POLICY BRIEF

TRANSGENDER PEOPLE AND HIV

JULY 2015

World Health Organization

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Policy brief: Transgender people and HIV

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Abbreviations

ART	antiretroviral therapy
ARV	antiretroviral
DSM	Diagnostic and Statistical Manual
EMRO	Regional Office for the Eastern Mediterranean
HBV	hepatitis B virus
HTS	HIV testing services
ICD	International Classification of Diseases
IPV	intimate partner violence
NCAVP	National Coalition of Anti-Violence Projects
NNRTI	non-nucleoside reverse transcriptase inhibitor
NSP	needle and syringe programmes
OST	opioid substitution therapy
PAHO	Pan American Health Organization
PI	protease inhibitors
PrEP	pre-exposure prophylaxis
RTV	ritonavir
SEARO	Regional Office for South-East Asia
STI	sexually transmitted infection
TB	Tuberculosis
TMM	Trans Murder Monitoring Project
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
WHO	World Health Organization
WPRO	Regional Office for the Western Pacific

Definition of key terms

Definitions used in this document are aligned with current consensus definitions used in relevant WHO guidelines and other United Nations documents.

Hormone therapy (also known as cross-gender hormone therapy or hormone replacement therapy) is a health intervention used by many transgender people. Hormones can be used to feminize or masculinize one's appearance in accord with one's gender identity. People often make assumptions about a person's sex on the basis of physical appearance; hormone therapy can help transgender persons to express themselves and to be recognized as their self-identified gender.

Key populations are defined groups that are at increased risk of HIV irrespective of the epidemic type. Stigma, discrimination and criminalization of their behaviours or identities underlie their greater vulnerability to HIV. The five key populations are men who have sex with men, people who inject drugs, people in prisons and other closed settings, sex workers and transgender people.

Natal sex refers to the sex that a person was assigned at birth. This may or may not accord with the individual's own sense of gender identity while growing up. Transgender people, generally speaking, do not identify with the sex assigned to them at birth.

Transgender is an umbrella term for all people whose internal sense of their gender (their gender identity) is different from the sex they were assigned at birth. Transgender people choose different terms to describe themselves. For example, a transgender woman is someone assigned male at birth who identifies as female. She might describe herself as a "transwoman", "MtF", "M2F" or "female". Someone assigned female at birth who identifies as male is a transgender man. He might use the term "transman", "FtM", "F2M" or simply "male" to describe his identity. There are some transgender people who do not identify as either male or female, but rather identify outside of a gender binary. In some cultures specific indigenous terms, such as *hijra* (India), *kathoey* (Thailand), *muxe* (Mexico), *travesti* (Argentina, Brazil) and *waria* (Indonesia) are used, more typically to describe trans women or those who identify as a third sex.

Transition refers to the process that transgender people undergo to express their gender identity. This may involve gender-affirming changes to outward appearance, clothing, mannerisms or to the name someone uses in everyday interactions. These types of changes are sometimes called "social transitions". Transitioning may also involve biotechnological steps that help to align one's anatomy with their gender identity. The changes resulting from these steps are sometimes called "medical transition" or "gender-affirming procedures" and can include feminizing or masculinizing hormone therapy, soft tissue fillers and surgeries.

Transphobia is prejudice directed at transgender people because of their gender identity or expression. It can also affect other people who do not fit societal expectations for males or females. Transphobia can be "institutional", that is, reflected in policies and laws that discriminate against transgender people. It can be "structural", that is, reflected in socioeconomic injustice affecting transgender people disproportionately. It can be "societal", that is, reflected in rejection and mistreatment of transgender people by others. And, it can be "internalized", that is, reflected in negative feelings that transgender people may have for themselves or other transgender people.

WHO DOCUMENTS THAT ADDRESS TRANSGENDER PEOPLE AND HIV

- ***Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations.*** Geneva: WHO; 2014.
  http://www.who.int/hiv/pub/guidelines/keypopulations/en/

- ***Tool for setting and monitoring targets: Supplement to the 2014 consolidated guidelines for hiv prevention, diagnosis, treatment and care for key populations.*** Geneva: WHO; 2015.
  http://www.who.int/hiv/pub/toolkits/targets-hiv-keypop

- ***Sexual health, human rights and the law.*** Geneva: WHO; 2015.
  http://www.who.int/reproductivehealth/publications/sexual_health/sexual-health-human-rights-law/en/

- ***A tool for strengthening STI surveillance at the country level.*** Geneva: WHO; 2015.
  http://www.who.int/reproductivehealth/publications/rtis/sti-surveillance/en/

- ***Prevention and treatment of HIV and other sexually transmitted infections among men who have sex with men and transgender people: recommendations for a public health approach.*** Geneva: WHO; 2011.
  http://www.who.int/hiv/pub/guidelines/msm_guidelines2011/en/

- ***HIV, sexually transmitted infections and other health needs among transgender people in Asia and the Pacific.*** Manila: WPRO; 2013.
  http://www.wpro.who.int/hiv/documents/tgtechnicalbriefs/en/

- ***The time has come: enhancing HIV, STI and other sexual health services for MSM and transgender people in Asia and the Pacific.*** Bangkok: UNDP, WHO, 2013.
  http://www.wpro.who.int/hiv/documents/timehascome/en/
  http://www.searo.who.int/entity/hiv/documents/en/

- ***Regional assessment of HIV, STI and other health needs of transgender people in Asia and the Pacific.*** Manila: WPRO; 2013.
  http://www.wpro.who.int/hiv/documents/regionalassesmentTG/en/

- ***Consultation on HIV, STI and other health needs of transgender people in Asia and the Pacific.*** Manila: WPRO; 2012.
  http://www.wpro.who.int/hiv/documents/HIV_STI_and_other_Health_Needs_of_Transgender_People/en/

- ***Blueprint for the provision of comprehensive care for trans persons and their communities in the Caribbean and other Anglophone countries.*** Washington (DC): PAHO; 2014.
  http://www.who.int/hiv/pub/transgender/blueprint-trans-paho/en/

- ***Priority HIV and sexual health interventions in the health sector for men who have sex with men and transgender people in the Asia–Pacific Region.*** Manila: WPRO; 2010.
  http://www.who.int/hiv/pub/populations/interventions_sea/en/
  http://www.searo.who.int/entity/hiv/documents/9789290614630/en/

Introduction

This technical brief summarizes essential information and existing WHO recommendations for HIV prevention, diagnosis, treatment and care among transgender populations. The 2011 WHO guidance, *Prevention and treatment of HIV and other sexually transmitted infections among men who have sex with men and transgender people*, did not separate recommendations for transgender people from those for men who have sex with men. The 2014 WHO *Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations* acknowledge that the "high vulnerability and specific health needs of transgender people necessitates a distinct and independent status in the global HIV response" (p. xiii) and consider transgender people as a separate key population. However, to date no global WHO document has addressed these needs exclusively. To fill that gap, this technical brief highlights WHO recommendations on HIV prevention, diagnosis, treatment care and needs of transgender people.

