

AHO Strategy and Plan of Action on HIV/AIDS and Access to Antiretroviral Therapy for Women: 2020 - 2030

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Summary

Over the past 30 years, enormous progress has been made in the prevention and treatment of HIV/AIDS. Yet a complex combination of factors including gender inequality mean that women are disproportionately affected by this public health crisis; with HIV/AIDS ranking as the second leading cause of death in African women (WHO, 2018a). The amalgamated effect of both social and biological causes similarly places 'key populations' at risk of poor HIV/AIDS outcomes. People from these underserved groups made up a quarter of all new HIV infections in those aged 15 - 49 years in Eastern and Southern Africa in 2018; and almost two thirds in Western and Central Africa (UNAIDS, 2019).

ART is an effective and affordable treatment for HIV, which also prevents transmission, yet 36% of Africans living with HIV lack access to these medications (WHO | Regional Office for Africa, 2020). Similarly, nationwide combination approaches are highly successful in reducing HIV transmission, especially when interventions are community-based. Accelerating HIV prevention and widening ART access are therefore essential in tackling the global epidemic. Furthermore, a range of evidence shows that programmes and policies can effectively address social determinants of health and remove the barriers to healthcare faced by key populations: these efforts must also be strengthened in order to meet the UNAIDS 95-95-95 targets by 2030.

This report presents Africa Health Organisation's 2020-2030 Strategy and Plan of Action on HIV/AIDS and Access to ART for Women. The ultimate goals of strategy can be split into three themes:

The infographic consists of three horizontal bars, each with a different color and icon. The top bar is yellow and features an icon of three people connected by lines, representing prevention. The middle bar is orange and features an icon of a pill bottle and a pill, representing healthcare. The bottom bar is red and features an icon of a scale of justice, representing equality. Each bar contains a title and a list of bullet points.

- Prevention**
 - Preventing new HIV infections through biomedical and behavioural interventions, including the prevention of mother-to-child transmission
- Healthcare**
 - Accessible healthcare systems providing HIV diagnosis, ART and long-term support for people living with HIV
- Equality**
 - Promoting equality in healthcare systems and across broader society, for women and girls, key populations and all people living with HIV

Instead of a 'one size fits all' strategy, AHO advocates for community-driven programmes which are tailored to meet the needs of specific groups, including women and key populations. A strong financial commitment is required to meet these targets and it is key that they are underpinned by thorough monitoring and evaluation, to respond to epidemiological trends and to maximise impact. Looking forward, biomedical advances and years of dedicated research in this field mean that the question of eliminating HIV/AIDS and providing ART for all is no longer a question of *if* but *when*. Hence, the next 10 years are critical in preventing avoidable HIV infections and AIDS-related deaths.

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Introduction

There are approximately 25.7 million people living with human immunodeficiency virus (HIV) in Africa, 1.1 million of whom were newly infected in 2018 (WHO | Regional Office for Africa, 2020). This public health crisis has a devastating impact not only on women, but in particular young women in sub-Saharan Africa. In this region, one in four of all new HIV infections in 2017 was accounted for by women between the ages of 15-24, despite this group making up just 10% of the overall population (UNAIDS, 2020b). This gender disparity results both from biological causes and the complex interaction of social determinants of health, including gender inequality. Social, legal and political factors are likewise a significant cause of the heightened risk of HIV in 'key populations', who are often marginalised; and in many communities people continue to face stigma and discrimination simply as a result of their HIV status.

Notwithstanding, a combination of biomedical, behavioural, and structural interventions can eliminate HIV. UNAIDS estimates that through greater condom use, voluntary male medical circumcision (VMMC), sexual health services, harm reduction for people who use drugs, social protection programmes and antiretroviral therapy (ART), the number of new HIV infections in adults globally could be reduced to 200,000 by 2030 (UNAIDS, 2014). AHO recognises that providing targeted outreach programmes and services for key populations is a priority, alongside wider progress in human rights, social equality and patient empowerment.

Whilst there is no cure for HIV/AIDS, continuous treatment with ART allows people living with HIV to have long and productive lives; and this has been a key driver of the 40% reduction in AIDS-related deaths across Africa between 2010 and 2018 (WHO | Regional Office for Africa, 2020). However, alongside the fact that a significant proportion of people lack access to this essential public health intervention, another issue is that HIV levels can rapidly rebound if treatment is disrupted. It is therefore equally imperative that people living with HIV are supported to adhere to treatment across their lifetime.

Continuous ART ensures viral suppression to the extent of preventing HIV transmission; and greater levels of ART coverage have been shown to reduce the risk of community infection (Tanser et al., 2013). For example, ART limits cases of mother-to-child transmission to 1-2%, which is the primary cause of child infection and can otherwise occur pregnancy, birth or breastfeeding (Sturt, Dokubo and Sint, 2010). Without treatment, it has been estimated that 15-45% of mothers with HIV will transmit the virus to their infant (WHO, 2019). Since the prevention of mother-to-child-transmission (PMTCT) was launched as a global priority of the World Health Organisation (WHO) in 2009, significant progress has been made in this area, as over 1.4 million infections in children have been prevented (UNAIDS, 2018).

