
Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations

Web Annex B. Values and
preferences report

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Web Annex B. Values and preferences report

Key populations' values and preferences for HIV, hepatitis, and STI services: A qualitative study

August 2021

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Executive summary

This report provides a summary and analysis of research conducted by GATE, INPUD, MPact, and NSWP on key populations' values and preferences surrounding HIV, STI, and HCV services. Findings are presented in response to seven PICO¹ questions, as well as broader health priorities, structural barriers, and enabling interventions. In presenting these findings, this report aims to inform future WHO guidance by providing a holistic overview of key populations' diverse values and preferences, as well as the contextual factors which shape them².

This report first identifies key populations' overarching health priorities, noting the diversity of priorities across and within populations. Next, the report examines perceptions of behavioral interventions and their impacts, identifying a preference for peer-based behavioral interventions focused on education and awareness-raising. In regard to service delivery for HIV, STIs, and viral hepatitis, findings suggest an overwhelming positive reception of peer navigators and community-led services, with differential preferences for and perceived impacts of online services due to varying levels of internet access and digital literacy, as well as privacy and online security concerns.

Regarding HCV testing and treatment, participants generally approved of treatment with pan-genotypic DAAs, noting a range of preferred testing frequencies following a negative HCV test result. In regard to STI prevention, testing, and treatment, findings indicate positive perceptions of sample pooling for chlamydia and gonorrhea testing, and negative perceptions of periodic presumptive treatment (PPT).

Lastly, this report examines structural barriers, as well as enabling interventions, to improve key populations' access to and retention in health services for HIV, STIs, and HCV. Criminalization, stigma, and discrimination were emphasized as persistent barriers, necessitating continued efforts for policy reform, community empowerment initiatives, and sustained funding.

This report has identified an overwhelming preference for community-based responses and service delivery for HIV, STIs, and HCV, as well as a need for more information on new and emerging testing, treatment, and prevention interventions and technologies. In order for key populations to make informed choices surrounding their health and well-being, more initiatives are needed to empower and inform communities, as well as address structural barriers.

Key population guidelines development process

In 2021, the World Health Organization (WHO) will update the 2016 Consolidated Guidelines for HIV prevention, diagnosis, treatment, and care for key populations. The updated guidelines will also address viral Hepatitis and STIs for five key populations: gay and bisexual men and other men who have sex with men (MSM), sex workers, people who inject drugs, trans people and people in prisons. The review process is coordinated by the WHO Department for Global HIV, Hepatitis and STI Programmes (HHS) and driven by the Guidelines Development Group (GDG), which will meet between 30 August and 8 September 2021.

In making new recommendations, the GDG will consider the values and preferences of key populations related to behavioral and structural interventions, service delivery, HIV, HCV testing and treatment, and STI screening. In this context, four key populations networks have collaborated with the WHO HHS Department to conduct a global, network-based, qualitative research study to provide a greater understanding of the values and preferences of these key populations. Given that there is no global network of people in prisons, a separate process will seek to get input from civil society organizations working with this population.

¹ PICO = patient/population, intervention, comparison and outcomes

² This study was funded by WHO through a grant received from the Bill and Melinda Gates Foundation.

Background

Key populations are defined by UN agencies as: gay and bisexual men and other men who have sex with men, sex workers, people who inject drugs, trans people, and people in prisons or other closed settings. These populations are defined as “key” because they are at increased risk of HIV, high burden of infection and disease, and face a number of structural barriers. Indeed, in 2020 UNAIDS estimated that, globally the majority of new HIV cases (62%) occur amongst the five key populations and their sexual partners.³

While these four groups were initially defined as “key” in the HIV response, their health needs are much broader than HIV, including sexual and reproductive health and prevention and care for other sexually transmitted infections (STIs), viral hepatitis, and tuberculosis (TB). For example, 2–15% of people living with HIV are also infected with HCV, accounting for 2.75 million infections - of whom 1.3 million are people who inject drugs.⁴ Further, 23% - 39% of new HCV infections are estimated to be among people who inject drugs⁵ and one in three HCV deaths globally are attributable to injecting drug use.⁶

Additionally, among men who have sex with men, for example, syphilis prevalence was estimated to average 11.8% (range 5.2% to 19.6%,%) considering data from 11 countries reporting to the Global AIDS Monitoring (GAM). In seven of these countries, the reported prevalence was higher than 10% (WHO, Global Health Observatory, 2020). For trans women, a systematic review also reported disproportionate prevalence of syphilis ranging from 1.4% to 50.4%, and of gonorrhea from 2.7% to 24.7%.⁷ Further, it should be noted that due to a current lack of data, STI prevalence in other trans identities (i.e. transmasculine and non-binary people) cannot be reported.

Study rationale and objectives

WHO seeks to make a number of improvements within its update of the 2016 Consolidated Guidelines⁸, including developing a module for each key population, providing recommendations on enabling interventions, and prioritizing health interventions for each key population group.

Between April and June 2021, GATE, INPUD, MPact and NSWP conducted separate peer-driven qualitative research studies examining the values and preferences of their communities in relation to HIV, other STIs and viral hepatitis services. As key populations are the intended end beneficiaries of these guidelines, it is crucial that any new recommendations understand and take into account the specific values and preferences of each key population.

This consolidated report presents an overall summary of key findings from each key population network’s research, identifying common themes, as well as key population-specific findings. It is important to note that while there are intersections across these populations with people in prisons due to widespread criminalization, this has not been a focus of this study or the associated reports.

³ UNAIDS, 2020, [UNAIDS Data 2020](#).

⁴ Platt et al. Prevalence and burden of HCV co-infection in people living with HIV: a global systematic review and meta-analysis. *Lancet Infect Dis*. 2016 Jul;16(7):797-808. doi: 10.1016/S1473-3099(15)00485-5. Epub 2016 Feb 25.

⁵ Degenhardt et al Global prevalence of injecting drug use and sociodemographic characteristics and prevalence of HIV, HBV, and HCV in people who inject drugs: a multistage systematic review *The Lancet Global Health* 2017 5(12) E1192-E1207

⁶ Trickey et al The contribution of injection drug use to hepatitis C virus transmission globally, regionally, and at country level: a modelling study *The Lancet Gastroenterology and Hepatology* 2019 4(6) 435-444.