Transgender-specific HIV data are limited. The majority of the published literature focuses on transgender women, given the documented heavy burden of HIV disease they bear. While this document will address HIV among transgender people, it contains limited information about transgender men, reflecting the imbalance of HIV burden and data on transgender women. While many transgender people identify as either male or female, some individuals express gender identities that do not fit within this binary. HIV data on people with non-binary identities are lacking, and, therefore, are not discussed separately in this technical brief. A technical brief on HIV among transgender youth, published in 2014, is referenced in this document where relevant.[1]

THE COMPREHENSIVE PACKAGE

a) Essential health sector interventions

1. comprehensive condom and lubricant programming
2. harm reduction interventions for substance use (in particular needle and syringe programmes and opioid substitution therapy)
3. behavioural interventions
4. HIV testing and counselling
5. HIV treatment and care
6. prevention and management of co-infections and other co-morbidities, including viral hepatitis, tuberculosis and mental health conditions
7. sexual and reproductive health interventions.

b) Essential strategies for an enabling environment

1. supportive legislation, policy and financial commitment, including decriminalization of certain behaviours of key populations
2. addressing stigma and discrimination, including by making health services available, accessible and acceptable
3. community empowerment
4. addressing violence against people from key populations.

This technical brief is intended as a resource for governments, donors and implementers to help them identify what needs to be done to address HIV among transgender people. It begins with a summary of the epidemiologic data and then moves directly to a consolidation of recommendations pertaining to transgender people and HIV. All recommended interventions for transgender people should be voluntary, without coercion or force, and informed consent ensured. It is informed by a values and preferences study of transgender people themselves, and it includes illustrative case examples. This brief concludes with a discussion of the gaps in evidence and suggested steps to fill those gaps. All recommended interventions for transgender people should be voluntary, without coercion or force, and informed consent ensured.

Epidemiology

In general, health data, including HIV prevalence data, are less robust for transgender people than for the general population due to challenges in sampling, lack of population size estimates and issues of stigma and discrimination. Research and surveillance data that include transgender people frequently fail to disaggregate the data by gender identity and involve sample sizes too small to make reasonable inferences. Transgender people remain severely underserved in the response to HIV, with only 39% of countries reporting in the National Commitment and Policy Instrument 2014 that their national AIDS strategies address transgender people *(1)*.

Transgender women

The existing data specific to transgender people demonstrate a heavy burden of HIV among transgender women, specifically transgender women who have sex with men. A systematic review and meta-analysis *(2)* found a pooled HIV prevalence of 19% among transgender women in the 15 countries with available, laboratory-confirmed data. Transgender women had odds of HIV infection 49 times greater than the general population. A separate meta-analysis of HIV among transgender women sex workers *(3)* found that these women had a pooled HIV prevalence of 27%, compared with 15%

1 Inter-agency working group on key populations. HIV and young transgender people: a technical brief. Geneva: Joint United Nations Programme on HIV/AIDS; 2014.

among transgender women who did not engage in sex work. Of note, no countries in Eastern Europe or the continent of Africa had published HIV prevalence data on transgender women at the time of these studies. Country reports in UNAIDS Gap Report 2014 suggest that HIV prevalence among transgender women sex workers is nine times higher than for non-transgender female sex workers and three times higher than for male sex workers *(1)*.

Many studies have demonstrated multiple co-occurring health problems among transgender women, including high rates of violence and victimization, substance use, sexual abuse and assault, and depression with suicidal ideation and attempts *(4–8)*. This syndemic[1] is associated with structural and social inequalities such as widespread stigma and discrimination, lack of access to identity documents that match gender expression, high prevalence of unemployment and under-employment, street-based sex work with low pay and no legal protections, homelessness and lack of access to health services, included gender-affirming care *(9–11)*. Many transgender women have partners who are at high risk for HIV. Transgender women who seek psychological affirmation of their gender from partners may be more willing to have condomless sex, thereby increasing their vulnerability to HIV *(12–16)*.

Transgender men

All published studies on HIV prevalence among transgender men are from North America, and they suggest a lesser burden of disease than among transgender women. The most recently published meta-analysis found only two studies with laboratory-confirmed HIV status among transgender men. One of the studies found no infections among participants, and the other found a prevalence of 2%, amounting to one HIV-positive study participant *(17)*. Emerging data among transgender men who have sex with men raises the possibility that this subpopulation faces heightened vulnerability to HIV *(18–22)*. Limited data suggest that mental health concerns are common among transgender men *(21, 23–25)*. It is unclear if and how mental health concerns among transgender men might affect their vulnerability to HIV.

HIV and hormonal therapy

Many transgender people use or want to have access to feminizing or masculinizing hormones to align their physical appearance with their gender identity. Respondents to a qualitative study on the values and preferences of transgender people with regard to HIV *(26)* noted that many transgender people prioritize access to and use of hormone therapy over HIV care and treatment. Therefore, access to hormone therapy is an important entry point into HIV care and treatment for transgender people.

Medical uncertainty remains over whether and how hormonal contraceptives affect HIV acquisition and transmission among natal women *(27)*. As part of the body transition process, transgender people may take doses of hormones that are larger than naturally occurring. A better understanding is needed of how hormones used for transition may affect HIV risk among transgender people. Estrogen comes in many forms, including ethinyl estradiol and 17-β estradiol. Ethinyl estradiol, the form of estrogen commonly used in oral contraceptives, has well-characterized drug interactions with antiretroviral therapy (ART) *(28)*. While guidelines of the World Professional Association for Transgender Health (WPATH) *(29)* discourage the use of ethinyl estradiol for body transition, this is the only formulation of estrogen available to some transgender women. There are published data that the effect of estrogen on antiretroviral (ARV) efficacy is limited, but the concomitant use of certain antiretroviral (ARV) drugs may decrease estrogen levels. (See http://www.hiv-druginteractions.org.) Data are lacking on additional drug interactions between ARVs and 17-β estradiol, the form most commonly used for hormone replacement therapy.

Testosterone and ARVs have been co-administered for many years with no published reports of problematic drug interactions. Testosterone use suppresses estrogen, often resulting in vaginal atrophy (that is, thinning and drying of the lining of the vagina) *(30, 31)*. Concerns have been raised about the potential impact of testosterone-associated vaginal atrophy on the risk of HIV acquisition among transgender men; however, data are unavailable.

