providers on access to services, findings also suggest that supporting MSM-led community-based organizations to provide safe spaces for MSM to access services and connect with the local gay community may be a highly effective strategy for addressing these issues. PrEP implementation will be most acceptable to MSM in the context of comprehensive health services that are provided in safe spaces by non-judgmental health providers.

In summary, we need to work hard to ensure contexts where appropriateness, accessibility, availability, safety and quality are carefully considered and addressed.

## 6 IMPLICATIONS FOR WHO GUIDLINES

The findings from all three analyses have several implications for PrEP implementation.

**1)** Conceptually, PrEP is an acceptable prevention strategy among most MSM. However, PrEP knowledge is limited, and increased knowledge reduces enthusiasm for PrEP—likely due to increased concerns about the implications of introducing PrEP in settings with extensive barriers to the most basic HIV prevention services (e.g., lubricants). Addressing concerns about PrEP implementation will be essential for successful PrEP implementation, uptake and efficacy.



**2)** It will be important to assess the barriers and facilitators of existing HIV preventions strategies in a given community and context. This should occur in collaboration with local CBOs (including advocates, providers and researchers) who have crucial cultural sensitivity, knowledge and trust of MSM. This process should include an assessment of local levels of:

- Sexual and HIV stigma
- Provider attitudes and knowledge about MSM sexual health needs
- Availability accessibility and use of basic HIV services
- Knowledge about ART-based prevention strategies
- Laws that criminalize sex between men
- Safety
- Legal protections for MSM
- Community engagement
- Availability, accessibility, and use of basic HIV services
- Other concerns particular to the location (identified by local CBO staff)

**3)** Based on the assessment, and in collaboration with local CBOs, it will be helpful to develop a plan to:

- Address identified barriers
- Support/enhance facilitators/enablers needed
- Assess changes over time

**4)** Strengthening local community and health systems will be beneficial in reducing barriers and enhancing facilitators of PrEP implementation; improving uptake of and adherence to PrEP among men who choose to use take it; and enhance sustainability of implementation efforts.

## APPENDIX I

### Antiretroviral Therapy as Prevention Interviews with MSM Interview Guide

#### FACE PAGE

*This section to filled in using panel data on participant and / or information that arises from interview.*

Age \_\_\_\_\_

Country / Region \_\_\_\_\_

#### HIV testing

Have you ever taken an HIV test?

- No  
 Yes  
 **Prefer not to answer**

If yes, do you wish to disclose the results of your test?

- No  
 Yes    Seronegative    Seropositive

#### Current relationship status

- In a serodiscordant relationship  
 In a seroconcordant relationship  
 Not in a relationship  
 In a relationship but status not disclosed to partner  
 **Prefer not to answer**

#### 1. Introduction

Explanatory notes in blue

Additional prompts or info to look for in green

To briefly describe the project related to this interview: WHO is developing consolidated guidance on HIV and KPs, bringing together existing guidance for separate key population groups and including important new information to address defined gaps. One of the new areas in the guidelines will be looking at PrEP for MSM. Values and preferences related to these services are a vital component that will inform the new recommendations.

**Length of interview:** 1 hour (if you have time constraints, I will make every effort to make our conversation shorter)

**Primary goal:** To have a conversation about a number of specific topics that affect you or that you have experience with as a man who has sex with men. I want to focus on your experience, your opinions and what you think or feel about the topics covered, and how your experiences have influenced your views.

**Overview:** I'll ask some general questions about your back ground and your experiences as a MSM where you live, but mostly about your experiences, values and preferences regarding the use of ART for

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prevention (PrEP, PEP, early initiation of ART, and some questions about your HIV testing experiences and preferences.

*If participant is involved with advising about or providing services for MSM ask:* I will also ask your views from a service provision perspective in relation to the topics discussed.

If there are any other topics that you would like to raise relative to the main topics we discuss, please feel free to do so, as I will include any additional topics or issues in the report.

**Important reminder: You may decline answers to any questions or discussion of any topics at any time.**

**Recording our conversation:** I would like to make an audio recording of our conversation to be sure that I am able to capture your contribution in as much detail and as accurately as possible. I do not keep any identifying information about you personally, so there is **no way to identify you in the report**. If you prefer that I not record our conversation, I will only take written notes. In either case, our conversation is **completely confidential**. Please let me know what you are more comfortable with. After we've spoken, if you have any further thoughts to share with me, please feel free to email me with your follow-up inputs.

