Since the start of the global HIV epidemic, women have been disproportionately affected by HIV in many regions. Today, women constitute more than half of all people living with HIV. 1 AIDS-related illnesses remain the leading cause of death for women of reproductive age (15-44). 2

Young women (15-24 years), and adolescent girls (10-19 years) in particular, account for a disproportionate number of new HIV infections. In 2016, new infections among young women aged (15-24) were 44% higher than men their age.3 In eastern and southern Africa, young women made up 26% of new HIV infections despite only accounting for 10% of the population.4 Some 7,500 young women across the world acquiring HIV every week.5
In East and Southern Africa young women will acquire HIV five to seven years earlier than their male peers. In 2015, there were on average 4,500 new HIV infections among young women every week, double the number in young men.

In west and central Africa, 64% of new HIV infections among young people in 2015 occurred among young women. The difference is particularly striking in Cameroon, Côte d’Ivoire and Guinea where adolescent girls aged 15–19 are five times more likely to be infected with HIV than boys of the same age.

Even in regions such as Eastern Europe and Central Asia, where the population most affected by HIV is injecting drugs users, the majority of whom are men, women make up a rising proportion of people living with HIV. In Russia, for example, the number of young women living with HIV aged 15-24 is double that among men of the same age.

This epidemic unfortunately remains an epidemic of women.

- Michel Sidibé, Executive Director of UNAIDS

Why are women and girls particularly at risk of HIV?

HIV disproportionately affects women and adolescent girls because of their unequal cultural, social and economic status in society.

Intimate partner violence, inequitable laws and harmful traditional practices reinforce unequal power dynamics between men and women, with young women particularly disadvantaged. HIV is not only driven by gender inequality, but it also entrenches gender inequality, leaving women more vulnerable to its impact.

Lack of access to healthcare services

In some countries, women face significant barriers to accessing healthcare services. These barriers occur at the individual, interpersonal, community and societal levels. Barriers take many forms including denial of access to services that only women require, discrimination from service providers stemming from views around female sexuality, and poor quality services.

Procedures relating to a women’s sexual and reproductive health (SRH), performed without consent, including forced sterilisation, forced virginity examinations and forced abortion, also deter women from accessing services. In some cases, healthcare providers do not fully understand laws around childbirth and HIV. This can lead to women choosing to have an abortion because they are misinformed about their options and how to protect their health as well as their child’s.

Additionally, in 29 countries women require the consent of a spouse or partner to access SRH services.

A lack of access to comprehensive HIV and SRH services means that women are less able to look after their sexual and reproductive health and rights (SRHR) and reduce their risk of HIV infection.

Young women’s lack of access to healthcare

In many settings, where SRHR and HIV services exist, they are primarily for married women with children and do not meet the specific needs of unmarried young women and adolescent girls. Healthcare providers often lack the training and skills to deliver youth-friendly services and do not fully understand laws around the age of consent.
In many countries, organisations cannot legally provide SRHR and HIV services to people under 18-years-old because it is seen as encouraging ‘prostitution’ or the trafficking of minors and may bring the organisation into conflict with the law.19

A study of young women aged 18-24, in Soweto, South Africa, found they knew where to obtain SRH information and services but that common experiences of providers’ unsupportive attitudes, power dynamics in relationships and communication issues with parents and community members prevented respondents from accessing and utilising the information and services they needed.20

A study on SRH services in Indonesia found that, in large part, sexual activity outside of marriage, often referred to as ‘free sex’, was viewed as unacceptable by both service providers and young people themselves, due to dominant cultural and religious norms. As a result, service providers were often reluctant to provide SRH services to unmarried but sexually active young people, and unmarried young people were too ashamed or afraid to ask for help.21

Age-restrictive laws, such as those that ban contraception under a certain age, also act as barriers to SRHR and HIV services for young women.22 Mandatory parental consent has been shown to deter young women from accessing SRHR and HIV services due to fear of disclosure of an HIV positive status or punishment.23 As a result of age restrictions, in Kenya, Rwanda and Senegal over 70% of unmarried sexually active girls aged 15 to 19 have not had their contraception needs met.24