⁷ Van Gerwen OT, Jani A, Long DM, Austin EL, Musgrove K, Muzny CA. Prevalence of sexually transmitted infections and human immunodeficiency virus in transgender persons: A systematic review. *Transgender Health* 2020; 5:90-103.

⁸ World Health Organization. 2016. Consolidated Guidelines on HIV prevention, diagnosis, treatment and care for key populations, 2016 update. World Health Organization. <https://apps.who.int/iris/handle/10665/246200>

Research questions

This research aims to inform the key population guidelines in relation to community values and preferences around seven questions:

1. Do behavioral interventions reduce harms associated with Chemsex?
2. Do behavioral interventions reduce risk behaviors associated with HIV, STI and viral hepatitis?
3. Do peer navigators improve key population initiation and retention in HIV and viral hepatitis treatment and prevention programs?
4. Does providing services online improve uptake of prevention, testing, linkage to treatment and treatment retention for key populations?
5. Should HCV treatment with pan-genotypic DAAs as recommended by WHO be offered immediately to people with ongoing risk behaviors and recent HCV infection (including recent HCV reinfection)?
6. How often should people with ongoing risk behaviors be retested for evidence of HCV RNA/cAg after documentation of a negative RNA/cAg test?
7. Among gay and bisexual men and other men who have sex with men, trans people and sex workers, should pooling of samples from three anatomic sites (urethra, anal and pharynx) be used for STI laboratory screening of gonorrhea and chlamydial infection over individual samples from three anatomic sites?

This research has also examined key populations' values and preferences in relation to how, where, and by whom services are provided, as well as the perceived advantages and disadvantages of different service modalities and approaches. Participants' values, preferences, and experiences related to structural barriers were also examined.

Study design & methodology

Between April and June 2021, GATE, INPUD, MPACT and NSWP conducted a total of 61 individual semi-structured interviews (SSI) and 32 multi-country focus group discussions (FGD). Individual SSI were conducted with people who are opinion leaders within the four communities and are individuals who are directly affiliated with key population-led organisations and networks and have a mandate to represent their community. FGD were conducted with grassroots community members nominated by each network through their affiliated community-led organisations and networks in line with participant criteria (see below). Where possible, FGD were held after the SSI, to allow for deeper discussion on key issues and gaps identified by opinion leaders in the SSI. The number of SSI and FGD were set and agreed in the protocol development process and were designed to ensure thematic saturation, that is, the point at which further data points (SSI or FGD) produce little or no new information relative to the study objectives. This was set at between 8-15 FGD with a minimum of 5 and maximum of 10 participants per FGD and 10-20 SSI. Ethics approval for this study was provided by the WHO Ethics Review Committee.

Recruitment

Participants were recruited using a generic purposive sampling approach⁹ informed by the aims and purpose of the study and the key research questions. The global key population networks selected participants through their regional and country-based networks to participate in SSI and FGD, with attention given to balancing representation by region, gender, age, and HIV status (see further detail in individual network reports). All research participants were required to meet the following criteria: be over 18 years of age; provide oral informed consent for participation¹⁰; be able to communicate in English, French, Spanish or Russian (or be able to communicate via an interpreter); and identify as a member of a key population and/or as a member of a key population organization or network.

All SSI and FGD were conducted virtually over Zoom, WhatsApp, Skype, or other secure communication platforms. Each interview was conducted in English, French, Spanish, or Russian. Three interviews were additionally conducted by NSWP consultants in Thai, Hindi, and Nepali using community interpreters.

Data collection and analysis

Data was collected by community experts engaged by the global key population networks as consultants. Interview and focus group discussion guides were developed and piloted by each of the global key population networks. Participant responses were documented, electronically recorded, and where possible participant responses were transcribed verbatim, however not all responses were fully transcribed due to limited resources. Responses were then collated and coded using an inductive, thematic analysis approach based on an analytical framework developed by the key population networks. The coded responses were then checked by a principal investigator from each network for quality and consistency.

Data summaries from each of the key population studies were prepared by one Principal Investigator from each network, inputted into a joint draft, and analyzed to create a consolidated key population report.

⁹ Bryman, A. 2012. *Social Research Methods* 4th Edition. Oxford University Press. p.422

¹⁰ Note: "informed consent for participation" was based on an approved consent script that was read verbatim to all participants with opportunity for participant questions. Consent was then confirmed verbally for participation, note-taking and recording. Consent was recorded via a researcher-signed consent log to protect the confidentiality of all participants.

Participant demographics

Table: Consolidated Key Population/Networks Data on Participant Sample & Demographics

Key population & network	Total participants	Gender breakdown (# & %)	Age group breakdown (# & %)	Total number SSI	Total number FGD*	Languages SSI & FGD (# in each language)	WHO regions** (# participants/ region)	Countries & # Ps by income level*	Total countries*
Trans People (GATE)	50	Transfeminine n=33 (66%) Transmasculine n=14 (28%) Trans non-binary n=3 (6%)	Data not collected	10	10	English (20) Spanish (6) Russian (4)	Africa (11) Americas (16) Europe (14) Eastern Mediterranean (2) Southeast Asia (1) Western Pacific (6)	# LMIC (24) = 42 Ps # HIC (5) = 8 Ps	29
People Who Inject Drugs (INPUD)	54	***Cis-female n=17 (31.48%) Cis-male n=30 (55.55%) Non-binary n= 6 (11.11%) Other gender non-conforming n= 1 (1.85%)	18 - 25: 2 (3.70%) 26 - 35: 11 (20.37%) 36 - 45: 20 (37.04%) 46 - 55: 17 (31.48%) 56 - 65: 3 (5.56%) Over 65: 1 (1.85%)	10	8	English (12) French (2) Russian (4) Spanish^	Africa (12) Americas (14) Europe (20) Eastern Mediterranean (0) Southeast Asia (0) Western Pacific (8)	# LMIC (18) = 26 Ps # HIC (9) = 28 Ps	27
Gay, Bi-sexual & Other Men Who Have Sex With Men (MPact)	36	Male^^ n=33 (91.67%) Female n=1 (2.78%) Transgender n=2 (5.56%)	Data not collected (estimate range: early 20s to late 50s)	15	6	English (35) Spanish (1)	Africa (11) Americas (5) Europe (5) Eastern Mediterranean (4) Southeast Asia (4) Western Pacific (7)	#LMIC (14) = 26 Ps #HIC (8) = 10 Ps	22