However, the current rate of progress is not enough. The UNAIDS 90-90-90 targets set for 2020 (in which 73% of people living with HIV have been diagnosed, receive ART and are virally suppressed) have only been met by 7 African countries (UNAIDS, 2020b). Large differences across the continent highlight the feasibility of making vast improvements in prevention, diagnosis rates and levels of treatment coverage. This is all the more important in light of the COVID-19 pandemic. As well as early research suggesting that HIV significantly increases the risk of mortality from COVID-19, disruptions to preventative interventions and the distribution of medication could have hugely detrimental and long-lasting impact on the goal of eliminating HIV/AIDS (Davies, 2020). It is therefore vital important that AHO works with governments, international organisations and community partners to affirm their commitment to tackling HIV/AIDS.

Background

Tackling discrimination and gender inequality are essential in eliminating HIV. For example, it is a combination of physiological and social factors which results in women being more likely to acquire HIV. Patriarchal attitudes contribute as women can lack the power and economic independence to insist of safe sex. These beliefs also underpin gender-based violence (GBV) against women, which is often exacerbated in times of humanitarian crisis. The Sudan Civil War, where survivors of rape have contracted HIV, highlights this (Sperber and Ohanesian, 2019). Additionally, it has been estimated that in the last 12 months alone, 243 million girls and women worldwide have experienced sexual and/or physical violence from an intimate partner. Intimate partner violence (IPV) is associated with a 1.5 times increased risk of HIV acquisition (UNAIDS, 2020c). Moreover, survivors often find it difficult to access HIV/AIDS services and may be afraid of disclosing their HIV status to healthcare workers. Hence, IPV is also associated with poorer clinical outcomes (Schafer et al., 2012). It is also worth noting that, even if not living with HIV themselves, young women and girls are more likely than their male peers take a caregiving role for family members with HIV, which can negatively affect school attendance (Robson et al., 2006).

Women in key populations¹ face an even higher risk of HIV/AIDS, due to a combination of stigma, discrimination, and HIV-risk behaviours. This is evident in the stark difference in HIV acquisition rates in these groups in comparison to the general population: transgender women are 13 times more likely acquire HIV, female sex workers are 13 times more likely and people who inject drugs are twice as likely (UNAIDS, 2018). The causative factors of these health disparities frequently interact with each other, such as social isolation and violence leading to mental illnesses like PTSD, which undermine daily function and can lead to ART adherence. Furthermore, people who are part of multiple key populations face amplified challenges: for example, transgender women who are in prison are at an increased risk of abuse in comparison to cisgender peers (Telisinghe et al., 2016). On top of this, key populations face institutionalised discrimination in healthcare and legal systems; and are therefore less likely to access HIV prevention services and treatment. Equally, legal barriers can make it challenging to collect data on marginalised and criminalised key populations, which exacerbates their omission from health policies (Rao et al., 2018).

Transgender women in Africa face high levels of violence and discrimination, which is generally endorsed by a lack of legal recognition and protection, and the criminalisation of same-sex relationships. Social exclusion and employment discrimination frequently drive women towards high-risk behaviours and sex work. Moreover, research specifically focusing on transgender women is limited. It often inaccurately subsumes them with cisgender gay men and men who have sex with men, and there is a widespread lack of understanding about gender non-conforming individuals in different cultures (Jobson et al., 2011). Whilst gay men and men who have sex with men are a key population group, transgender women are significantly more likely to report familial rejection, depressive symptoms, and a fear of walking in public spaces. This discrimination has been associated with higher levels of sexual risk behaviour, such as condomless anal sex. One recent study in Lesotho highlights this, by showing that the HIV prevalence in transgender women was 3.6 times higher than that in cisgender men who have sex with men (Potteat et al., 2017).

¹ Defined in this report as: transgender women, female sex workers, women who use drugs, women in prison, and disabled women

Similarly, female sex workers experience high levels of discrimination and violence. A recent study carried out in South Africa found that 65% of those surveyed had been discriminated against within the last year as a direct result of having engaged in sex work. Over half had experienced IPV in the past year; 47% had experienced violence from clients; and 19% violence from the police (Coetzee, Gray and Jewkes, 2017). Most African countries have laws which criminalise sex work, or some aspects of it, which creates these unsafe working environments. The same laws also restrict access to HIV prevention and treatment services.

In West and Central Africa, it is thought that 30% of people who inject drugs are living with HIV (Harm Reduction International, 2020). Despite their strong evidence-base in reducing transmission, a lack of political will means that harm reduction services across the continent are severely underfunded. The specific issues of gender inequality are difficult to assess as studies of drug users rarely include women; and there is a notable lack of programmes addressing the needs of women who use drugs (Harm Reduction International, 2020). Moreover, punitive laws limit access to healthcare, such as the possession of a needle without a prescription being enough to result in arrest in some areas.