At this time, do you have any further questions or concerns?

*Emphasize at this point that you want to hear about the individual's actual experiences and views, not those of his/her organization or those that are considered legal or acceptable in their country. They may mention these differences of perspective or setting, but their personal views are of primary importance for this interview.*

## 2. Verbal consent

Before we move on, I will need to obtain your verbal consent to be interviewed. Would you like to participate in this interview?

**Make sure to receive verbal consent to participate.**

*If participant says "NO", thank him and discontinue interview.*

*If participant says "YES", begin the interview.*

- Verbal consent was NOT obtained from the study participant
- Verbal consent was obtained from the study participant

## 3. Background information

Thank you again for agreeing to participate in this interview. I would like to begin by asking you to share a little about yourself.

1. How do you identify yourself sexually?
2. What is your living situation?
3. What is your relationship status?
4. What is it like for you living as (*however he identifies regarding MSM*) in your country?

## 4. HIV testing experience / modalities (if not addressed previously)

I'd like to ask you a few questions about HIV testing as it concerns you and other members of your community.

**Community members:** Can you briefly tell me a about your HIV testing experience?

To inform the Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations development process.

- Where tested / type of setting (hospital / clinic / stand-alone HTC / mobile clinic / community-based service provider / self-test)
- Was it easy or difficult to get a test? Specific barriers / facilitators to access?
- What do you feel is the optimal testing modality/setting for yourself? For others in your community? Please explain. Advantages / disadvantages of different options?
- What are the most important issues you see in providing HIV testing services for MSM?
- HIV self-testing is becoming increasingly more available, via the internet (online purchase) and over the counter in pharmacies. Some countries are considering supporting community groups to supply HIV self-test kits. What are your thoughts about self-testing for yourself and for others in your community?

**Experts / service providers:** As an expert / someone who advises on services for MSM / service provider:

- What are your general thoughts about providing HIV testing for MSM?
- In your view, how has this been delivered most successfully?
- HIV self-testing is becoming increasingly more available, via the internet (online purchase) and over-the-counter in pharmacies. Some countries are considering supporting community groups to supply HIV self-test kits. What are your thoughts about self-testing?

## 5. Current prevention approaches/practices

### Community member

1. What interventions are you currently using to protect yourself from getting HIV / to prevent transmission of HIV to a partner? (*Follow/up regarding: Condoms and Lube, Individual/Group/Community level interventions, Provider-initiated testing and counseling for HIV and STI, Individual and Group Risk Reduction Counseling*)
2. What barriers do you experience / have you experienced in accessing prevention interventions? *For young respondents: Especially as a young MSM?*
3. What has assisted / does assist you in accessing these interventions?
4. What additional prevention interventions do you think will be helpful to you and others in your community?
5. What other strategies would be helpful to improve access to prevention interventions?

**PROBES:** For each questions use following probes as appropriate

- >>> What kinds of prevention programs exist in your country? (individual, group, and community level programs)
- >>> How accessible are (each of the categories)
- >>> Has a health care provider ever talked about (each of the categories) with you?
- >>> How should (each of the categories) be delivered to MSM?
- >>> How is it received by MSM in your country?
- >>> What do you think about it?
- >>> How would you organize prevention programs?
- >>> If not offered in country,
- >>> Is this viable in your country?
- >>> How would it be received?
- >>> How would you improve the conditions for meeting sexual health needs of MSM?

### Experts / service providers

1. In your setting/experience, what current prevention strategies are being used / are available for MSM?
2. In your setting/experience, what barriers do MSM experience in accessing prevention interventions?
3. In your setting/experience, what current strategies are helping MSM to access prevention interventions?
4. In your setting / experience, how do the needs of young or adolescent MSM differ from older members of the community and how are their particular needs be addressed by services?
5. In your setting/experience, what additional prevention interventions do you think would benefit MSM?

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6. In your setting/experience, what other strategies would you suggest to improve access to prevention interventions for MSM?

## 6. ARVs for prevention

There are a number of prevention interventions that involve the use of antiretrovirals (some of which you have mentioned) that the new guidelines are looking into, and we would like to explore these with you.