Key population & network	Total participants	Gender breakdown (# & %)	Age group breakdown (# & %)	Total number SSI	Total number FGD*	Languages SSI & FGD (# in each language)	WHO regions** (# participants/region)	Countries & # Ps by income level*	Total countries*
Sex Workers (NSWP)	89	Cis-female n=60 (67.42%) Cis-male n= 19 (21.35%) Trans-female n= 9 (10.11%) Non-binary n= 1 (1.12%)	20 or under: 1 (1.12%) 21-25: 4 (4.49%) 26-30: 13 (14.61%) 31-35: 20 (22.47%) 36-40: 13 (14.61%) 41-45: 13 (14.61%) 46-50: 7 (7.87%) Over 50: 16 (17.98%) N/A: 2 (2.25%)	26	8	English French Spanish Russian ^^^Thai Hindi Vietnamese Nepali	Africa (26) Americas (28) Europe (19) Eastern Mediterranean (0) Southeast Asia (7) Western Pacific (9)	# LMIC (27) = 68 Ps # HIC (12) = 21 Ps	39
TOTALS:	229			61	32				69

* See separate network reports for more detailed breakdowns on countries for each WHO region and # participants (Ps) by country.

** “Europe region” includes countries in Eastern Europe and Central Asia.

*** “Cis” or “cisgender” refers to person/s whose sense of personal and gender identity corresponds with their birth sex.

^ Although no FGDs/SSIs were conducted in Spanish, there were bi-lingual Spanish/English speaking participants in FGDs

^^ Majority of participants identified as gay or queer, two as transgender, one as a woman.

^^^ Other languages spoken by participants in FGDs/SSIs (some with interpreter).

Results

Key populations' health priorities

Health priorities varied among key populations. Participants from the four communities involved in the study highlighted the centrality of mental health, sexual health, access to testing, prevention, treatment, and care for HIV/STIs/HCV, and access to gender-affirming care.

In addition to the points highlighted above, participants from all networks also stressed the importance of reducing structural barriers, such as criminalization, stigma and discrimination, and lack of legal gender recognition frameworks for trans people, as well as combating violence to minimize negative health outcomes. Comprehensive, integrated and contextualized health approaches, in combination with community empowerment and peer-lead services, were described as desirable and effective.

Although specific health priorities varied across networks, mental health was emphasized as one of the main health concerns among participants across networks.

“Mental health is the bigger umbrella priority that contributes to lots of issues, like TB, HIV, other STIs.”

Gay man, Western Pacific

Other health priorities were shared by participants from multiple networks, including HIV and STIs (MPact, NSW), sexual and reproductive health care (INPUD, NSW), and harm reduction (INPUD, MPact). Moreover, the role of the COVID-19 pandemic in exacerbating existing vulnerabilities and health inequalities was noted by INPUD, MPact, and NSW.

“The issue of the COVID pandemic has exploded in [Latin America] – hunger, inequality, exploitation. People living with HIV are the last link, and key populations are not included in access to vaccines.”

Female sex worker, Americas

Throughout participants' responses, it was also clear that communities' diverse health priorities were overwhelmingly shaped by stigma, discrimination, criminalization, and violence. As a result, many participants across networks described enabling interventions, such as law reform, decriminalization of drug use, sex work, same-sex relations, and gender expression and community empowerment, as being health priorities in and of themselves. As one participant from the INPUD network explained, without comprehensive drug policy reform, people who inject drugs will continue *“to experience barriers to HIV and hepatitis C prevention, testing, and treatment.”*

Female drug user, Western Pacific

Perceptions of behavioral interventions and their impacts

The impacts of behavioral interventions on reducing harms associated with chemsex¹¹ (Q.1)

Perceptions surrounding chemsex and its relevance varied both across and within the four key population networks. Although chemsex is most widely recognized and practiced among gay, bisexual, and other cis men who have sex with men, participants beyond these communities also noted that they engage in drug use to enhance and/or prolong sexual experiences. Some participants described this activity without using the term 'chemsex.' Some sex workers, including participants from both the NSW and GATE networks, reported engaging in chemsex due to pressure from clients and/or financial necessity.

¹¹ Within the SSI and FGD, the following definition of “chemsex” used: *“the use of drugs during sexual activities, which are used to enhance and/or prolong sexual experiences. The most commonly used drugs for Chemsex are methamphetamines, GHB/GLB, mephedrone, cocaine, and ketamine.”*

In regard to behavioral interventions, participants across networks indicated a need to promote awareness and education surrounding chemsex, as well as address stigma and discrimination towards those who engage in chemsex. In particular, participants called for tailored, non-judgmental, peer-led interventions and harm reduction approaches (which avoid focusing purely on abstinence).

“[We need] awareness campaigns to prevent risky behaviors, training among peers, self-help groups [and] psychological and accompaniment programs to provide support.”

Male sex worker, Americas

Additionally, participants from the NSWPN network emphasized the importance of promoting interventions which educate sex workers on the potential risks of chemsex. However, such behavioral interventions remain uncommon in many regions.

Participants from the INPUD network stressed the importance of expanding the way we think about chemsex, including moving beyond a focus on ‘risks’ and ‘harms’ alone, perhaps to the concept of “sexualized drug use” and within that framing, encouraging and supporting people to engage in “cultures of care” including ideas such as “hosting packs” or “safety kits” that are harm reduction focused and encourage people to “plan to be safe” were suggested.

Additionally, participants from the MPact network stressed the need for more psychosocial support, clinical services, and research. Chemsex has emerged as an issue across the globe. In particular, there are challenges to identifying the community members who engage in areas where gay sex and drugs were stigmatized behavior (e.g. MENA). In some contexts like Zimbabwe, drug use is not pathologized so “chemsex” is understood as a challenge to all sex with substances (e.g. alcohol). In South Asia and Southeast Asia, “chemsex” is more common amongst certain socio-economic groups (e.g. those who engage with sex with foreigners), so therefore more interventions have to be based in the particular contexts of drug use and sex. Also, as noted by one participant from the GATE network, these interventions to reduce harms associated with chemsex should also be tailored to address the needs of trans men.

“There are initiatives for MSM, but under a cis perspective, ignoring trans men are at risk too. Services are underfunded and not exactly trans sensitized.”