High rates of HIV in prison populations are a consequence of the criminalisation of high-risk behaviours such as drug use, and of prison environments themselves. Poor living conditions, including overcrowding and a lack of contact with health services, put prisoners at a heightened risk of both HIV and tuberculosis (TB). For those who do have access to HIV testing, results are not always kept confidential, which breaks fundamental medical ethics principles (Piot et al., 2015). Moreover, across Western and Central Africa, 13% of women in prison are estimated to be living with HIV. This is in comparison to 7% of men in prison (Harm Reduction International, 2020). Whilst women in make up a smaller proportion of the population overall, they often have worse access to healthcare and face high levels of sexual violence (Telisinghe et al., 2016).

One of the main barriers disabled women face in terms of HIV prevention and treatment is a lack of accessible HIV services. Their needs are rarely considered in education programmes, due to educators being unable or unwilling to recognise their sexuality. Subsequently, disabled people tend to have less knowledge about HIV compared to their peers (Hanass-Hancock, 2009). As disabled people are at a higher risk of experiencing sexual abuse, this is a particularly pertinent issue for women and girls.

Although migration is not inherently a risk factor for HIV, some migrants have worse HIV/AIDS health outcomes. This can result from discrimination, language barriers and a lack to access to healthcare services. Female migrants are particularly vulnerable as they are more likely to experience sexual violence. In addition to this, economic insecurity can push migrants towards transactional sex (International Labour Organisation, 2008). More generally, poverty is inextricably linked to HIV/AIDS: food insecurity due to poverty has been correlated with high HIV risk behaviour in women (UNAIDS, 2018). Alongside this, those who cannot afford healthcare are most at risk of AIDS-related mortality.

Moreover, there are still high levels of stigma surrounding HIV itself. Over half of all people in Ethiopia would 'avoid buying vegetables from a vendor with HIV' and 42% stated in a recent survey that children living with HIV should not be allowed to attend schools (UNAIDS, 2019). Furthermore, people living with HIV often experience discrimination from healthcare services; including judgemental attitudes, breaches of HIV-status confidentiality, and a lack of access to treatment for other health problems (Orza, Welbourn and Bewley, 2014; UNAIDS, 2018). Women living with HIV often experience violence, or the threat of violence, because of their diagnosis. More shockingly, there have been reports of forced sterilisation of women with HIV, which violates fundamental human rights (Global Network of People Living with HIV, 2020). The effect of HIV stigma, whether perceived or enacted,

should not be underestimated: it has been estimated that reducing its cumulative impact on HIV prevention, testing, treatment and ART adherence would have a greater impact on the PMTCT than introducing additional biomedical interventions (Prudden et al., 2017).

Despite a range of evidence showing that prevention programmes are effective at averting new HIV infections, a lack of political commitment and funding means that less than 20% of people at risk of HIV infection have access to these interventions (Piot et al., 2015). This is particularly evident in the low rates of condom use in key populations (UNAIDS, 2020a). Another contributing factor to the HIV/AIDS epidemic is the lack of accessible and affordable sexual health services across Africa, with only 58% of women of reproductive age reporting to have their family planning needs met with modern contraceptives (Kantorová et al., 2020). Women living with HIV face additional barriers to accessing sexual health services, despite this being a vital part of the PMTCT. This is highlighted by a recent global survey of women living with HIV which found that whilst 80% were aware of sexual health services, almost 40% lacked access to good quality facilities in which their rights were 'promoted, protected and upheld' (Orza, Welbourn and Bewley, 2014).

Recent figures show that the rate of mother-to-child transmission of HIV is 9.9% in Eastern and Southern Africa; and 20.2% in Central and Western Africa (UNAIDS, 2018). The risk of transmission is significantly higher in adolescent mothers, who are almost three times less likely to have planned pregnancies than adult mothers (Ramraj et al., 2018). Progress towards the PMTCT must be accelerated as women living with HIV face an increased risk of pregnancy-related death, and HIV/AIDS and maternal conditions are the two leading causes of death for African women aged 15-49 (WHO, 2018a). Moreover, vertical transmission is the most common type of HIV transmission to children. Whilst low mortality rates in children living with HIV can be achieved, early diagnosis and treatment play are key to ensuring strong treatment outcomes; and currently, the virological tests required to diagnose HIV at birth are not always available (Kabue et al., 2012).

Alongside prevention, the coverage of HIV testing must be expanded. It has been estimated that 15% of people in Eastern and Southern Africa living with HIV do not know their status; and 36% of people in Western and Central Africa (UNAIDS, 2019). Simultaneously, healthcare guidelines in some countries 'aggressively promote HIV testing and disclosure of HIV status' to the extent that health workers sometimes lack informed consent when carrying out HIV tests (UNAIDS, 2019). Whilst women are more likely to access testing than men, they can face the specific barriers of abandonment or violence from male partners; as well as a legal requirement for some young women to have parental or spousal consent to access HIV services (Avert, 2016).