Transgender people would benefit from systematic research on the impact of hormone therapy on HIV acquisition, transmission and drug interactions, as well as on other health effects.

1 A syndemic typically involves one or more epidemics or other societal problems that work together to create a more negative impact on health than there would be if the community were afflicted by simply the disease/epidemic.

Essential strategies for an enabling environment

Supportive legislation, policy and financial commitment

Good practice recommendation concerning decriminalization

ALL KEY POPULATION GROUPS

Countries should work towards decriminalization of behaviours such as drug use/injecting, sex work, same-sex activity and nonconforming gender identities and toward elimination of the unjust application of civil law and regulations against all key populations.

TRANSGENDER PEOPLE

- Countries should work towards developing policies and laws that decriminalize same-sex behaviours and nonconforming gender identities.
- Countries should work towards legal recognition for transgender people.

Transgender people are often socially, economically, politically and legally marginalized *(32–34)*. Discrimination against transgender people may stem from multiple forms of stigma relating to gender identity, gender expression and perceived sexual orientation. In most countries transgender people are either unable to obtain gender-appropriate legal identification or are required to undergo genital surgery to do so. Some transgender people do not desire surgery to change their bodies, and a surgical requirement is a barrier to legal recognition. For people who desire such procedures, health insurance (either private or socialized) may not cover gender-affirming surgeries. Undergoing these surgeries may be costly, and a limited number of surgeons are trained to perform them.

Absence of gender-congruent identity documents may limit access to a range of services, such as health-care and education, as well as employment and voting rights *(35, 36)*. Most jurisdictions offer no effective and enforceable legal protections against such discrimination *(37, 38)*. Thus, stigma, discrimination and lack of legally authorized or gender-appropriate identity documents exclude many transgender people from civic participation, limit economic opportunities and result in poverty and marginalization that increase HIV vulnerability *(39)*.

Transgender people in most countries face restrictive policies toward their gender expression, for example, laws in some jurisdictions criminalizing "cross-dressing" *(40)*. Other laws also affect HIV vulnerability among transgender people. For example, most countries criminalize some or all aspects of sex work. Sex work is a significant source of income for many transgender women around the world, given their exclusion from other means of income generation *(10, 34)*. In settings where sex work is illegal, transgender sex workers often bear the brunt of police brutality *(10, 40)*, and, when complaints against police brutality are lodged, they are often ignored.

At least 76 countries criminalize sexual relations between people of the same sex, with some countries imposing the death penalty *(41)*. These "anti-homosexuality laws" affect transgender people in several ways. Many societies conflate sexual orientation and gender identity; therefore, many people who express a gender different to the one assigned at birth are perceived to be homosexual and subject to criminal persecution. The lack of legal recognition of their gender means that transgender people who have sexual partners of a different gender are legally considered to have engaged in same-sex relations and are, therefore, subject to persecution under anti-homosexuality laws.

Decriminalization of sex work, cross-dressing and same-sex sexual behaviour would decrease the marginalization of transgender people that increases their vulnerability to HIV. Access to legal change of gender and name, registration of identity documents that are consistent with lived gender, and prohibition of discrimination based on gender identity or expression would enable transgender people to more easily participate in the workforce, have access to health-care services and have recourse in the case of transphobic violence. Lawmakers and law enforcement officers need skills-building trainings on how best to uphold the basic human rights of transgender people, including how to avoid unnecessary harassment, arrest, detention and incarceration, as well as how to treat transgender people with dignity, discretion and respect when searching or detaining them. In addition to legal reform, social welfare services and policies that address poverty are necessary for a holistic, effective response to the needs of transgender people.

WHO Member States use the International Classification of Diseases (ICD) to classify diseases for purposes of record-keeping and for reimbursement and resource allocation. The current version, ICD-10, includes transgender identities in the category of mental and behavioural disorders *(42)*. The ICD is currently under revision, and advocates from the transgender community are leading efforts to remove "gender identity disorders" from the mental disorder category *(43)*.

For several decades the mental health manual used by psychiatrists in the United States to diagnose disorders, the Diagnostic and Statistical Manual (DSM), included "gender identity disorder". The May 2013 update (DSM-V) replaced "gender identity disorder" with "gender dysphoria", allowing that a difference between sex assigned at birth and current gender identity may not be pathological if it does not cause the person distress *(44)*.

The transgender community advocates for reconsideration of transgender identity as a mental illness because it diminishes transgender people's autonomy in decision-making and forces them, in many jurisdictions, to be diagnosed in order to gain access to legal recognition and/or gender-affirming procedures.

Case examples

In 2007 the Supreme Court of **Nepal** ordered the government to end the system that barred "teshro linki" – or "third gender" individuals from access to basic citizenship rights. Judges ordered the repeal of penalties against cross-dressing, as well as other legal reforms, noting that cross-dressing is within an individual's human right to freedom of expression. In 2014 the Supreme Court of Nepal created the "third gender" status for hijras and transgender people.

A 2009 law in **Uruguay** allows people over the age of 18 to change their names and sex on official documents.

In 2012 the Senate in **Argentina** unanimously approved the Gender Identity Law, making access to gender-affirming procedures a legal right as part of public or private health-care plans, with the transgender person's informed consent being the only requirement. Under the same law transgender people can change their birth certificates, national ID cards and passports without a requirement for any diagnoses. **Denmark** followed the same model in 2014.

Addressing stigma and discrimination

Good practice recommendations for implementing and enforcing anti-stigma, anti-discrimination and protective policies

ALL KEY POPULATION GROUPS

- Countries should work towards implementing and enforcing anti-discrimination and protective laws, derived from human rights standards, to eliminate stigma, discrimination and violence against people from key populations.
- Policy-makers, parliamentarians and other public health leaders should work together with civil society organizations in their efforts to monitor stigma, confront discrimination against key populations and change punitive legal and social norms.

Good practice recommendations for providing key population-friendly services

ALL KEY POPULATION GROUPS

Health-care workers should receive appropriate recurrent training and sensitization to ensure that they have the skills and understanding to provide services for adult and adolescent transgender people based on all persons's right to health, confidentiality and non-discrimination.

Both internalized and experienced stigma compromise mental health and quality of life for transgender people *(45)*. Stigma and discrimination have been associated with depression, suicidal thoughts and other mental health problems among transgender people. For example, in the United States 41% of transgender people report attempting suicide *(1)*. Transphobia has also been associated with substance use as well as increased behavioural risks for HIV *(34)*.