Transmasculine person, Europe

Finally, participants also urged policy reform to address the underlying structural barriers and stigma and discrimination that can significantly exacerbate the potential harms associated with chemsex.

The impacts of behavioral interventions on reducing risk behaviors for HIV and other STIs, and viral hepatitis (Q.2)

The key message from participants across the four key population networks was that a greater focus on peer-led education, information, counselling and outreach surrounding condom usage, harm reduction, and treatment adherence is needed to reduce vulnerability to HIV, STIs, and HCV.

“Peer education is the most effective, because we have seen it being tested and working in most of the regions, and that is what has been able to curb HIV and to get sex workers into programs.”

Female sex worker, Africa

Participants from INPUD, particularly from low or middle income countries (LMIC), and GATE identified a lack of formal education and literacy as barriers to HIV, STI, and HCV prevention education, noting the need for more specific ongoing peer-based and community-led HIV/STI/HCV education delivered through a variety of mechanisms and formats to account for different levels of access, knowledge and literacy and to combined this with counselling and other psychosocial supports for maximum effectiveness.

“[There is a need for] continuous education where this will be repeated many times, and not just giving people pamphlets, but explaining to people, as some are illiterate, having psychosocial interventions where they can even have classes and be taught a skill which will be combined with the learning objectives.”

Gender non-binary drug user, Africa

Participants from NSWP also noted the importance of providing education to sex workers in ways which are interactive and engaging. Participants from the NSWP network also noted that peer-led behavioral interventions, in general, are particularly effective among sub-populations of sex workers who may be more difficult to reach – such as migrant sex workers.

Participants from the INPUD network further noted that while access to information and education is critical, so too is adequate access to evidence-based harm reduction approaches, such as needle and syringe programs (NSP) and opioid agonist therapy (OAT), to put education into practice. This continues to be a major problem in many countries and regions.

The impact of structural factors in increasing HIV and STI risk behaviors was also stressed by participants from GATE. Specifically, limited access to employment and healthcare (incl. gender affirming care) have been mentioned multiple times as a major risk factor in regard to HIV. As one participant from the GATE network explained,

“[We need] to find ways, alternatives and sustainable income sources to commercial sex work for trans people, all this coupled with health education, to be able to self-assess risk vs benefit and finally access to proper gender affirming health care.”

Transfemale person, Americas

Some participants from the INPUD network specifically identified the value of counselling and motivational interviewing techniques and highlighted both the importance of the approach used and the need for a range of different counselling and other behavioural interventions so that people have access to the specific types of support and services they need at different stages of their health and life journeys.

Other INPUD participants stressed that while counselling during HIV, STI and viral hepatitis testing and other psychosocial support, particularly when provided by peer-led, community-based services can be very helpful, they also pointed out that such counselling is only helpful if it is readily available. One participant from the INPUD network spoke to the ongoing gaps in the availability of counselling for people who inject drugs particularly in LMIC.

“Initially, when we had enough staff, it was effective, as people who would have otherwise engaged in risky behaviour had that structure to know that there is somebody they can talk to but right now it is not effective because we don't have enough counsellors.”

Female drug user, Africa

Other findings on behavioral interventions and their impacts

The focus of comments from all four key population networks in relation to other factors impacting on access to behavioral interventions (including education and counselling) overwhelmingly related to structural issues, including: negative community and service provider attitudes, problematic approaches and messaging, stigma and discrimination, and the need for law reform and education to change the way that key populations are perceived and treated.

People who inject drugs specifically raised the importance of the underpinning approach to behavioral interventions including counselling, and that these interventions must be based on harm reduction, rather than promoting abstinence from drug use. In particular, INPUD participants highlighted how they have been refused access to behavioral interventions and other health care services due to being seen as insufficiently motivated towards cessation of drug use including being on OAT.

“When I was diagnosed with HIV, I was refused counselling because I was on methadone. So I mean, that’s not just for counselling, but like that’s for a range of healthcare, and especially if you are an opioid user.”

Male drug user, Europe

Sex workers and people who inject drugs also highlighted how law enforcement approaches can undermine access to, as well as the effectiveness, of behavioral interventions, such as condoms and injecting equipment being used as evidence of sex work or drug use.

“In most of the countries [in Asia], law enforcement use condoms as evidence to arrest sex workers... and that makes sex workers use condoms less correctly and consistently.”

Female sex worker, South East Asia

Participants also raised the need for tailored education and training to improve the skills and attitudes of those delivering education and/or counselling in relation to HIV, STIs, and HCV, and for others in regular contact with key populations, such as law enforcement and social service workers. Participants from the MPact network also identified the need to break down “sexual silencing” and improve sexual health curriculum in schools.

“In schools they mainly teach about reproductive health, and sex is seen as something for reproduction and not for fun; sexual health conversations completely ignore sexual rights.”

Gay man, Eastern Mediterranean

Finally, the importance of adequate and ongoing resourcing as a key factor in providing sustainable access to comprehensive behavioral interventions was also raised by participants.

Modes of service delivery for HIV, STIs, and HCV

Perceptions of peer navigators and their impacts on initiation and retention in treatment and prevention programs (Q.3)

Although the term “peer navigators” was not universally recognized by all participants, the practice of peers assisting with health service access, information, education, and referral was greatly valued by participants across all four key population networks. Peers who facilitate access to services and information were also interchangeably referred to as “peer educators,” “peer counsellors,” and “peer consultants.” Participants both supported the concept of peer navigators, as well as their capacity to “act as a bridge between two different worlds,” in the words of one participant from the INPUD network. In some settings, peer navigators were described as one of the only available tools for reaching communities.

Across key population networks, the positive impacts of peer navigators were observed throughout the testing and treatment cascade – including treatment linkage, continuity, and re-engagement.

“I abandoned my treatment at the hospital due to the stigma. Thanks to the perseverance of a peer educator who took a lot of time to explain the advantages of being in treatment to me, I was able to start going to the hospital again, and now I have an undetectable viral load.”

Male sex worker, Africa

According to participants, the key traits of successful peer navigators include: passion for community and the health issue, communication, compassion, and supportive listening skills, first-hand experience, trustworthiness, empathy, and dedication. Participants from the GATE, INPUD, and NSWP networks also stressed the importance of having peer navigators with a specific age, gender, cultural, and/or linguistic background.