Adolescent girls and young women belonging to key affected populations are also negatively affected by laws that criminalise injecting drug use, sex work and homosexuality.25 Their ability to protect themselves from human rights violations and HIV are further amplified by their age.26 Despite this, even where programmes for key populations exist, the presence of ‘youth-friendly’ services to address the specific needs of young people from these groups are normally lacking.27

Lack of access to education

Studies have shown that increasing educational achievement among women and girls is linked to better SRH outcomes, including delayed childbearing, safer births and safer abortions.28 It has also been shown to be linked to reduced risk of partner violence, another factor that makes women and girls vulnerable to HIV.29

Research has shown a direct correlation between girls’ educational attainment and HIV risk; girls with at least six years of school education are more likely to be able to protect themselves from HIV.30 In Botswana, UNAIDS reports that every additional year of school a girl completes has been shown to reduce her risk of HIV infection by 11.6%.31

However, many young people who are in school do not receive adequate HIV and sex education.32 Based on information from the 37 countries that reported data, only 30% of young women compared to 36% of young men had comprehensive knowledge about HIV.33 In west and central Africa, only 24% of women had comprehensive knowledge.34

Poverty

Poverty is an overarching factor that increases vulnerability to, and the impact of, HIV.

The poorest women may have little choice but to adopt behaviours that put them at risk of infection, including transactional and intergenerational sex, earlier marriage, and relationships that expose them to violence and abuse. Poorer and less-educated women may be less knowledgeable about risks and therefore less able to adopt HIV risk-reducing behaviours.35

The risk of trafficking and sexual exploitation is also higher for young women and adolescent girls living in poverty.36
Food insecurity, often linked to poverty, acts as a barrier to treatment for women living with HIV. This increases both the risk of HIV advancing and onward transmission.37

There is evidence that shows that cash transfers to young girls can improve their SRH outcomes, empowering them and helping them to stay in school.38

**Gender based violence and intimate partner violence**

Intimate partner violence and gender based violence prevents many women, particularly young women, from protecting themselves against HIV.39 In some regions it has been estimated that women who experience intimate partner violence are as much as 1.5 times more likely to acquire HIV.40

In places with high HIV prevalence, women who experience intimate partner violence are 50% more likely to acquire HIV than women who do not.41

Intimate partner violence has been identified as a key driver of HIV transmission in east and southern Africa. More than 30% of ever married or partnered young women (aged 15–24 years) in Uganda, Tanzania, Zambia and Zimbabwe experienced intimate partner violence in the previous 12 months in 2015. It is estimated that around half of adolescent girls aged 15–19 in Namibia will experience intimate partner violence.42

Gender based violence, a physical manifestation of gender inequality, has been shown to act as an important barrier to the uptake of HIV testing and counselling, to the disclosure of HIV-positive status, and to antiretroviral treatment (ART) uptake and adherence, including among pregnant women who are receiving ART as part of services to prevent mother-to-child transmission (PMTCT).43

A study in the regions of Brazil with the highest rates of gender based violence and highest prevalence of HIV (São Paulo in the Southeastern region and Porto Alegre in the Southern region) found women were at increasingly greater odds of being HIV-positive with greater frequency of experiencing gender based violence during their lifetime.44 Overall, in Brazil 98% of women living with HIV reported a lifetime history of violence and 79% reported violence prior to an HIV diagnosis.45

**Sugar daddy culture and transactional sex**

Age-disparate sexual relationships between young women and older men are common in many parts of the world, with particularly high levels in both East and Southern Africa and West and Central Africa. In many instances, these relationships are transactional in nature, in that they are non-commercial, non-marital sexual relationships motivated by the implicit assumption that sex will be exchanged for material support or other benefits.46

Transactional sex with an older man is more likely to expose young women to unsafe sexual behaviours, low condom use and an increased risk of sexually transmitted infections.47

A long-term study of age-disparate sex and HIV risk for young women took place between 2002 to 2012 in South Africa. It is estimated that in South Africa a third of sexually active adolescent girls will experience a relationship with a man at least five years older than them. The study found a cycle of transmission, whereby high HIV prevalence in young women was driven by sex with older men (on average 8.7 years older) who themselves had female partners with HIV, many of whom had acquired HIV as young women.48
Child marriage

As of 2017, around one in seven adolescent girls (aged 15 to 19) in the world were married or in union.49

Girls who marry as children are more likely to be beaten or threatened by their husbands than girls who marry later, and are more likely to describe their first sexual experience as forced. As minors, child brides are rarely able to assert their wishes, such as whether to practice safer sex.50 These factors all increase HIV risk.