Stigma and discrimination also serve as barriers to health care. Emerging data indicate that transgender people delay care due to discrimination *(36, 46)*. When they do seek care, they are often harassed, abused and even refused care. Few health-care providers receive adequate training on the health needs of transgender people, and, therefore, they are unprepared to meet their specific health-care needs. Health-care providers' negative attitudes towards transgender people also limit the uptake and quality of health services *(47)*. As a result, for many transgender people the point of entry to the health system may be emergency services for treatment of injuries caused by assaults and other violence.

While the burden of HIV is especially high among transgender women, transgender people have a wide array of health and social concerns, of which HIV is only one. For many transgender people transitioning to align their bodies with their identities takes priority over seeking HIV prevention and care services. Health-care providers need to be trained in both cultural competency and medical competency in the care of transgender patients. It would be helpful for health systems to create policies and workplace expectations that recognize the preferred gender and names of all patients. The local needs of transgender people should be assessed and considered when working to make health services more available, accessible and acceptable to transgender people.

Beyond the health sector, greater visibility of transgender people can increase public knowledge and acceptance. Anti-stigma campaigns that support the dignity and human rights of transgender people are needed. For example, training journalists to use non-stigmatizing language when reporting on transgender issues, encouraging positive depictions in the news about transgender people and positive portrayals in drama and comedy, and developing public service campaigns are all important ways to address stigma and discrimination against transgender people. Poverty among transgender

people can be a consequence of stigma, and in turn it can lead to greater stigmatization. This cycle can be addressed through social services/welfare reform. Transgender people themselves should be involved in, and ideally lead, efforts to address societal and health care-specific stigma and discrimination.

Case example

Young people in Asia have developed a "Loud and Proud" video campaign to address self-stigma among transgender women and men who have sex with men *(45)*. A video from Vietnam can be found at: https://www.youtube.com/watch?v=lV2-JL5m6Ck&feature=youtu.be

Community empowerment

Good practice recommendations for community empowerment

ALL KEY POPULATION GROUPS

- Programmes should implement a package of interventions to enhance community empowerment among key populations.
- Programmes should be put in place to provide legal literacy and legal services to key populations so that they know their rights and applicable laws and can receive support from the justice system when aggrieved.

TRANSGENDER PEOPLE

Organizations of transgender people are essential partners in delivering comprehensive training on human sexuality and gender expression. They also can facilitate interaction with members of communities with diverse gender identities and expressions, thereby generating greater understanding of their emotional health and social needs and the cost of inaction against transphobia.

In the context of HIV and key populations, community empowerment has been described as the process by which a group takes individual and collective ownership of programmes in order to achieve the most effective HIV responses and takes concrete action to address social and structural barriers to their health and human rights. The key elements of community empowerment are explained in detail in *Implementing comprehensive HIV/STI programmes with sex workers: practical approaches from collaborative interventions (48)*.

Transgender people can lead the process of community empowerment by engaging and mobilizing members of their community to develop solutions to their collective problems and to advocate for protection of their human rights. Meaningful participation of and partnership with community-led organizations and networks in the planning, implementation, monitoring and evaluation of activities is fundamental to improving HIV service provision for transgender people. HIV prevention, care, and treatment interventions are more effective and sustainable when conducted within an empowerment framework. Trained lay transgender people may contribute to health-care services as health educators, case managers and navigators. These roles not only empower them as people but also helps to normalize the presence of transgender people in social gathering spaces.

Over the last 20 years transgender people have increasingly become better informed and more visible, active and organized. Transgender organizations and activists played a key role in the passage of the 2011 Gender Identity Law in Argentina. *Hijras* in Bangladesh run a large health clinic that serves more than 1000 people per month. A coalition of organizations in Nicaragua developed a strategic plan calling for advocacy for legal reform, training and health care *(49)*. These examples illustrate how an empowered community can effect meaningful change for its members.

Transgender organizations, like many other key population groups, frequently lack sufficient financial resources. Funding from donors has been inadequate, and, where it is available, many transgender organizations are unaware of funding opportunities and lack the capacity to complete funding applications *(49)*. Therefore, the capacity of the transgender community may be stretched by efforts to be service providers, peer supporters and lobbyists for change. More funding is needed to support the strengthening of community systems, including advocacy, mobilization, training and direct service delivery by transgender communities *(50)*. Many transgender communities around the world have well-organized internal structures that provide ready-made opportunities for empowerment and collective action. Donors, governments and decision-makers should invest in building the capacity of transgender communities.

Case example

A coalition of 18 transgender organizations in Ecuador (The Trans Covenant) has launched a website, www.MiGeneroEnMiCedula.com, to report on progress of the gender identity reforms guaranteed in the Civil Registration Act in 2012.

Violence

Good practice recommendations for reducing violence

ALL KEY POPULATION GROUPS

- Violence against key populations should be prevented and addressed in partnership with key population-led organizations. All violence against people from key population groups should be monitored and reported, and redress mechanisms should be established to provide justice.
- Health and other support services should be provided to all persons from key populations who experience violence. In particular, persons experiencing sexual violence should have timely access to comprehensive post-rape care in accordance with WHO guidelines.
- Law enforcement officials and health- and social-care providers need to be trained to recognize and uphold the human rights of key populations and to be held accountable if they violate these rights, including perpetration of violence.

Transgender people around the world face multiple types of violence: structural, emotional, physical and sexual. There are no representative global estimates of violence against transgender people. However, several organizations around the world track reported cases of violence, including murder. For example, the Trans Murder Monitoring project (TMM) publishes annual reports of transgender homicides. Many murders of transgender people go unreported or misreported in their assigned sex at birth instead of in their lived gender. Still, the TMM project collected over 1600 reports from 68 countries of transgender people, predominately transgender women, murdered between January 2008 and October 2014 *(51)*.

The National Coalition of Anti-Violence Programs (NCAVP), based in the United States of America, produces annual reports on both intimate partner violence (IPV) as well as hate violence against gender and sexual minorities, utilising data from across the United States of America as well as Montreal and Ontario. They found that when transgender people are subjected to IPV, the violence is twice as likely to be physical than non-transgender survivors of IPV. *(52)* Almost three-quarters (72%) of all homicide victims reported to NCAVP were transgender women, and yet transgender survivors and victims only represent 13% of total reports of IPV to NCAVP *(53)*. Transgender men survivors were one and a half times more likely to experience injuries as a result of hate violence and four times more likely to be the target of hate violence in shelters than other survivors of IPV. Transgender women were almost twice as likely to experience sexual violence than other survivors of sexual violence. Of those reporting violence to the police, transgender survivors were particularly likely to experience further physical violence at the hands of the police The NCAVP report found that transgender survivors of IPV were seven times more likely to experience physical violence when interacting with the police. *(52)*

Reducing stigma and discrimination against transgender people is an essential part of preventing violence. Community-led violence prevention efforts should receive support from governments, donors and programmes. Research is needed to better address the root causes of violence against transgender people and to test violence prevention interventions. Law enforcement officers should receive training on preventing and responding to violence against transgender people and especially on effective, respectful and non-violent ways to interact with the community. Legal and regulatory measures are needed that prevent violence and facilitate safe reporting. When acts of violence are reported, they should be taken seriously, and perpetrators should be held accountable. Emergency services and health professionals should be trained to provide appropriate, confidential, non-judgemental, quality care for transgender survivors of violence, including post-rape care for survivors of sexual violence.