“Definitely yes, peer counselors can improve program engagement and continuity. There should be consultants of different ages to reach trans people of different ages.”

Transfeminine person, Europe

Some participants noted limitations in the use of peer navigators due to lack of resources and sustained support for their work. For example, in trans communities, it was observed that most peer navigators work on a volunteer basis or receive little compensation for their efforts, which may discourage trans people from serving as peer navigators. In addition, some participants from the GATE network raised concerns surrounding the possibility of spreading confidential information within their communities.

The impacts of online services (Q.4)

Overall, participants across key population networks and regions supported the use of online services and platforms to augment in-person services. At the same time, many participants described challenges associated with varying levels of internet access, digital competencies, as well as the broader implications of poverty.

Specific examples of online platforms and services noted by participants included the use of online dating platforms for awareness-raising, information sharing, and service linkage; social media outreach; online ordering systems combined with postal services for NSP and harm reduction supplies; and online health appointment scheduling and consultations. Participants from the MPact and NSWP networks shared that online services can be particularly impactful amongst harder-to-reach sub-populations, such as migrant sex workers or young men who have sex with men.

“We sometimes use dating apps, such as Grindr, for awareness raising and info sharing, especially for younger generations, because many are not out and don’t have access to information.”

Gay man, Europe

It was stressed across all networks, however, that online services and platforms cannot replace in-person health services. Participants in all networks emphasized the importance of maintaining in-person, face-to-face services as a gateway to broader health and support services, as well as a means to foster personal connections and trust.

“Face-to-face interventions are so important for PWUDs, as they feel seen and heard. We can never do away with face-to-face interventions for this population.”

Male drug user, Africa

Participants from all four networks additionally highlighted the role that digital inequalities play in mediating access to and uptake of online services. Concerns, including reduced access to technology, high data costs, and differing levels of digital competencies were all cited as factors affecting the use and impact of online tools and platforms. These issues can be exacerbated by criminalization and law enforcement actions, in the case of sex workers and people who inject drugs.

“[Sex workers] don’t always have internet access. It often happens that police take away their phones, or something else happens. Sex workers are often changing their phones, gadgets, and sim cards.”

Female sex worker, Europe

Due to the widespread criminalization of drug use and sex work, participants from the networks of INPUD and NSWP additionally raised security concerns associated with leaving a ‘digital footprint.’ For example, the frequent use of online tools and platforms related to sex work or drug use could be used by authorities as evidence that a person has engaged in criminalized activities, resulting in legal consequences.

Other values and preferences surrounding service modalities

Community-led services were unanimously endorsed and preferred by participants across all four key population networks. Participants described community-led services as being critical to promoting the health and human rights of marginalized groups, especially as a counterbalance to stigmatizing mainstream healthcare environments. Accordingly, participants across all population networks advocated for the scale-up of community-led interventions, as well as resources to support community-led services.

Participants discussed a range of advantages to community-led services, including their comprehensive approach to key populations' well-being; specific understanding of community health needs; greater accessibility of services and referrals; confidentiality; and safe spaces for communities to gather and self-organize for advocacy.

"[Gay and bisexual-] led services are more welcoming, attend to the whole person, are safe, and can make appropriate referrals."

Gay man, Africa

Effective community-led service models mentioned by participants included drop-in centers, mobile clinics, peer outreach, and one-stop-shop models. At the same time, participants also highlighted the need for greater collaboration between community-led and mainstream service providers, emphasizing the importance of sensitizing health care providers to provide non-stigmatizing, non-discriminatory healthcare to key populations.

"Peer-led services would be ideal as one wouldn't need to explain who you are and just explain the symptoms. But this can't be done in an isolated way. There has to be some sort of hybrid integration as it is a two-way interaction and co-existence [between general care facilities and trans-lead facilities]."

Transmasculine person, Europe

Values and preferences surrounding HCV testing and treatment

Treatment with pan-genotypic DAAs for key populations (Q.5)

Awareness of and access to HCV treatment with pan-genotypic DAAs varied greatly across key populations. Of those participants who were aware of and felt able to comment on HCV and HCV treatment, most reported ongoing barriers to the access and utilization of HCV services, including cost, treatment delays, stigma and discrimination, and lack of research and political will¹². Some participants in the NSWP network, had not even heard of pan-genotypic DAA treatments for HCV. Several participants from the INPUD network in particular also noted that in certain contexts, cessation/abstinence from drug use (and sometimes even OAT) continues to be used as a criteria for HCV treatment access (despite available evidence to the contrary) and in these circumstances can act as a major barrier to treatment.

"They also want you to stop using for you to get treatment. They also say things like if you get re-infected, they will not treat you again."

Female drug user, Africa

With the exception of participants from the INPUD network, most participants expressed limited knowledge about treatment with pan-genotypic DAAs. Nonetheless, most participants were open to this form of HCV treatment, provided that they receive adequate information on its efficacy and side effects, as well as sufficient education and research to guide treatment implementation.

"[HCV] treatment without education does not make sense. People need to be aware."

Male sex worker, Americas

¹² Note: Questions in relation to HCV DAA treatment were not included in the GATE SSI or FGD Guides.

Participants from the INPUD network conveyed the most knowledge of and enthusiasm towards pan-genotypic DAA treatment. These participants recommended the expansion of HCV DAA treatment options and settings, including at NSPs, harm reduction services, OAT clinics, drop-in centers, and general healthcare settings, to maximize access and uptake.

Frequency of HCV testing following a negative test result (Q.6)

Preferences regarding HCV testing varied greatly across the three key population networks who included this question in their research (INPUD, MPact, and NSWP). Participants from the MPact network indicated a lack of protocols and need for evidence to guide frequency of HCV testing recommendations. Meanwhile, participants from the NSWP network recommended a wide range of preferred frequencies – from once a week to once a year – with many participants considering 3-6 months as optimal. Participants from the INPUD network suggested that individuals be tested every 3 months for the first year following viral clearance, and then subsequently every 6 or 12 months, depending on risk profile.

Participants from INPUD and NSWP further recommended that regular HCV RNA testing and re-testing following cure should be made available and promoted similarly to HIV ‘Test and Treat’ approaches, whereby regular monitoring is publicly and positively promoted, widespread testing is facilitated and immediate treatment for those diagnosed is encouraged.