### 6a) PrEP (pre-exposure prophylaxis)

#### Community member

If the respondent has mentioned PrEP in the response to Section 4, go to Question 3 –

1. Are you aware of PrEP?

<b>Yes</b>	a) Do you feel you have a good understanding of PrEP, or would you like me to give you more information? <i>If the respondent asks for more info, go to explanation below.</i>
<b>No (or if answer is incomplete)</b>	<p>b) Explanation:  <i>Pre-exposure prophylaxis (or PrEP or Truvada) is the use of antiretroviral drugs by HIV-negative people to reduce the risk of or getting HIV. Recent studies have shown that people who took PrEP pills every day were less likely to become infected with HIV.</i></p> <p><i>Several studies have shown that PrEP can prevent someone acquiring HIV from sex and one study has shown that it can also prevent HIV from sharing needles. Studies have also shown that PrEP or antiretrovirals for people who are HIV-negative are safe and cause few, minor side effects. PrEP does not protect against other blood-borne viruses, hepatitis, STIs, or pregnancy.</i></p>

2. Check understanding: Is that explanation useful? Do you have any questions? How would you explain PrEP to someone?
3. What are your views on PrEP as a preventive option for yourself?
4. Would you be interested in taking PrEP for HIV prevention if it was available?

<b>Yes</b>	<p>a) Why would you consider it?</p> <p>b) What would help you to make a decision about using PrEP as a prevention intervention?</p> <p>&gt;&gt;&gt; More information – What information would you require for making a decision about taking PrEP?</p> <p>&gt;&gt;&gt; Support from health provider</p> <p>&gt;&gt;&gt; Better access</p> <p>&gt;&gt;&gt; Peer influence</p>
<b>No</b>	<p>c) Why would you not consider PrEP?</p> <p>d) What would help you to make a decision about using PrEP as a prevention intervention?</p> <p>&gt;&gt;&gt; More information – What information would you require to make a decision about taking PrEP?</p> <p>&gt;&gt;&gt; Support from health provider</p> <p>&gt;&gt;&gt; Better access</p> <p>&gt;&gt;&gt; Peer influence</p>

5. What do you think are potential benefits of taking PrEP on a daily basis for HIV prevention?
6. What do you think are potential challenges of taking PrEP on a daily basis for HIV prevention? For young respondents: Any particular challenges related to being an adolescent MSM?

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7. How do you feel about PrEP vs other harm reduction options / current prevention strategies that are available?
8. Do you have a strong feeling or preference for one particular option (esp among NSP/OST/PrEP)? Please explain.
9. Are you aware of the views of other MSM regarding PrEP?

**Experts / service providers**

1. What are your views on PrEP as a prevention option for MSM? Are those views the same for adolescents and young MSM? Please explain.
2. Are MSM aware of PrEP?

<b>Yes</b>	a) What are their views?
	b) How have most of them been informed about PrEP?
	c) Is the information they present with correct?
<b>No</b>	d) Why do you think this is the case?

3. If PrEP was available, should it be offered to MSM?

<b>Yes</b>	a) What would be your rationale for offering PrEP?
	b) In what circumstances should PrEP be offered?
	c) What support would service providers require to be able to offer PrEP? >>> Up to date information >>> Standard operating procedures and policies >>> Ongoing/reliable supply
	<b>No</b>
	d) What is your rationale for not offering PrEP? >>> Potential concerns/challenges of offering PrEP to MSM in relation to service provision? What strategies could be used to address these concerns/challenges? >>> Potential concerns/challenges in relation to your clients? – What strategies could be used to address these concerns/challenges?
	e) What would assist in improving the acceptability of PrEP to you as a provider?

**6b) PEP (post-exposure prophylaxis)**

**Community member**

*If the respondent has mentioned PEP in the response to Section 4, go to Question 3 –*

1. Are you aware of PEP?

<b>Yes</b>	a) Do you feel you have a good understanding of PEP, or would you like me to give you more information? <i>If the respondent asks for more info, go to explanation below.</i>
<b>No</b>	b) Explanation: <i>Post-exposure prophylaxis (or PEP) is the use of antiretroviral drugs by HIV negative people AFTER possible exposure to HIV to reduce the risk of getting HIV.</i>

2. *Check understanding:* Is that explanation useful? Do you have any questions? How would you explain PEP to someone?
3. What are your views on PEP as a preventive option for yourself?
4. What do you think are the benefits of taking PEP for HIV prevention?
5. What do you think are the challenges of taking PEP for HIV prevention? – What strategies could help to address these challenges? For young respondents: Are there particular challenges for taking PEP related to being a young MSM?
6. Have you ever taken PEP?