Essential health sector interventions

Comprehensive condom and lubricant programming

Related recommendations and contextual issues

ALL KEY POPULATION GROUPS

The correct and consistent use of condoms with condom-compatible lubricants is recommended to prevent sexual transmission of HIV and STIs (*strong recommendation, moderate quality of evidence*).

TRANSGENDER PEOPLE

- Condoms and condom-compatible lubricants are recommended for penetrative sex.
- Adequate provision of lubricants for transgender women and transgender men who have sex with men needs emphasis.

It is important for condoms and lubricants to be available for all transgender people who have penetratitve sex, regardless of the gender identity of their sexual partners. Sexual behaviour and identity vary among transgender people, as it does in the non-transgender population. Condom programmes should avoid making assumptions about the sex of transgender people's partners as well as about their sexual positioning or orientations.

Partners of transgender people can be transgender or non-transgender and of any sex or sexual orientation. A transgender woman who has a penis may be either the insertive or receptive partner during sexual intercourse. Transgender women with a neovagina may have oral, vaginal or anal sex, or all of these. Transgender men with male partners may have oral sex or be the insertive or receptive partner (or both) during sexual intercourse. For some transgender people condoms may serve as triple protection for HIV prevention, for prevention of other sexually transmitted infections (STIs) and for contraception.

Transgender women who take feminizing hormone therapy may experience loss of spontaneous erections and decreased tumescence as a side-effect. Loss of tumescence[1] and difficulty maintaining an erection can interfere with condom use and contribute to condom slippage or breakage. Transgender men who take masculinizing hormone therapy may experience an increase in sexual drive, which may lead to a greater number of sexual encounters, and a need for more condoms for penetrative sex. In addition to condom distribution, condom programming should include interventions to address correlates of low condom use, such as insufficient condom negotiating skills, potentially compounded by low self-esteem. Sexual desirability may be gender-affirming for some transgender people, and they may be willing to have condomless sex to avoid rejection. Some transgender sex workers may not use condoms during sex with their primary partners as way to distinguish it from sex with clients.

Anal sex has a much higher risk of HIV transmission than vaginal or oral sex *(54)*. However, the HIV acquisition and transmission risks for surgically constructed neovaginas are unknown and may depend on the type of surgical procedure used. Research is underway that may provide more information about the immunology of the neovagina *(55, 56)*. Similarly, there is a lack of data on the risk of HIV acquisition or transmission with a surgically constructed penis.

Condom-compatible lubricant should be used with condoms for all penetrative sex. Research on the safest formulations of lubricant for use in anal and vaginal sex is ongoing. Technical experts discourage the use of lubricants that contain spermicides and also ones that are medicinal, oil-based or containe other active substances. *(57)*.

1 Tumescence usually refers to the normal engorgement with blood (vascular congestion) of the erectile tissues, marking sexual excitation and possible readiness for sexual activity.

Access to condoms and lubricants, as well as their frequency of use, varies greatly from one context to another. Where sex work is criminalized, transgender people may be unwilling to carry condoms because they have been used by police as "evidence" of sex work. Even where condoms may be readily available and accessible, lubricants often are not. It is important that both condoms and lubricant are part of a comprehensive HIV prevention package, as it is for other populations. Because "male" condoms may not be acceptable to transgender women, nor "female" condoms acceptable to transgender men, transgender-specific marketing may be needed. Programmes should provide condoms and lubricant that are acceptable and accessible to transgender people with appropriate marketing strategies.

Harm reduction interventions for substance use and safe injection

Related recommendations and contextual issues

ALL KEY POPULATION GROUPS

- All individuals from key populations who inject drugs should have access to sterile injecting equipment through needle and syringe programmes (*strong recommendation, low quality of evidence*).
- All people from key populations who are dependent on opioids should be offered opioid substitution therapy in keeping with WHO guidance (*strong recommendation, low quality of evidence*).
- All key populations with harmful alcohol or other substance use should have access to evidence-based interventions, including brief psychosocial interventions involving assessment, specific feedback and advice (*conditional recommendation, very low quality of evidence*).

TRANSGENDER PEOPLE

- Transgender people who inject substances for gender affirmation should use sterile injecting equipment and practice safe injecting practices to reduce the risk of infection with bloodborne pathogens such as HIV and viral hepatitis B and C.
- There is no evidence of drug interactions between opioid substitution therapy and medications used for gender affirmation; however, research is very limited.

Limited data suggests that transgender people may be more likely to use psychoactive substances than non-transgender people. Substance use is associated with discrimination and HIV transmission *(58–60)*. Transgender people who use drugs (injectable and non-injectable) should have the same access to harm reduction services as non-transgender people. Needle and syringe programmes (NSP) and opioid substitution therapy (OST) programmes should be accessible and acceptable to transgender people. Providers of NSP and OST services should be trained in providing in non-judgemental and competent care for transgender individuals.

Transgender people who inject substances for gender affirmation should use sterile injecting equipment and safe injecting practices to reduce the risk of infection with bloodborne pathogens such as HIV, hepatitis B (HBV) and hepatitis C. In addition to injectable opioids, transgender people may inject hormones obtained outside of the formal health system. Emerging data suggest that many transgender women use feminizing hormones obtained outside the formal health sector due to lack of access to appropriate medically prescribed gender affirmation care *(61, 62)*. For transgender men injections are the most common way of taking hormones. Little information is available, however, on the prevalence of self-prescribed hormone injections.

People may share needles and syringes for injection of hormones due to lack of access. Needles and syringes used for hormone injections often differ in size, shape and gauge from needles and syringes used for injecting opioids. Harm reduction services need to be aware of and responsive to these specific needs.

The injection of soft tissue fillers for feminization of the body is common. The types of fillers used vary and may include industrial grade silicone, oils and other substances. Unlicensed providers may inject fillers without using sterile techniques, risking transmission of bloodborne pathogens. In addition, because they are injected without being encapsulated, the substances may migrate through the body, causing inflammation, disfiguration and even sudden death from emboli. While access to sterile equipment for soft-tissue filler injections is important to reduce the risk of bloodborne pathogens, there is no known way to reduce the harm from the injection of loose silicone and other fillers. Ideally, transgender people should have access to competent cross-sex hormone therapy by a licensed medical professional.