All groups highlighted concerns associated with criminalization, stigma, and discrimination, noting that testing should always be voluntary.

“You can’t impose testing and say to people you must be tested and force people to do things. It must be with information and consent.”

Female drug user, Europe

Other values and preferences for HCV service provision

Across the three key population networks which asked this question (INPUD, MPact, and NSWP), participants noted an overwhelming preference for HCV services to be community-led and available within community settings, in order to address concerns related to safety, confidentiality, stigma and discrimination, as well as criminalization. Some participants from the NSWP network indicated that they would also feel comfortable receiving HCV testing and treatment in a mainstream health setting.

As with other community-led services, participants advocated for increased training and resources to support community organizations in this work. In addition, INPUD participants emphasized the importance of embedding HCV testing within a broader harm reduction approach, including offering pan-genotypic DAA treatment and HCV prevention for people in prisons.

“Hepatitis C treatment and harm reduction services go hand-in-hand. People talk about access to [HCV] treatment and leave the prevention side out, or they expect that once someone gets [HCV] treatment they will remain abstinent and that’s not always the case. So, prevention always needs to be linked to treatment because health services and treatment don’t exist in a vacuum.”

Female drug user, Europe

Values and preferences surrounding STI prevention, testing, and treatment

Pooling of samples from 3 anatomical sites for chlamydia and gonorrhea testing (Q.7)

This question was only included in the research of MPact and NSWP (among male and trans sex workers). The majority of participants across both networks indicated that they were not familiar with this method for chlamydia and gonorrhea screening, and many participants from NSWP did not understand the purpose of pooling samples. Nonetheless, most participants across both networks stated that they were willing to have samples taken from three anatomical sites (urethra,

anus, and pharynx) and pooled, particularly if this method would yield the most accurate results. There was confusion across all regions for MPact respondents about how accurate these tests are. This would indicate that more education has to be done at the clinical and community level about the efficacy of these testing choices. It is evident that communities do not understand the efficacy of this method.

When people had the process explained, they were more comfortable that considerations about anal sex samples be put in the context of how gay sex and anal health be considered. Some participants from the MPact network additionally noted that due to stigma surrounding anal testing, the practice of simultaneously collecting and pooling samples from anal, pharyngeal, and urethral swabs could offer a less stigmatizing way to test for STIs. Pooling samples would also eliminate the need for health care providers to ask patients what kind of sex they engage in, providing greater discretion.

“Mix test (pooled sample) is a good idea... in our context, asking patients about their sex acts is shameful, so mix test is very good.”

Gay man, Africa

Values and preferences surrounding the periodic presumptive treatment of STIs

Values and preferences surrounding periodic presumptive treatment (PPT) were only examined by MPact and NSW. While most participants from the MPact network were unfamiliar with PPT, expressing an interest in acquiring further information on its risks and efficacy, the overwhelming majority of participants from the NSW network were both familiar with, and strongly opposed, to PPT.

“[PPT] generates more vulnerability... they are going to saturate my liver with antibiotics so that I don’t get chlamydia, instead of giving me education and access to condoms and health [services].”

Female sex worker, Americas

Participants from both networks expressed a range of concerns surrounding the potential side effects of PPT, including kidney damage and antibiotic resistance. Several participants from the NSW network additionally noted the potential negative impacts of antibiotics on vaginal health.

“I think offering antibiotics to anyone if they are not showing symptoms is really dangerous, because there’s a lot of drug resistance.”

Male sex worker, Europe

Participants from the NSW network additionally expressed concerns surrounding the ethical implications of PPT and its role in perpetuating stigma and vulnerability. Some participants felt that offering sex workers PPT was akin to using sex workers as medical ‘guinea pigs.’ Instead of offering PPT, participants from the NSW network stressed the need for increased access to STI testing and prevention methods.

“It really doesn’t make sense to me that there are situations where you are not able to test, but you are able to hand out antibiotics. We should be removing those barriers to testing, not just handing out pills.”

Trans female sex worker, Western Pacific

Other values and preferences surrounding STI services

Due to marginalization, stigma and discrimination, and violence within mainstream health settings, participants across all four networks expressed preferences for peer-based, community-led STI services as part of a comprehensive approach. Participants from each network stressed the need for accessible services which understand and address the unique needs and priorities of each key population, free from stigma and judgment.

“There is also a need for more of a holistic approach to address problems, and we really need to understand priorities.”

Gay man, Eastern Mediterranean

Some participants from the NSWP network noted that in some regions, due to the poor general state of public health services, community-led programs remain the only way that sex workers can regularly access STI testing and prevention services.

“In Macedonia, we have a community ambulance where sex workers can go and do their health checks, gynecological checks, HIV testing, and STI testing – and this is the only place where they can get these kinds of services.”

Male sex worker, Europe

Participants from the GATE network expressed concern surrounding the broader inaccessibility of HIV and STI services for trans people. With the exception of those from HIC, participants from GATE reported limited-to-no access to HIV and STI testing for trans and gender diverse individuals. Most services for STI testing are provided by cis-led LGB organizations offering services to cis men who have sex with men. As a result, trans and gender diverse people are still subjected to stereotypical assumptions about gender identity, bodies, and sexual practices, as well as discrimination and violence.

“Doctors from friendly offices are poorly informed about trans people. Trans people are faced with inappropriate questions and stigma, and are trying to reduce the number of visits.”

Transmasculine participant, Europe

Accordingly, the need to sensitize health staff to provide appropriate, non-discriminatory, gender-sensitive, and gender-affirming care was stressed by participants from GATE, INPUD, and NSWP.

Values and preferences surrounding HIV prevention

HIV prevention methods and technologies

Across all four networks, participants called for targeted, community-based HIV prevention services tailored to the specific needs of each key population. Accordingly, preferred HIV prevention methods and technologies varied across and within each key population group.

“Every individual has something that they prefer ... so when you [offer] a wider range of options ... it gives them freedom to prevent [HIV for] themselves even more.”

Female sex worker, Africa

The importance of external condoms and lubricants was noted by participants from the INPUD, MPact and NSWP networks. That said, some participants from MPact and NSWP noted that condoms are not universally available or affordable. Participants from NSWP noted many advantages of external condoms, including their ability to simultaneously protect against HIV, STIs, and unwanted pregnancy.