<b>Yes</b>	a) Can you tell me about the situation in which you decided to take it?
	b) Who offered it to you?

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	c) Where did you access it? Was it easy to get hold of?	
	d) What was the recommended protocol? Number of days? Follow-up testing?	
	e) Did you take the whole course of PEP as prescribed?	
	<b>Yes</b>	--
	<b>No</b>	How long did you take it? Why did you stop?
	f) What was your experience of taking PEP? >>> Easier / harder than other prevention options? >>> Pill burden? >>> Side effects? >>> More stigmatizing / less stigmatizing? If negative, how could it be improved?	
	g) Would you take it again?	
<b>No</b>	h) Why have you not taken it before?	
	<b>Not available</b>	If offered to you, would you accept it? What would help you to make a decision about PEP? >>> More info – what sort of info would you need? >>> Support from health provider >>> Better access
	<b>Offered but refused</b>	What were your reasons for not taking it? What would help you to make a decision about PEP? >>> More info – what sort of info would you find most helpful?
	<b>Have never needed it</b>	Would you be interested in taking PrEP for HIV prevention?

- How do you feel about PEP vs other harm reduction options / current prevention strategies?
- Do you have a strong feeling or preference for one particular option (esp among NSP/OST/PrEP)? Please explain.
- Are you aware of the views of other MSM regarding PEP?

**Experts and service providers:**

- What are your views on PEP for MSM who have had a possible exposure to HIV? Are those views the same with regard to adolescents and young MSM? Please explain.
- What are the benefits of PEP for MSM with possible exposure to HIV?
- What concerns do you have with offering PEP to MSM with possible exposure to HIV?
  - In relation to service provision
  - In relation to your clients (MSM)
  - In relation to adolescent and young clients

**Service providers only:**

- Have you ever prescribed PEP for MSM?

<b>Yes</b>	a) Tell me about your experiences prescribing PEP for MSM	
	b) What challenges did you as a SP face?	
	c) What challenges did your clients face? – What strategies helped you / your client to address these challenges?	
<b>No</b>	d) Why have you not offered PEP?	
	<b>Not available</b>	--
	<b>Not appropriate</b>	Please explain >>> e.g. clients don't return for follow-up
	<b>Offered, client refused</b>	Main reasons for refusing? How to improve acceptability? >>> Access, info....

- If you offer PEP to MSM how many 'courses' of PEP would you feel comfortable with offering in a 12-month period to an individual? Please explain.

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**6c) Early initiation of ART**

**Community members (HIV+ only):**

If the respondent has mentioned early initiation of ART in the response to Section 4, go to Question 3 –

1. Are you aware of early initiation of ART?

<b>Yes</b>	a) Do you feel you have a good understanding of early initiation of ART, or would you like me to give you more information? <i>If the respondent asks for more info, go to explanation below.</i>
<b>No</b>	<p>b) Explanation:</p> <p><i>Early initiation of ART is the start of ART by people with HIV at CD4 count above 500.</i></p> <p><i>In 2013, WHO recommended individuals start ART when CD4 is ≤500 (vs. previous guidance of CD4 ≤350). WHO does not currently recommend starting ART when someone's CD4 is &gt;500 except for people with HIV and active TB, for people coinfecting with HIV and Hepatitis B and evidence of severe chronic liver disease, or for partners with HIV in serodiscordant relationships who should be offered ART to reduce transmission to uninfected partners; in all of those cases they should start (or be offered) ART regardless of CD4 count. However some countries are now recommending or considering recommending that all MSM should also be recommended to start ART regardless of CD4 count.</i></p> <p><i>Taking ART, whatever your CD4 count, can reduce HIV transmission to others, either through sex or through sharing equipment. WHO recommends that everyone with a CD4 of 500 or below should be on ART for their health and to prevent transmission to others. While it is not known whether taking ART when you have a CD4 &gt;500 is actually beneficial for your own health, it does have a preventive effect. This early ART initiation is sometimes called 'treatment as prevention' or TasP. Some people suggest early ART (CD4 &gt; 500) should be recommended for all MSM to help prevent transmission to others.</i></p>

2. Check understanding: Is that explanation useful? Do you have any questions? How would you explain early initiation of ART
3. If HIV seropositive: Are you on ART? (Or: You have told me that you are on ART...)