Transgender women who need OST to treat opioid dependence may be taking estrogen-containing substances for feminization. While there is no evidence of drug interactions between estrogens and OST, research is very limited in this area. It is important for OST providers to assess carefully all medications for drug interactions to ensure appropriate dosages – not too low to be effective and not so high as to cause side-effects.

Behavioural interventions

Related recommendations and contextual issues

ALL KEY POPULATION GROUPS

A range of behavioural interventions can provide information and skills that support risk reduction, prevent HIV transmission and increase uptake of services among all key populations.

TRANSGENDER PEOPLE

Implementing both individual-level behavioural interventions and community-level behavioural interventions is suggested.

A variety of factors at the structural, social, community and individual levels influence vulnerability to HIV. Transgender people benefit most from interventions that work at multiple levels. Evidence-based behavioural interventions can increase safer sex and HIV testing and counselling among key populations overall. Only a few of these interventions have been adapted for transgender people, however. When delivering health promotion messages and implementing behavioural interventions, it is important to ensure that messages are acceptable and relevant to transgender people. For example, interventions for men who have sex with men should be inclusive of transgender men who have sex with men. Interventions for transgender women should not be subsumed under men who have sex with men. Participants in the transgender values and preferences study expressed a strong desire for transgender-specific health information that reflects their specific needs (for example, gender affirmation) *(26)*.

Peers, the transgender community, the Internet and social media are common sources of health information among transgender people *(26)*. Therefore, peer-led interventions are likely to be more effective than behaviour change messages delivered by non-transgender people. The public health literature describes promising examples of Internet-based interventions, often led by peers *(63)*. When engaging transgender communities in behaviour change interventions, it is important to understand the social structure of the community so as to best align interventions with community norms. For example, it is common for young transgender people in urban settings in the USA to organize the community into "houses", which often serve as alternative families *(64)*. Similarly, in South-East Asia, *hijras* typically participate in highly organized, hierarchical social structures based on the *guru-chela* relationship *(65)*.

Pre-exposure prophylaxis (PrEP)

Related recommendations and contextual issues

ALL KEY POPULATION GROUPS

Where serodiscordant couples can be identified and where additional HIV prevention choices for them are needed, daily oral PrEP (specifically tenofovir or the combination of tenofovir and emtricitabine) may be considered as a possible additional intervention for the uninfected partner (*conditional recommendation, high quality of evidence*).

TRANSGENDER PEOPLE

Where HIV transmission occurs among transgender women who have sex with men and additional HIV prevention choices for them are needed, daily oral PrEP (specifically the combination of tenofovir and emtricitabine) may be considered as a possible additional intervention (*conditional recommendation, high quality of evidence*).

While several studies have demonstrated the efficacy of pre-exposure prophylaxis (PrEP) among men who have sex with men, the number of transgender women included in these studies was too small to determine if there are differences in acceptability, use or pharmacokinetics for transgender people prescribed PrEP *(66, 67)*. However, where acceptable and appropriate, PrEP may be considered an additional intervention in the HIV prevention package for transgender women and particularly for transgender people who have sex with male partners and those who are in serodiscordant relationships.[1]

1 When the recommendation on PrEP for men who have sex with men was updated in the 2014 WHO *Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations*, it did not include an updated recommendation for transgender women. This was because at that time the transgender experts on the guidelines review group requested further experience on the use of PrEP among transgender women, to be obtained through prioritizing their inclusion in demonstration projects and additional research on values and preferences. Therefore, the 2012 conditional recommendation from the WHO *Guidance on oral pre-exposure prophylaxis (PrEP) for serodiscordant couples, men and transgender women who have sex with men at high risk of HIV* still holds for transgender women.

HIV testing and counselling

Related recommendations and contextual issues

ALL KEY POPULATION GROUPS

- Voluntary HIV testing should be routinely offered to all key populations in both the community and clinical settings.
- Community-based HIV testing and counselling for key populations, with linkage to prevention, care and treatment services, is recommended, in addition to provider-initiated testing and counselling (*strong recommendation, low quality of evidence*).

Voluntary HIV testing and counselling (HTC) should be routinely offered to transgender people in both the community and clinical settings. In addition to provider-initiated testing and counselling, community-based HIV testing and counselling is recommended and should be linked to prevention, care and treatment services. These services should be acceptable to and accessible by transgender people. Transgender people should be involved in the design and implementation of services. Services led by transgender people may be more acceptable to the community.

Case example

Over a three-year period a trans-specific HIV testing and psychosocial support programme, Sisters, in Pattaya, Thailand, increased HIV testing among trans individuals by 25% (68).

HIV testing counsellors should be trained on and sensitized to transgender health issues in order to deliver transgender-relevant messages. HIV testing staff who are able to provide information or referrals about gender-affirming care facilitate utilization of HIV testing services by members of the transgender community *(26)*.

Locations and hours of testing should respond to the needs of the transgender community. Both mobile and fixed sites should be available to maximize the accessibility of HTC services. Forms used to collect data at HIV testing sites should include options for people to disclose that they are transgender, if they choose, knowing who will have access to that information. For example, some HIV testing sites forms ask both the sex assigned at birth and current gender. The response options available for the current gender questions should include locally relevant, respectful (non-derogatory) terms for transgender people.

HIV self-testing kits are available for use in many countries. WHO has not issued normative guidance on HIV self-testing. However, UNAIDS and WHO have issued a short technical update discussing important legal, ethical, gender and human rights considerations for entities that are considering or already implementing HIV self-testing *(69, 70)*.

As a key population, transgender people may be particularly vulnerable to coercive or mandatory testing. WHO guidelines are clear that all types of HIV testing must be fully voluntary and never coerced or mandatory *(71)*.

HIV treatment and care

Related recommendations and contextual issues

ALL KEY POPULATION GROUPS

- As a priority, ART should be initiated in all individuals with severe or advanced HIV clinical disease and individuals with CD4 counts of ≤350 cells/mm^3 (*strong recommendation, moderate quality of evidence*).
- ART should be initiated in all individuals with HIV with CD4 counts between 350 and 500 cells/mm^3 (*strong recommendation, moderate quality of evidence*).
- ART should be initiated in all individuals with HIV, regardless of WHO clinical stage or CD4 count, in the following situations:
  - individuals with HIV and active TB disease *(strong recommendation, low quality of evidence)*
  - individuals co-infected with HIV and HBV with evidence of severe chronic liver disease *(strong recommendation, low quality of evidence)*
  - partners with HIV in serodiscordant couples, to reduce HIV transmission to uninfected partners *(strong recommendation, low quality of evidence)*
  - pregnant and breastfeeding women.