Harm reduction approaches were also stressed as an essential HIV prevention method. Above all, participants from the INPUD network emphasized the importance of NSP, OAT, condoms and lubricants, and other harm reduction supplies, such as naloxone, noting that these services should be available free of charge. In addition, some participants noted that in order for these services to be most effective, they must respond to the evolving needs of the community.

“I don’t really see anything really, as more useful and cost effective as needle and syringe programs, naloxone and overdose prevention responses. They are easy to access and easy to explain... they should be developed.”

Male drug user, Americas

Participants across networks also noted the importance of providing HIV prevention services which address and respect the specific needs of key population groups. Participants from the GATE network reiterated that HIV prevention methods are not targeted to the needs of diverse trans communities (i.e. different needs in transfemale, transmasculine, and non-binary trans identities). Moreover, it was noted that HIV prevention services seldom respect the identities of gender diverse people.

Pre-Exposure Prophylaxis (PrEP) and Post-Exposure Prophylaxis (PEP) were also acknowledged as effective HIV prevention methods, with participants from the MPact network most strongly advocating for the use of PrEP. At the same time, many participants across networks reported a lack of knowledge surrounding these prevention technologies, as well as low availability of both PrEP and PEP.

Participants preferred to receive HIV prevention services and commodities in a range of settings, including mobile clinics, harm reduction settings, drop-in centers, and through peer outreach.

PrEP and its different dosing regimens and modalities

Participants across all key population networks expressed a growing interest in PrEP as an HIV prevention method. That said, most participants also reported that PrEP remains widely inaccessible in their communities. When asked about preferences regarding different PrEP dosing regimens and modalities (daily oral, injectable long-acting, event-driven, and the vaginal Dapivirine ring), most participants were only familiar with daily oral PrEP.

Although many participants were not previously familiar with injectable, long-acting PrEP, participants from all four networks indicated that this would be one of their preferred dosing regimens. Injectable long-acting PrEP was perceived as being more convenient, discreet, affordable, and easier to adhere to than oral daily PrEP.

“Injectables would be ideal in mitigating costs for access, stigma from taking pills, and avert the need for ‘adherence’.”

Gay man, South East Asia

Another common theme expressed across communities was a lack of information and knowledge surrounding PrEP, including its safe and correct use, efficacy, and potential interactions with other drugs and medicines. For example, participants from the INPUD network noted ongoing gaps in the evidence base in relation to the efficacy and suitability of PrEP for people who inject drugs. For trans people undergoing gender-affirming hormone therapy, participants from GATE also pointed to gaps in research about the efficacy of PrEP, as well as misinformation about PrEP intake regimens increasing the risk of HIV infection (i.e. PrEP on demand is currently not recommended for trans people undergoing gender-affirming hormone therapy).

Participants from NSWP additionally cautioned that the growing number of PrEP users, especially in communities of men who have sex with men, has increased pressure and financial incentives from clients to provide services without condoms, increasing risks of STIs and unwanted pregnancy. This trend has been exacerbated by the fact that many sex workers were not provided with adequate information on PrEP, and may falsely believe that PrEP also protects them from other STIs.

“If a sex worker starts accepting condomless sex with clients [because of PrEP], it will create pressure on all sex workers in the streets of the neighborhood.”

Female sex worker, Europe

In general, although PrEP was supported by participants across networks, some participants stressed that what they viewed as the increasing promotion of PrEP among key populations must not come at the expense of other evidence-based HIV prevention services, such as community-led programming, NSP, and OAT.

Structural barriers and enabling interventions

Impacts of stigma, discrimination, and criminalization on access to services

Across all key populations, stigma, discrimination, and criminalization were emphasized as persistent barriers to accessing health services and remaining in treatment, as well as driving factors in perpetuating vulnerability, human rights abuses, and poor health outcomes. Participants from the GATE network additionally emphasized structural barriers to legal gender recognition.

The criminalization of drug use, sex work, same-sex relations, and gender expression not only deter members of key populations from accessing services due to fears of legal repercussions. Participants from INPUD and NSWP also noted how criminalization perpetuates the exclusion of community-led and rights-based health programming from funding mechanisms and state health responses.

“As long as drug use is criminalized, there’s not going to be enough funding or attention towards either the introduction or the scale-up of services such as HIV, hepatitis C and harm reduction services.”

Female drug user, Europe

These participants additionally noted how law enforcement’s use of condoms and injecting equipment as ‘evidence’ of sex work and drug use further hinder the use of prevention services and commodities.

“When you’re out there working the streets, maybe you... had three clients, but you only had two condoms, because you weren’t allowed to carry more. Now you’re causing a public health concern with that third client.”

Female sex worker, Americas

Stigma and discrimination also remain a salient barrier to accessing services and remaining in treatment for key populations. Participants across key population groups emphasized the pervasive problem of provider-based stigma and discrimination, including judgmental attitudes, breaches of confidentiality, denial of treatment, violence, and abuse.

“Health care staff do not respect confidentiality and when they recognize a man as gay, they are very judgmental. People don’t want to go back to [the] health center after incidents like this with unprofessional providers.”

Gay man, Africa

Moreover, participants noted how stigma and discrimination from society fuel internalized stigma among members of key populations, discouraging some community members from seeking out care and adhering to treatment. Internalized stigma can also increase vulnerability to risk behaviors, such as engaging in condomless sex, re-using injecting supplies, and using drugs in isolation.

Enabling interventions

In order to improve key populations’ access to and retention in treatment for HIV, STIs, and HCV, and to promote their health and human rights in general, participants stressed the need for policy reform, community empowerment and capacity-building, and anti-violence initiatives.

The full decriminalization of drug use and sex work was emphasized as a key enabling intervention. While the importance of decriminalization was particularly stressed by participants from INPUD and NSWP, participants from MPact also called for the decriminalization of drug use as a measure to reduce harms associated with chemsex. Participants from INPUD further noted that in tandem with decriminalization, a safe drug supply must be ensured.

Community empowerment was another enabling intervention emphasized across key population networks. Participants discussed the importance of peer outreach, awareness-raising, advocacy, drop-in centers, capacity-building, and resource mobilization to ensure sustainable community-led programming. These initiatives were seen both as a means to improve access to services, as well as an essential measure for addressing structural barriers undermining key populations' health and human rights. Participants from GATE additionally noted that community members can be empowered to become healthcare providers.