Biological factors

The risk of HIV acquisition during vaginal sex has been found to be higher for women than for men in most (but not all) biological-based studies.51

This high susceptibility can be explained by a number of factors including the ability of HIV to pass through the cells of the vaginal lining, the larger surface area of the vagina.52 Adolescent girls may be at further increased risk due to the existence of greater proportions of genital mucosa, which are present in an immature cervix. Adolescent girls are also susceptible to relatively high levels of genital inflammation which may also increase the risk of HIV acquisition.53

Due to the lower uptake of ART among men, in most countries it is likely that fewer men than women are virally suppressed, which means men are more likely to pass the virus on to others. In settings where the main mode of transmission is heterosexual sex, this further increases women’s risk of acquiring HIV.5455

HIV testing and counselling (HTC) for women and adolescent girls

A major gap in HIV service provision for women can be found in HIV testing and counselling (HTC), which is a vital gateway to treatment services.

A study conducted in Tanzania between 2003 and 2012 found the odds of HIV testing were higher among young women (15-24) who were married than young women who were not. It also found antenatal care to be an important determinant for HIV testing. Women who had given birth in the two years and received antenatal care had increased odds of getting tested compared to young women who had not given birth. Young women with primary and/or secondary education were also more likely than those without any formal education to test for HIV.56

Treating women and adolescent girls living with HIV

Antiretroviral treatment (ART) for women

Globally, adult women are more likely to be accessing antiretroviral treatment than men. In 2016, 60% of women had access to treatment compared to just 47% of men.57 This has meant that despite women being more affected by HIV globally, the AIDS-related death rate is 27% lower among women than among men, decreasing by 33% since 2010.58 59

In 2015, 9.2 million women aged 15 years and older living with HIV were accessing life-saving ART.

Coverage is higher among pregnant women attending clinics that provide PMTCT services. In South Africa, for example, while ART coverage is only 53% for women over the age of 15, PMTCT
coverage is over 95%. Similarly, in Uganda ART coverage is 65% in women over the age of 15, yet PMTCT service coverage is over 95%.60

Clearly PMTCT services are proving effective. However, despite considerable progress, 24% of pregnant women living with HIV in 2016 did not access antiretroviral drugs (ARVs) for PMTCT and efforts are failing to reach young women who are not pregnant. 61 62 For more information on PMTCT see our children and HIV page.

A study of around 2,000 women living with HIV from Western Europe, Canada, Central and Eastern Europe, Latin America and China found 88.2% were currently taking ART. Barriers to accessing care that disproportionately affected women included transportation, lack of gender autonomy, stigma, economic constraints, lack of knowledge, and gender roles.63

The study found the most prevalent barrier to care experienced by women in the study was HIV-related stigma from within their own community. HIV/AIDS knowledge, lack of supportive/understanding work environments, lack of employment opportunities, and personal financial resources were also key barriers stopping participants from accessing care.64

**Antiretroviral treatment (ART) for young women**

Nonetheless, AIDS-related illness are the leading cause of death among women of a reproductive age.65 A lack of youth-friendly HIV treatment, support and care services prevents many young women from accessing ART. Studies from Southern Africa have shown how loss to follow up a year after enrolling on ART is higher among young people compared to both adults and children.66 67

**Barriers to adherence**

Various factors can act as barriers to women adhering to ART including a lack of accurate information about the use of ARVs. Misunderstandings about treatment have been linked to poor adherence and loss to follow-up, increasing the chances of drug resistance and treatment failure.68