<b>Yes</b>	a) When did you start?	
	b) Did you start because of your health status or for prevention reasons? Or other? (>>> to start a family) Please explain your answer.	
	c) If it was for prevention:	
	<b>If for prevention</b>	<p>Did you face any particular challenges in starting ART for prevention reasons? If so, what were they?</p> <p>What benefits do you see or have you experienced in starting ART for prevention?</p>
<b>No</b>	d) What is your view on early initiation of ART (CD4 500 or above) as a preventive intervention?	
	e) Is this something that you would consider if it was available where you live?	
	<b>Yes</b>	<p>Why would you consider this?</p> <p>What would help you to make a decision about early ART?</p> <p>&gt;&gt;&gt; More info – what info would you find most helpful?</p> <p>&gt;&gt;&gt; Support from service providers</p> <p>&gt;&gt;&gt; Access</p>
	What are your potential concerns or challenges you might have starting ART at a higher CD4 count (or before you feel sick?) – What	

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		strategies do you think could be used to address these challenges?
	<b>No</b>	Why wouldn't you consider it?
		What would assist in improving the acceptability of early initiation of ART?

**Experts and service providers:**

1. What are your views on early initiation of ART? Are those views the same for adolescent and young MSM? Please explain.
2. What are the potential benefits of offering early initiation of ART to MSM?
3. What are your concerns of offering early initiation of ART to MSM?
  - a) In relation to service provision
  - b) In relation to your clients
  - c) In relation to adolescent and young clients
4. What strategies do you think could be used to address these challenges?
5. What do you advise your MSM clients about early initiation of ART? Same for adolescent and young clients?

**Service providers only:**

1. Have you ever prescribed early initiation of ART for MSM?

<b>Yes</b>	a) Tell me about your experiences	
	b) What challenges did you as a service provider face?	
	c) What challenges did your clients face? What strategies helped you/your client to address these challenges?	
<b>No</b>	d) Why have you not offered early initiation of ART to MSM?	
	<b>Not available</b>	--
	<b>Not appropriate</b>	Please explain
	<b>Offered, client refused</b>	What were the main reasons that the client refused?
		What would assist in improving the acceptability of early initiation of ART for MSM? >>> Info >>> Access

**7. Discrimination/Violence**

*If discrimination or violence issues arose during interview:* Earlier you talked about whatever discrimination or violence issues he mentioned. I would like to ask you some further questions about that if it is OK with you.

*If not previously discussed,* I would like to ask you some questions about how MSM are received in your country.

- How are MSM treated in your country?
- What are the attitudes of health providers towards MSM?
- How do health providers treat MSM?
- How have these attitudes and experiences affected the ability of MSM to access sexual health services?
- What experiences have you had with violence directed at you or other men because of being MSM?

**7. Legal Issues**

- How does the legal system affect your to access to HIV services (e.g., criminalization of homosexuality)
- What kinds of legal assistance do MSM need?
- Where do MSM go for legal assistance?
- How does the legal system respond to MSM?

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## 9. Closing

Thank you very much for your time – I appreciate your willingness to share your personal experiences, views and feelings. Is there anything else that you would like to add at this time?

Once we have collected all the data required for this study, we will prepare a report that will be made available as part of a larger report, which will be available on our website at [www.msmsgf.org](http://www.msmsgf.org).

**Reminder - Please be assured that I will not include in the report any identifying information about you personally.**

Please feel free to contact MSMGF staff if you have any questions or would like to provide feedback. You may have these contact details from an earlier email but would you like me to repeat this information for your convenience?

If participant says yes: You can contact me, Sonya Arreola at [SArreola@msmsgf.org](mailto:SArreola@msmsgf.org) if you have any questions or comments or George Ayala at [GAyala@msmsgf.org](mailto:GAyala@msmsgf.org).

Thank you again for your time today. Is this a good time to end the call?