Participants from INPUD and NSWP described how community empowerment initiatives can promote individuals' self-esteem and confidence in health services.

“When the community becomes empowered, we do not need to repeatedly tell them to do testing. When they become empowered, they will do the testing by themselves.”

Female sex worker, South East Asia

In addition, participants from GATE, INPUD, and NSWP noted the importance of sensitizing health care staff, law enforcement, NGO workers, and the broader community. Community-led sensitization trainings were perceived as an effective intervention to decrease stigma and discrimination and improve the acceptability of health services.

Some participants from the communities of people who use drugs and sex workers also recommended anti-violence interventions as enabling interventions.

“If you have a structure where I can report the violence and if the community is inspired, then we have a group of people motivating one another to say I am on ARVs I feel better and the other person will go too.”

Female drug user, Africa

Participants from INPUD also felt that because violence can be common in the lives of people who use drugs (largely due to the effects of criminalization that require systemic solutions), violence prevention interventions need to be incorporated in an ongoing way into an overall wellness approach that views health as much more than “*simply a set of interventions*”. In this context, they stressed the need for services to think more about what might bring people in and empower them to think about and address their health.

Lastly, all key population networks noted the critical role that funding plays in community-led initiatives, indicating an ongoing need to prioritize funding for key population-led programming.

“It is a struggle to meet ambitious goals with inadequate funding to meet targets.”

Gay man, Europe

Limitations

This study had several key limitations. Firstly, participation in this study was predominately limited to participants who could speak English, French, Spanish, or Russian. INPUD did not recruit participants from Latin America and the Caribbean given that injecting drug use has less relevance in that region at this time.

Furthermore, participation in this study was limited to those with reliable access to the internet and technology required to participate in online interviews or focus groups. In addition to these barriers, GATE also noted that some participants could only provide answers in written form due to the inability to speak openly and confidentially in their environment.

Due to these factors, and to the heterogenous nature of key population groups, the results of this study cannot be generalized.

Discussion

This study identified many commonalities in key populations' values and preferences surrounding services for HIV, STIs, and HCV, in addition to population-specific needs and priorities. One overarching value informing all responses was the centrality of community-led interventions and service delivery models. Another key value was the importance of peer-led education and awareness-raising initiatives surrounding prevention, testing, and treatment options, as well as to reduce risk behaviors associated with specific practices. Lastly, it was emphasized that structural barriers continue to significantly impact key populations' access to services and ability to remain in treatment, necessitating greater investments in enabling interventions.

In regard to behavioral interventions, participants' preference for tailored, peer-led education, counselling, and outreach programming confirms a strong commitment to individual and community health. Community-led behavioral interventions, including peer-led counselling, are perceived as being more efficacious, both in reducing harms associated with chemsex, as well as reducing overall vulnerability to HIV, STIs, and HCV. Therefore, it is essential to prioritize peer-led behavioral interventions, which are not only more acceptable, but can better address the specific priorities of different groups with greater sensitivity.

The importance of peer-led interventions was also emphasized in regard to service delivery models for HIV, STIs, and HCV more broadly. Participants' emphasis on fostering trust, connections, and rapport with peer navigators, educators, and counsellors underscored the advantages of peer-led interventions. While online tools and platforms were supported as a means to supplement in-person services, due to differential access to information and communication technology and varying digital competencies across communities, these tools will not benefit all key population members equally. Indeed, if digital tools and platforms for service delivery are prioritized over in-person models, this may exacerbate health inequalities among key populations.

In regard to testing and treatment options for HCV and STIs, it was clear that key populations value the ability to make informed, empowered choices surrounding their health. However, key population members are seldom provided sufficient information on specific methods' advantages and disadvantages, including their efficacy, side effects, and risks. It was evident from responses that many participants, with the exception of those from the INPUD network, were less familiar with HCV treatment with pan-genotypic DAAs. Participants' negative perceptions of PPT for STIs were informed by an understanding of its potential negative health impacts, as well as ethical concerns, underscoring the importance of providing key populations with adequate information to make informed decisions.

Due to the diversity across and within key populations, preferred HIV prevention methods can be highly individual. Additionally, key populations often intersect with one another, exposing them to multiple risk factors and vulnerabilities (i.e. trans sex workers, cis MSM drug users, etc.). That said, condoms and lubricant, as well as OAT, NSP, and harm reduction supplies for people who use drugs, were perceived as the most important pillars of HIV prevention. While offering key populations a wider selection of HIV prevention methods could increase the use of HIV prevention methods, there is still an unmet need for consistent, unhindered access to condoms and lubricants, OAT, NSP, and harm reduction supplies.

As an HIV biomedical prevention method, PrEP remains both largely unavailable, and inadequately understood by many. Misinformation surrounding PrEP exists within key populations, fostering doubts surrounding its safety and efficacy and contributing to incorrect use. In spite of key populations' general support for PrEP, among for those who have heard about it, their responses also indicate that greater care must be taken to provide correct information and avoid marketing the method as a 'silver-bullet.' Moreover, the promotion of PrEP must not come at the expense of support for other evidence-based HIV prevention interventions, including community-led responses.

The significant impact of structural barriers on key populations' access to services and vulnerability to HIV, STIs, and HCV was reiterated throughout this research. Stigma and discrimination, violence, criminalization, and other harmful policies remain persistent barriers, necessitating policy reform, investments in community-empowerment, and anti-violence measures. Without addressing these barriers, participants made it clear that biomedical and behavioral interventions cannot achieve their full impact. Therefore, the importance of supporting enabling interventions—including community empowerment, anti-violence measures, and policy reform—cannot be overstated.

The findings of this study are consistent with previous findings from community-based research conducted by GATE, INPUD, MPact, and NSWP, as well as the guidance promoted within the SWIT, MSMIT, TRANSIT, and IDUIT¹³. Due to the wide range of topics covered within this study, however, further research should be pursued to gain a more in-depth understanding of individual populations' values and preferences regarding specific HIV, STI, HCV interventions.

¹³ Note: SWIT (Sex Worker Implementation Tool), MSMIT (Men Who Have Sex With Men Implementation Tool), TRANSIT (Transgender People Implementation Tool) and IDUIT (People Who Inject Drugs Implementation Tool).