The next pre-requisite for eliminating HIV is strong links between diagnostic and treatment services, which would ensure people diagnosed with HIV immediately start treatment. However, logistical and fiscal challenges in healthcare systems often result in unreliable ART supplies in clinics. On top of this, the WHO estimates that one in ten of all drugs in low- and middle-income countries are falsified or substandard (WHO, 2018a). More broadly, health systems in some regions face severe difficulties, such as staff shortages. A recent survey also found that 14% of people across Africa who had used medical services in the past 12 months paid a bribe to do so (Transparency International, 2019).

Moreover, it is not enough to simply provide access to ART. Even a short break in treatment can result in rapid virological rebound and disease progression. Different groups face specific barriers to adherence: this is exemplified by research showing that young people are more likely to drop out; and that strategies which are effective in adults are not necessarily so in adolescents (UNAIDS, 2018). In addition, treatment disruption can contribute to ART resistance. This problem already affects over

40% of children in sub-Saharan Africa exposed to ART via the PMTCT and may be exacerbated by the expansion of ART coverage (Boerma et al., 2016). In the cases where resistance does arise, it is key that second-line treatments are available, though this may present further challenges. The growing need for second- and third-line treatments been estimated to raise the per person cost of ART from \$480 to \$600 by 2030 (Glassman and Temin, 2016). Access to alternative treatments is equally important to maintain adherence in people who experience unmanageable side effects from ART (Al-Dakkak et al., 2012).

Finally, reducing AIDS-related deaths requires healthcare systems to provide accessible screening of and treatment for opportunistic infections. Around 445,000 people died in Africa because of HIV/AIDS (WHO, 2020) in 2019. Even with high effectiveness of TB preventative treatment, the biggest contributor to this was TB; and this is a particularly pertinent issue for people who are in prison, people living in poor-quality housing and people who use drugs.

Past successes and failures

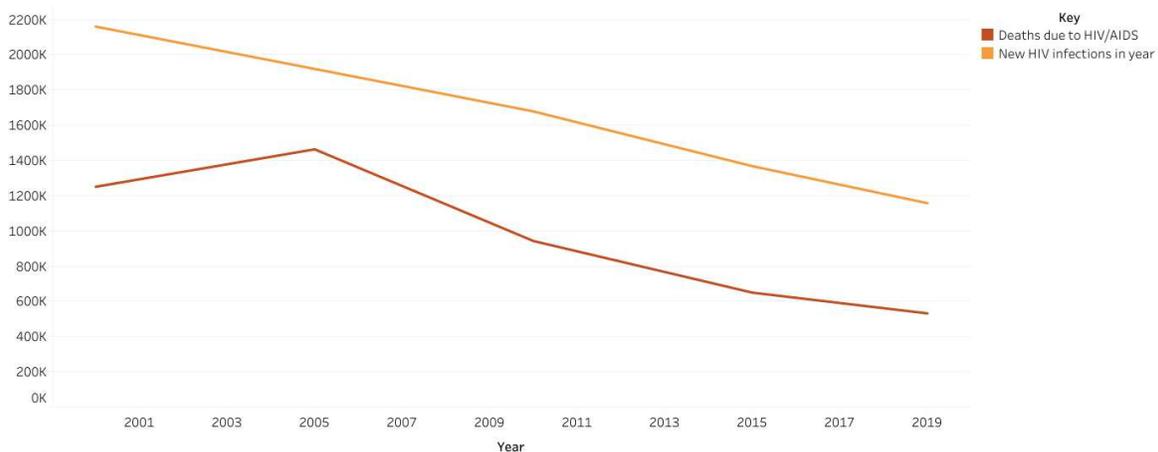


Figure 1: HIV/AIDS trends across Africa (WHO, 2020)

African countries have had huge successes in controlling the HIV/AIDS epidemic, with significant decrease in both deaths due to HIV/AIDS and the number of new HIV infections over the past 20 years (see Figure 1). This is exemplified by Botswana, which achieved 90% PMTCT coverage by 2014 and became the first country in sub-Saharan Africa to fully commit to providing ART to all its citizens in 2016. Botswana has since met the UNAIDS 90-90-90 targets and has seen a significant decrease in both HIV incidence and AIDS-related mortality (UNAIDS, 2018; Moyo et al., 2018).

Recent studies in Uganda highlight the efficacy of taking a multi-pronged strategy to HIV prevention. Across the country, high levels of ART coverage were combined with VMMC, respectively reaching 69% and 59% of eligible groups in 2016. Behavioural interventions were also implemented, albeit with mixed effects: condom use remained unchanged over time, though adolescents reported lower risk sexual behaviour. Overall, this resulted in a 42% reduction in HIV incidence between the years of 2006 and 2016 (Grabowski et al., 2017). However, the decline in HIV infections did not reach women aged 20-24, which demonstrates the limitations of a 'one size fits all' approach in meeting the needs of different groups.

The successes of both Botswana's and Uganda's approaches are further highlighted in Figure 2, which compares the percentage coverage of ART, number of HIV/AIDS-related deaths and the number of people living with HIV across Africa (WHO, 2020).