Transgender people should have the same access to HIV care and treatment as other populations. These services should be welcoming and competent in the care of transgender individuals. Barriers to engagement and retention in HIV care include stigma, past negative experiences, prioritization of hormone therapy and concerns about interactions between ART and hormone therapy. Facilitators of engagement and retention in care include having a health care provider who is knowledgeable about transgender medical issues, the ability of the health facility to provide and integrate hormone therapy and HIV care and clinic staff who are respectful and sensitive to transgender issues *(72, 73)*. Studies of correlates of adherence and viral suppression among transgender women have found that less stress, due to less discrimination, was associated with better adherence and lower viral load. Adherence to hormone therapy was correlated with adherence to ART *(74, 75)*. Non-discriminatory and trans-inclusive ART services, in which transgender people's need for both ART and hormone use are addressed, may help improve uptake and ART adherence by transgender people. Members of the transgender community assert that education and empowerment of transgender people is essential to encouraging them to seek treatment *(26)*.

Antiretroviral drugs may have drug-drug interactions with the hormones found in oral contraceptives (ethinyl estradiol particularly) *(76)*. While not recommended, transgender women often use oral contraceptives for feminization, especially where safer formulations of estrogen (17-β estradiol) are unavailable or more expensive. Limited data suggest that contraceptive hormones used by natal women may interact with some non-nucleoside reverse transcriptase inhibitors (NNRTIs) and ritonavir (RTV)-boosted protease inhibitors (PIs). These interactions have the potential to alter the safety and effectiveness of either drug. In particular, ethinyl estradiol is known to be more thrombogenic than 17-β estradiol. When used in combination with ARV drugs that potentiate metabolic abnormalities, the risk of thrombotic events may be higher *(29)*.

However, current WHO contraception guidelines conclude that no drug interactions between hormonal contraceptives and currently recommended ART or PrEP are significant enough to prevent their use together *(76)*. Most interactions between oral contraceptives and ARV drugs decrease the blood levels of estradiol but not of ARVs. Starting, stopping or changing ART regimens may lead to hormonal fluctuations among transgender women taking gender-affirming medications; therefore, close monitoring is recommended *(28)*.

There are limited data on the interactions between ARVs and other drugs that transgender women use in feminizing hormone therapy, particularly anti-androgens (for example, cyproterone acetate or flutamide). The same is true for androgens (for example, dihydrotestosterone) commonly used by transgender men. Currently, there are no documented drug interactions between these medications and ARVs. However, more research is needed.

Self-medication with products and doses that are not recommended is common, and health-care providers should be aware of such self-medication, alert clientsto possible risks and monitor potential side-effects.

Prevention and management of co-infections and co-morbidities (viral hepatitis, TB, mental health)

Related recommendations and contextual issues

ALL KEY POPULATION GROUPS

- People from key populations should have the same access to TB prevention, screening and treatment services as other populations at risk of or living with HIV.
- People from key populations should have the same access to viral hepatitis B and C prevention, vaccination, screening and treatment services as other populations at risk of or living with HIV.
- Routine screening and management for mental health disorders (particularly depression and psychosocial stress) should be provided for people from key populations living with HIV in order to optimize health outcomes and improve adherence to ART. Management can range from co-counselling for HIV and depression to appropriate medical therapies.

Living in prisons and other congregate settings increases the risk for TB. Such settings could include not only prisons but also brothels, bars, drop-in centres, drug treatment centres, health facilities and shelters. These are places where some transgender people are likely to spend time. Services for TB prevention screening and treatment as well as viral hepatitis screening and treatment should be available and accessible to transgender people, provided by health-care providers trained and sensitive to the needs of transgender people.

Transgender people may be at increased risk for viral hepatitis through injection of hormones or through sexual transmission. Like other populations they should have access to screening, HBV vaccination, prevention and treatment services for hepatitis B and C. When treating viral hepatitis among transgender people who are taking hormones for gender affirmation, it is important to screen for drug-drug interactions between hormone therapy and medications used for the treatment of viral hepatitis.

The impact of stigma on mental health has been well documented *(33, 77–79)*. The stress of societal stigma and discrimination against transgender people, as well as the stigma of HIV, can lead to self-stigma and related mental health problems among transgender people living with HIV *(80, 81)*. Transgender people living with HIV should be screened routinely for mental health disorders and have access to appropriate management in a non-stigmatizing, gender-affirming setting with the clear understanding that transgender identity itself should not be considered a mental illness.

Sexual and reproductive health

Related recommendations and contextual issues

ALL KEY POPULATION GROUPS

- Screening, diagnosis and treatment of STIs are crucial parts of a comprehensive response to HIV; this includes services for key populations. STI management should be in accord with existing WHO guidance and be adapted to the national context. Also, it should be confidential and free from coercion, and patients must give informed consent for treatment.
- Periodic screening of people from key populations for asymptomatic STIs is recommended (*conditional recommendation, low quality of evidence*).
- In the absence of laboratory tests, symptomatic people from key populations should be managed syndromically in line with national STI management guidelines.

TRANSGENDER PEOPLE

Health-care providers should be sensitive to and knowledgeable about the specific health needs of transgender people. In particular, genital examination and specimen collection can be uncomfortable or upsetting whether or not the person has undergone genital reconstructive surgery.

Health-care providers should be sensitive to and knowledgeable about the specific sexual and reproductive health needs, concerns and desires of transgender people. Routine STI screening, diagnosis and treatment is an important part of comprehensive HIV prevention and care for transgender people. Taking a sexual history is an important part of performing an appropriate sexual health exam; it is particularly important when determining what parts of the body need to be screened for STIs. When discussing sexual practices, health-care providers should avoid making assumptions about the anatomy or sexual behaviour of transgender people. Open-ended questions allow for responses that the provider may not have anticipated. At the same time, it is important with transgender people, as with all others, to only ask questions that are relevant to providing health care to the person. Likewise, the physical exam should be conducted in a respectful, private setting and only when indicated. In particular, genital examination and specimen collection can be uncomfortable or upsetting, whether or not the person has undergone genital reconstructive surgery. Some transgender people may be uncomfortable with their anatomy or use terms to refer to their genitals that may be unfamiliar to the provider. Whenever possible and appropriate, providers should consider using language that the transgender person uses to describe themselves and their body. Many transgender people have been victims of physical and sexual violence and may find genital exams particularly difficult physically and psychologically. Health care providers should take this into consideration when providing care to transgender people.