Intimate partner violence, which is fuelled by gender inequality, can also affect adherence. For example, a study of African serodiscordant couples (when one person is HIV positive and the other is not) found that women who had been exposed to intimate partner violence in the previous three months were 50% more likely not to adhere to pre-exposure prophylaxis (ARV medication taken by someone who is HIV negative before exposure to HIV to lessen the likelihood of transmission, otherwise known as PrEP) than women who had not experienced it.69

**Reducing mother to child transmission**

**Family planning**

Family planning is one of the most important PMTCT measures. Reducing the number of unintended pregnancies among women living with HIV would reduce the number of children born with HIV. Pregnant women living with HIV are also at greater risk of dying from pregnancy-related complications than women who are not living with HIV. In 2015, WHO estimates that globally an estimated 4,700 maternal deaths were caused indirectly by AIDS-related illnesses.70

A study in Kenya found that, despite improvements in coverage of family planning, women living with HIV were more likely than other women to have experienced an unintended pregnancy.71

Despite this, programmes to help women living with HIV avoid unwanted pregnancies remain inadequate. The most recent population-based surveys show that, although some countries (notably Malawi, Swaziland and Zimbabwe) have made noticeable improvements in their efforts to provide
family planning services, 11 of the 21 countries identified as a priority by UNAIDS do not meet the need for family planning for 20% or more of married women.72

An experimental study linking HIV with family planning services was conducted in Mumbai, India. Two hospitals were involved in the study, one of which integrated HIV and family planning services, while the other offered standard HIV services. At each site, 150 HIV positive women who did not intend to get pregnant in the next year and were eligible to use dual methods, were enrolled in the study.73

At the end of one year, 60% of women in the intervention group reached Family Planning Centres compared to 8% in the control group. In the intervention group, there was three times more acceptance of, and continued use of, dual protection methods along with increases in condom use and less unplanned pregnancies than in the control group.74

Integrating healthcare

Integrating health services so that they cover maternal and child health as well as HIV and SRHR services have been shown to produce better health outcomes for pregnant women.75

CASE STUDY: The Integra Initiative

The Integra Initiative, implemented by the International Planned Parenthood Federation (IPPF), the Population Council, and the London School of Hygiene & Tropical Medicine, has generated important evidence on the feasibility, effectiveness, cost, and impact of different models for delivering integrated HIV/SRH services in settings with high and medium HIV prevalence in sub-Saharan Africa.76

Conducting studies in Kenya and Swaziland between 2008 and 2013, the project found that integrating HIV services into family planning and postnatal care services can improve the use of HTC. The vast majority of women in the studies preferred fully integrated SRH//HIV services to save time and money. Yet many women living with HIV prefered SRH services, such as family planning, to be integrated into specialist HIV units as they trusted the providers at these facilities, enjoyed continuity of care from them, had reduced fear of stigma within specialist sites, and benefited from the opportunity to meet other clients living with HIV. The study also found there was potential for integrated services to improve cost efficiencies at facilities but this often went unrealised.77

Let’s say today I am going for family planning and I am using vehicles... That is money. Tomorrow family planning, the following day for HIV virus, that way it becomes expensive.

- Woman living with HIV in Kenya78

Increasing male involvement

Research from Kenya recorded a 45% decrease in mother-to-child transmission (MTCT) rates and mortality among women whose partners attended antenatal clinics, and a 41% decrease in MTCT
among women with partners who had tested for HIV. Involving male partners also provides an opportunity to identify mixed status couples and facilitate access to treatment.

As part of the Integra Initiative, studies were conducted in Kenya and Swaziland to assess the barriers to accessing SRH services for couples. It found that, among men who used health facilities for SRH services, only a few reported positive experiences. Many highlighted a lack of privacy and confidentiality as barriers, while some also reported unavailable staff, a lack of staff motivation and long waiting times as problematic. Having to take time off from work was also a common barrier for working men. The few men who described positive experiences with health care providers at facilities reported friendliness and lack of invasive questioning. Many men perceived questioning from staff as embarrassing, especially if the provider was a young female.