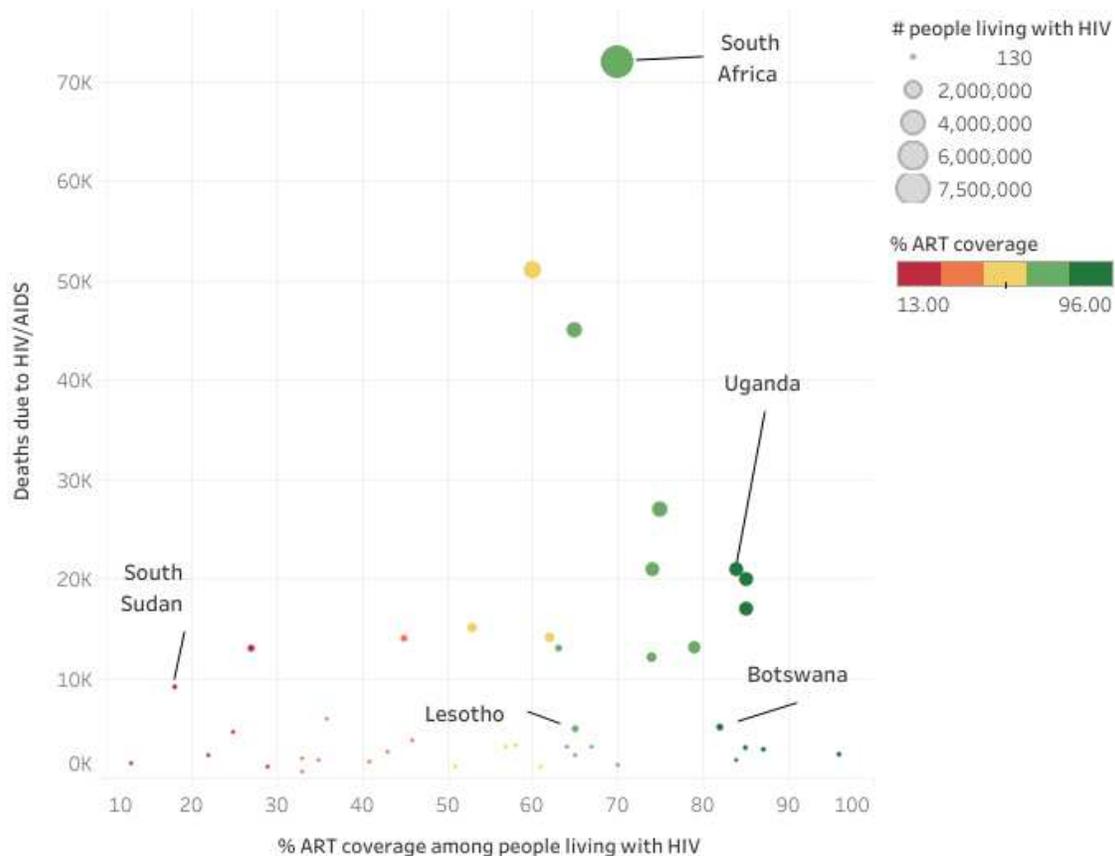


Figure 2: Percentage coverage of ART, number of HIV/AIDS-related deaths and number of people living with HIV by country (WHO, 2020)

Prevention

The main biomedical interventions for HIV prevention are detailed below in *Table 1*. As previously addressed by AHO, the factors that increase the risk of HIV transmission are multifactorial and, as no single strategy is completely effective in preventing transmission, healthcare systems must take a holistic approach to prevention (see *AHO's Plan of Action for the Prevention and Control of HIV and Sexually Transmitted Infections 2020-2030*). For example, education programmes should be combined with freely available condoms and regular HIV/STI testing.

Method	Effectiveness
Condoms (male and female)	Highly effective both in protecting against HIV and other sexually transmitted infections, which can increase the risk of HIV acquisition
Microbicides	Moderately effective at preventing HIV with high gel adherence (Abdool Karim et al., 2010)
VMMC	Provides a significant degree of protection against HIV acquisition, as well as substantially reducing transmission to sexual partners. Highly cost effective and can be carried out by healthcare workers without the need for extensive training.
ART	Whilst ART does not cure HIV, consistent use reduces the chance of transmission to almost zero, known as 'treatment as prevention'. ART can also be given as post-exposure prophylaxis (PEP), as an emergency measure after possible HIV exposure; or in long-term prevention, as pre-exposure prophylaxis (PrEP).

Table 1: Methods of preventing the transmission of HIV/AIDS

In the past 10 years, using PrEP to stop HIV acquisition in high-risk groups has revolutionised prevention in countries such as the UK. However, studies carried out in African women in serodiscordant relationships have had limited success due to low adherence rates (Van Damme et al., 2012). Further research is required to evaluate the cost-effectiveness of PrEP in different settings, and to determine if intermittent dosing would be more effective. For example, a recent clinical trial with a long-acting PrEP injection given once every 8 weeks showed promising results when compared to daily oral medication, by providing easier drug management and greater confidentiality (Bokoch, 2020).