Contraceptive services

Related recommendations and contextual issues

ALL KEY POPULATION GROUPS

It is important that contraceptive services are free, voluntary and non-coercive for all people from key populations.

TRANSGENDER PEOPLE

It is important to counsel transgender women who use oral contraceptive pills for feminization about the higher risk of thrombotic events with ethinyl estradiol than with 17-beta estradiol.

As noted above, transgender women may use oral contraceptive pills for feminization when safer alternatives are not available or accessible. Counselling on sexual and reproductive services for transgender women should discuss the possibly higher risk of thrombosis with ethinyl estradiol found in oral contraceptives compared with 17-β estradiol. For transgender women who retain a penis and testes and who have female partners, it is important to discuss fertility desires. While estrogens may significantly reduce fertility, they may not entirely prevent pregnancy. It is important that transgender women who desire biological offspring have the opportunity to discuss their reproductive options prior to initiating feminizing hormone therapy, since it is unclear whether viable sperm will be produced after continued exposure to estrogen. Counselling of transgender women with female partners who can become pregnant needs to address contraception if pregnancy is not desired.

It is also important to discuss fertility desires with transgender men. Transgender men who retain a uterus and ovaries may still be able to become pregnant when having vaginal intercourse, even while taking androgens. Therefore, transgender men with male partners who do not wish to become pregnant need to be offered contraceptive options if desired.

Access to gender-affirming therapy is an integral part of primary care for many transgender people. When transgender people do not have access to medically supervised services, they may self-medicate with products and doses that may not be safe. Health-care providers should be informed about transgender health-care needs and rights and aware of resources for medical protocols. The World Professional Association for Transgender Health publishes guidelines for the care of transgender patients that is available online at http://www.wpath.org *(29)*. These guidelines include some medical information but focus more on psychosocial aspects of transgender health care. The Center of Excellence for Transgender Health at the University of San Francisco in the USA has a website that provides medical protocols for the primary care of transgender patients, including hormone therapy, at http://transhealth.ucsf.edu.

Access to gender-affirming surgery is limited, even in high-income countries. Few providers worldwide have been trained in gender-affirming surgeries, and the cost of surgery is often beyond the reach of many transgender people. For transgender people who are planning to or who have recently undergone surgery, their primary care provider should communicate with the surgeon, if possible, concerning appropriate pre-operative and post-operative care.

Cervical cancer screening

Related recommendations and contextual issues

TRANSGENDER PEOPLE

Specific considerations are needed for transgender men:

- Transgender men who retain their female genitalia often miss out on cervical screening and other sexual health services, as they may not seek out or may be excluded from those services. As a result, they face increased risk of ovarian, uterine and cervical disease.
- Following total hysterectomy, if there is a history of high-grade cervical dysplasia and/or cervical cancer, a Papanicolaou test of the vaginal cuff can be performed annually until three normal tests are documented and then every two to three years.
- Following removal of ovaries, but where the uterus and cervix remain intact, WHO cervical screening guidelines for natal females can be followed. This may be deferred if there is no history of genital sexual activity. It is important to inform the pathologist of current or prior testosterone use, as cervical atrophy can mimic dysplasia.

Transgender men who retain genitalia from birth often miss out on cervical screening and other sexual health services, such as breast cancer screening, as they may not seek out or may be excluded from those services. As a result, they may face increased risk of ovarian, uterine and cervical disease. Health-care providers should recognize that some transgender men might experience emotional discomfort with genital procedures or experience physical pain due to tissue atrophy. Access to cervical screening should be provided routinely without disclosing a transgender man's sex assigned at birth.

Following total hysterectomy, if there is a history of high-grade cervical dysplasia and/or cervical cancer, a screening of the vaginal cuff should be performed annually until three normal tests are documented and then repeated every two to three years *(82)*. Following removal of ovaries, but where the uterus and cervix remain intact, WHO cervical screening guidelines for natal females can be followed. This may be deferred if there is no history of genital sexual activity. It is important to inform the pathologist of current or prior testosterone use, as cervical atrophy can mimic dysplasia.

Summary and key points

Access to comprehensive, integrated, quality health services, including HIV services, that respond to transgender needs must be improved. Services must respond to the particular health needs of transgender people, including integrated delivery of sound advice on safer gender-affirmation treatment and services, mental health and substance use. The specific needs of transgender people in terms of HIV prevention, diagnostic testing, treatment and care should be addressed, and the transgender community should be engaged in service provision. Effective HIV prevention outreach programmes linking to HIV testing and treatment services are urgently needed in the transgender community. Governments and donors need to work together with transgender communities to develop and adequately fund an evidence-based national HIV plan that specifically addresses the needs of transgender people.

Key points

- Worldwide, transgender women bear an extraordinarily heavy burden of HIV.
- HIV prevalence among transgender men appears to be low, but further research may be needed in order to determine the risk, particularly among transgender men who have sex with men.
- Transgender people have been neglected in the global HIV response.
- HIV vulnerability among transgender people is embedded in the structural contexts of stigma and discrimination in employment, education, housing and health care.
- Transgender people have multiple health needs beyond HIV; therefore, holistic care is needed.
- An enabling environment is crucial to support the implementation of effective health sector interventions.
- Funding must be dedicated to interventions tailored for transgender people, particularly transgender women, who bear the brunt of the HIV disease burden.
- Health-care systems need to be knowledgeable about transgender health issues and provide quality, respectful services to transgender people.

Research agenda

Areas for further research include the following:

- mapping and population size estimates of transgender populations in a way that protects safety and confidentiality;
- how to assess transgender status in epidemiologic surveillance and data collection systems;
- obtaining an adequate sample size and disaggregating data by gender identify in key populations studies;
- implementation research on biomedical interventions, such as PrEP and early ART, as part of a comprehensive package of evidence-based prevention interventions for transgender people;
- HIV risk among transgender people who do not identify on a gender binary;
- HIV risk among transgender men who have sex with men, which may be higher than for other men who have sex with men;
- improving understanding of appropriate HIV prevention, treatment and care options for transgender people, taking into consideration and engaging with the diversity within transgender communities;
- the effects of hormones commonly used by transgender people on HIV acquisition, transmission and treatment;
- operational research to develop transgender-specific service delivery models in various settings as suited to local contexts.

Additional resources

World Professional Association for Transgender Health.
http://www.wpath.org/

Center of Excellence for Transgender Health.
http://transhealth.ucsf.edu/

UNAIDS. The Gap report 2014: transgender people.
http://www.unaids.org/sites/default/files/media_asset/08_Transgenderpeople.pdf

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