The study also found men to strongly prefer traditional healers, particularly for sexually transmitted infections. This was due to the fact that many traditional healers are male, and they were perceived as offering greater privacy, were more easily accessible and did not carry out physical examinations. Traditional healers also offer flexible or delayed payment schemes, which incentivised men to consult healers when they needed.

HIV prevention programmes for women and girls

Addressing poverty and promoting economic empowerment

The World Health Organization (WHO) promotes a number of approaches to help reduce women’s vulnerability to HIV.

Addressing poverty has been shown to reduce high-risk sexual behaviour, particularly among young women in low and middle-income countries, and thereby prevent the sexual transmission of HIV.

CASE STUDY: HEAL in Uganda

In Uganda the Health Empowerment and Livelihoods (HEAL) programme combined HIV prevention training, testing and counselling with savings and business-enterprise coaching and life skills training, helping young women secure access to higher earnings and increasing overall levels of confidence and self-esteem. HEAL has found that engaging local leaders, authorities and men makes women more likely to participate in savings groups and less likely to fear repercussions as a result of their involvement. This engagement helped the wider community to see the benefits of women’s participation in savings groups for the family and the community.

HEAL also arranged for a bank representative to go to villages and speak to the community directly about the project. In an evaluation, programme implementers Act4Africa found a 25% reduction in men and women reporting high-risk sexual behaviour compared with the project baseline. By the end of the project, the vast majority (80%) of those testing HIV positive were taking up healthcare referrals compared to only 48% at the start.

Cash transfers

For adolescent girls, several randomised control trials in Africa found school attendance and safer sexual health to be directly incentivised by a cash transfer scheme, which had a positive effect on
However, studies suggest that financial support augmented with social support from parents or teachers increases HIV-prevention benefits over cash alone. A study in South Africa found a cash transfer support which included social support led to a reduction in multiple and concurrent partners and other HIV-risk behaviours among both young women and men.88

School-based interventions

In 2015, UNAIDS and the African Union included age appropriate comprehensive sexuality education (CSE) as one of five key recommendations to Fast-Track the HIV response and end the AIDS epidemic among young women and girls across Africa. In the same year, many countries in Asia and the Pacific, West Africa and Europe were revising their policies and approaches to scale up CSE.89

If girls are able to access CSE before becoming sexually active they are more likely to make informed decisions about their sexuality and approach relationships with more self-confidence. CSE is also known to increase adolescent girls’ condom use, increase voluntary HIV testing among young women and reduce adolescent pregnancy, especially when linked with non-school-based youth-friendly SRHR services, provided in a stigma-free environment.90

CSE not only plays an important role in preventing negative SRH outcomes, but also offers a platform to discuss gender inequality and human rights and to promote respectful, non-violent relationships. A 2011 systematic review of engaging men and boys through school education recorded reductions in sexual violence and other forms of violence in seven out of nine studies. Of the 47 studies that examined attitudes towards acceptability of violence, ten showed significant improvements in attitudes and less tolerance of violence against women.91

Addressing violence

Risk-reduction education and counselling includes specific messages about equitable decision-making with partners; violence against women and its links to HIV; supporting women to negotiate safer sex in unequal power relationships and provides referrals to support services.92

A number of successful interventions that address gender and intimate partner violence as part of wider empowerment programmes for woman include SASA!, a community mobilisation programme developed by Raising Voices in Kampala, Uganda; DREAMS in sub-Saharan Africa and SheConquers in South Africa (see our gender inequality page for further detail).