It also is vital that HIV behavioural prevention programmes are evidence-based and tailored to social and cultural contexts. This is exemplified by a meta-analysis of community-level interventions aiming to improve condom usage in the general population. The analysis found that whilst these programmes did increase knowledge about sexual health and to some extent condom use, they did not reduce the incidence of HIV or of sexually transmitted infections (Moreno et al., 2014). The gap ‘between improvement in knowledge, behaviours and biological outcomes’ was hypothesised to result from behavioural interventions failing to take into account wider social frameworks, such as unaffordable condom costs or women being unable to consistently negotiate condom use.

Furthermore, prevention strategies directed at key populations are currently underfunded, making this a high-efficacy area for reducing HIV transmission. One area with a particularly large scope for development is harm reduction strategies for drug users. There is strong evidence that taking a person-centred and human rights-based approach to healthcare policy, such as needle and syringe programmes, would reduce the risk of both HIV and viral hepatitis transmission (Harm Reduction International, 2020). It is also key that these changes are supported by accessible HIV/AIDS treatment and prevention services. An example of this provided by the recent development of a ‘one-stop’ clinic in India, which combines harm reduction alongside HIV care (Harm Reduction International, 2020).

Healthcare

Alongside biomedical advances, changes to healthcare systems would equally improve HIV/AIDS prevention and treatment. This is exemplified by HIV self-testing, which has been promoted since 2016 by the WHO as an accurate and empowering method of diagnosis. Randomised control trials have shown that self-tests are associated with a statistically significant rise in test uptake and there is moderate evidence that this method increases testing frequency (Johnson et al., 2017). Whilst health services must ensure that there is a robust link between test results and treatment services, self-tests can also be beneficial in increasing testing in stigmatised key populations. For example, the peer distribution of self-tests has been shown to increase uptake in female sex workers (UNAIDS, 2018). Furthermore, testing uptake can be increased by the integration of HIV services with wider healthcare. This increase has been demonstrated both when providing HIV testing alongside screening for NCDs like diabetes, and when providing HIV tests at six-week infant immunisation visits (UNAIDS, 2018).

It has been proposed that removing payment for healthcare would improve ART adherence. However, this can counterintuitively result in patients paying more to access treatments, such as if shortages in supplies and staff make private healthcare a more attractive option (UNAIDS, 2018). A more robust method of improving the accessibility and quality of care is community ART delivery. Community-based peer support, for example, is a low-cost way of increasing adherence that removes the time and financial barriers associated with visiting distant services (Bemelmans et al., 2014). This also benefits the clinics themselves by allowing healthcare workers to focus on patients with complex needs. The vast success of trained peer supporters acting as ‘mentor mothers’ in Uganda in increasing both ART adherence and the uptake of early infant HIV testing further exemplifies the advantages of this

approach. This scheme was shown to improve the emotional wellbeing of mothers; and as the psychosocial aspect of HIV care is overlooked across Africa, the potential positive impact of expanding peer schemes is huge (UNAIDS, 2018).

Services can also be tailored to meet the needs of high-risk groups, such as young people, who have a lower concept of health risks and are more likely to drop out of ART treatment. The ‘STACKing’ study highlights this, as a combination of five different factors was associated with an increase in ART retention from 3.3% to 69.5% (Cluver et al., 2018; see *Figure 3*). These factors were summarised by the acronym STACK: Stocking clinics with medication; staff who make Time for patients; young people being Accompanied and having the Cash to travel to services; and Kind staff members. Moreover, these protective factors are both feasible and affordable to introduce, with one clinic in the study using community healthcare workers to accompany young people to the clinic.

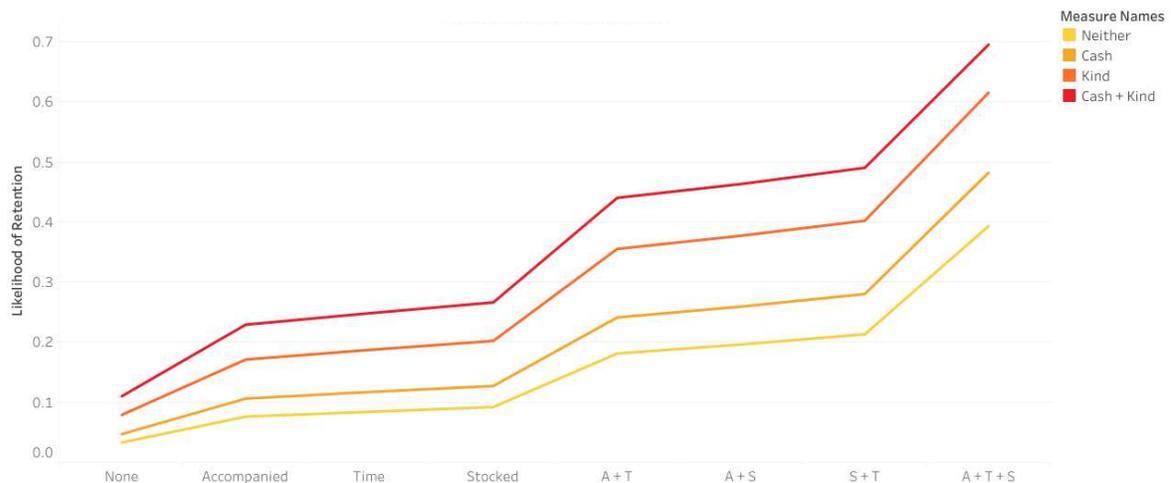


Figure 3: The effect of protective health service factors on ART retention (Cluver et al., 2018)