HIV testing and counselling, PMTCT and treatment services can provide opportunities for the issue of violence towards women to be addressed. Healthcare workers can be trained to recognise the signs of intimate partner violence, promote gender equality in the community, increase women’s access to services and teach women about partner communication and negotiation skills.93

However, a systematic review of universal screening interventions where women were routinely asked by a healthcare professional if they have experienced intimate partner violence, showed that screening is not effective in either reducing violence or improving women’s quality of life.94 As a result, the WHO recommends identifying women based on signs and symptoms of intimate partner violence rather than universal screening.95

Laws addressing gender inequality and violence against women

Laws and policies that promote gender equality create an environment that increases the likelihood of success and sustainability of efforts to reduce violence against women and their vulnerability to HIV.96

As of 2014, 143 countries guarantee equality between women and men in their constitutions; 132
have equalised the minimum age of marriage (without parental consent) at 18 years or older, at least 119 have passed legislation on domestic violence and 125 have passed laws to make workplaces and public spaces safer for women by prohibiting sexual harassment. For more information see our gender inequality page.

The way forward

To better address the impact of HIV on women, particularly on young women and adolescent girls, approaches are needed that consciously adopt the perspectives of women in all their diversity.

As recommended by WHO, programmes need to better integrate SRHR and HIV services and adopt a woman-centred approach, underpinned by two guiding principles: human rights and gender equality. Women must be seen as active participants in, as well as beneficiaries of, health systems served by programmes that respond to women’s specific needs, rights and preferences.

Better strategies are needed across health systems to improve the accessibility, acceptability, affordability, uptake, equitable coverage, quality, effectiveness and efficiency of services, particularly for adolescent girls. This population must be better empowered to drive the design and implementation of services so that they are truly able to meet their needs.

Integrated services must be provided in ways that respect women’s autonomy in decision-making about their health, and include provision of information and options to enable women to make informed choices about all aspects of their SRH, including family planning, sexual rights and HIV.

Photo credit: istock/peeterv. Photos are used for illustrative purposes. They do not imply any health status or behaviour on the part of the people in the photo.

Tools and resources:

USAID (2014) Educating Girls: Creating a foundation for positive sexual and reproductive health behaviors

USAID (2017) Economic empowerment: a pathway for women and girls to gain control over their sexual and reproductive health

5. UNAIDS (2017) ‘When women lead change happens: Women advancing the end of AIDS’ [pdf] and
11. United Nations News Centre (2010, 9 June) 'Noting progress to date, Ban urges greater efforts against HIV/AIDS'
15. OHCHR ‘Sexual and reproductive health and rights’ (Accessed 14/3/2017)
21. IPPF/Coram Children’s Legal Centre (2016) ‘Overprotected and Underserved: The Influence of Law on Young People’s Access to Sexual and Reproductive Health in Indonesia’
22. The Global Coalition on Women and AIDS (2014) 'Advancing young women’s sexual and reproductive health and rights in the context of HIV'[pdf]
34. UNAIDS (2016) 'Prevention Gap Report'[pdf]
40. UNAIDS (2017) Ending AIDS: Progress towards the 90-90-90 targets
41. UNAIDS (2017) 'When women lead change happens: Women advancing the end of AIDS'[pdf]
42. UNAIDS (2016) 'Prevention Gap Report'[pdf]
43. UNAIDS (2016) 'Prevention Gap Report'[pdf]
47. ATHENA (2013) ‘Integrating strategies to address gender-based violence and engage men and boys as partners to advance gender equality through National Strategic Plans on HIV and AIDS: West and Central Africa Regional Consultation’
52. ibid
53. ibid
54. ibid
60. UNAIDS (2017) ‘When women lead change happens: Women advancing the end of AIDS'[pdf]


68. Aidsmap (2010) ’TB/HIV treatment literacy’


70. UNAIDS (2016) ‘Final Global Plan Progress Report’


75. UNAIDS (2014) ’The Gap Report’[pdf]


77. ibid


82. ibid


85. STOP AIDS (2017) ‘Women’s economic empowerment’[pdf]

86. STOP AIDS (2017) ‘Women’s economic empowerment’[pdf]


- 90. UNAIDS ‘Comprehensive sexuality education in Zambia’[pdf]


- 98. WHO (2017) ‘Consolidated guideline on sexual and reproductive health and rights of women living with HIV’[pdf]


- 100. WHO (2017) ‘Consolidated guideline on sexual and reproductive health and rights of women living with HIV’[pdf]


Last full review: 12 April 2017

Next full review: 12 April 2019

Last updated: 11 April 2018