In the future, additional efforts should explore how technology can be utilised for behavioural nudges. For example, in a recent large-scale trial, SMS texts were shown to be an effective and inexpensive method of improving adherence to TB treatment and ART (Hirsch-Moverman et al., 2017).

Equality

Gender inequality, whilst ingrained in society, is not inevitable. This is illustrated by programmes which have successfully reduced IPV and increased support for gender equality, such as community-based interventions which have used group education and activities promoting dialogue between young men (Pulerwitz et al., 2015). As well as being multidisciplinary, a key contributor to programme success is the involvement of local organisations, which helps to ensure programmes that are culturally sensitive and that they can be sustained over long periods of time.

Furthermore, the widespread potential of structural interventions targeting the root causes and mitigating the impact of gender inequality has been overlooked in the elimination of HIV/AIDS. For example, cash transfers to young women of school age promote economic security and reduce new HIV infections, possibly via a decrease in the incidence of high-risk behaviours like transactional sex (Heise et al., 2013). Similarly, although evidence showing a direct link on HIV prevalence is limited, schemes that reduce poverty levels and improve food security reduce the rate of HIV risk factors such as school dropouts and transactional sex (Toska et al., 2016).

For key populations, the first step in making progress would be accurately monitoring of these groups. Detailed data on HIV prevalence and monitoring the efficacy of HIV/AIDS services is fundamental to

designing and promoting evidence-based healthcare programmes. One current barrier to data collection is criminalisation, which also has an indirect impact on HIV prevalence. It has been estimated that the decriminalisation of sex work in Kenya would avert a third of HIV infections in female sex workers and their clients over the next decade alone; a similar effect as the reduction from increasing access to ART (34%), and significantly more so than a scale up sex-worker led outreach (20%) or the elimination of sexual violence (17%) (Shannon et al., 2015).

Finally, with political will and investment, the large-scale problems faced by key populations can be alleviated. A meta-analysis of prisons in sub-Saharan Africa demonstrated this by finding that national guidelines of the prevention of HIV in prisons, inmate peer educators, and screening for TB all had a positive effect on HIV outcomes for people in prison (Telisinghe et al., 2016). However, it is also worth noting that improving the human rights for prisoners requires a broad long-term strategy, which addresses weak criminal justice and healthcare systems, as well as overcrowding.

Goals

Building on the goals we have previously proposed, AHO aims to promote evidence-based improvements in the prevention and treatment of HIV/AIDS. In alignment with UNAIDS, AHO also supports the 95-95-95 targets: that by 2030, 95% of people living with HIV will know their HIV status; that 95% of those who know they have HIV will receive treatment; and that 95% of people on ART will have suppressed viral loads. AHO also aims to promote equality in society, for women and girls, key populations and people living with HIV. In line with the Sustainable Development Goals of 'leaving no one behind', this will address social determinants of health (UNAIDS, 2016).

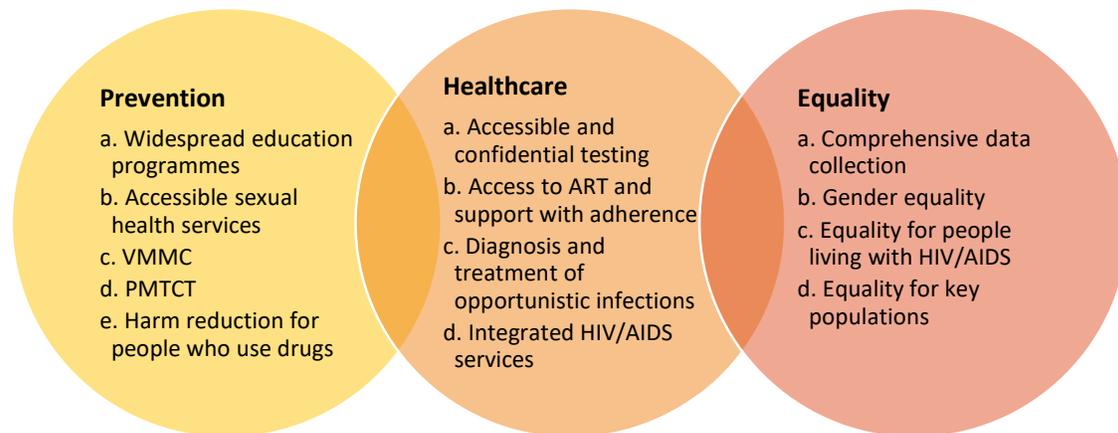
Our ultimate goals can be split into three categories:

- 1) **Prevention:** work towards the elimination of new HIV infections, including the PMTCT. This should be achieved through a combination approach of biomedical interventions (such as VMMC) and behavioural programmes (education), which are tailored to meet needs of specific populations.
- 2) **Healthcare:** work towards widely accessible HIV testing, treatment and long-term support. Healthcare services should take a patient-centred and lifecycle approach, supporting people with ART adherence and treating opportunistic infections.
- 3) **Equality:** work towards the legal and social equality of women and girls, key populations and people living with HIV.

HIV/AIDS does not exist in isolation and the achievement of these three interconnected goals is inextricably linked to wider improvements in healthcare, public services, and the rights of women and marginalised groups. AHO cannot achieve this by itself and must engage with community groups, NGOs and governments, as well as academics and health leaders.

Strategy and Plan of Action

AHO proposes that the following changes are implemented:



This will build on AHO's current work advocating for community-based healthcare and national frameworks of health promotion, as well as strategies aiming for gender equality.

Prevention

Preventing HIV/AIDS requires a holistic strategy consisting of behavioural and biomedical interventions. AHO will promote the expansion of evidence-based programmes, alongside monitoring and evaluating existing schemes to maximise efficacy. Instead of a 'one-size-fits-all' approach, health leaders should work with local stakeholders to design culturally competent programmes that utilise existing infrastructures and take into consideration wider social contexts. AHO believes this is vital in ensuring that the needs of key populations are met; and will therefore work with NGOs and governments to advocate for this approach. As the panacea for HIV prevention would be the development of an effective vaccine, funding in this area should be enhanced.

a. Widespread education programmes

AHO believes that education around sexual health should begin with accurate and age-appropriate information given in schools. Education programmes should address misconceptions and stigma around HIV/AIDS, as well as signs of healthy and unhealthy relationships. As young women who are not in school face a higher risk of HIV, AHO will also advocate for funding to be allocated to provide community outreach targeting this group. Furthermore, AHO will work with health leaders to promote the integration of education throughout healthcare systems. This will empower women to make informed decisions about their bodies, including the PMTCT. On a larger scale, AHO will also reach out to governments to ensure that national public health messaging provides clear and reliable information about HIV/AIDS prevention.

b. Accessible sexual health services

Accessible, free and confidential sexual and reproductive health services are essential in preventing HIV/AIDS. This should include the provision of male and female condoms and PEP; treatment for STIs; and family planning services. By collaborating with health leaders, AHO will promote community-based services which are available to all, without the requirement for spousal or parental permission. Services should also strive to have programmes in place targeting key populations, including an evaluation of the cost-effectiveness of providing PrEP to people in high-risk groups.

c. VMMC

AHO will advocate governments to take a human rights-based approach to the national promotion of VMMC, for all men aged 15-49. Public health messaging and outreach programmes should aim tackle a lack of uptake in young people, such as by promoting encouragement from female partners. Furthermore, AHO will work alongside health leaders to ensure that this procedure is utilised as an opportunity to engage men in healthcare services, by providing behavioural HIV interventions.

d. PMTCT

AHO will advocate for the prevention of unplanned pregnancy in women of reproductive age living with HIV to be prioritised by all countries. Pregnant women should be offered HIV testing in an 'opt out' approach; and those who test negative should be supported against contracting HIV whilst pregnant. For women living with HIV, healthcare services should provide advice, ART, and psychosocial support. AHO will also work with local governments to encourage the expansion of peer support networks, as well as programmes which promote male involvement and reproductive health as a joint responsibility. At birth, point-of-care virological HIV testing should be available to all, as this has been shown to be timely, cost-effective and to increase rates of paediatric HIV treatment (UNAIDS, 2018).

e. Harm reduction for people who use drugs

AHO will campaign on a national and international level for the decriminalisation of drug possession and the abolition of punitive laws regarding personal drug use, as an evidence-based and cost-effective approach to eliminating HIV/AIDS in people who use drugs. AHO believes that each country should have a national harm reduction plan. This plan should include the UNAIDS recommendation of 200 sterile needles being available per drug user per year; places for the safe disposal of used injecting equipment; and a high coverage of opioid substitution therapy. Additionally, health services should have specific programmes in place supporting people who use drugs, including regular HIV testing and addiction counselling; and there should be an end to Hepatitis C treatment being conditional on drug usage (Harm Reduction International, 2020). AHO will monitor these programmes for their specific impact of women who use drugs.

Healthcare

AHO recognises healthcare as a human right and advocates that HIV/AIDS testing and treatment should be accessible to all. AHO will work with local and national governments to promote healthcare services which take a life-course approach and are patient-centred, including the use of patient groups to maximise user-friendliness. There should be regular monitoring to ensure that services meet the needs of key populations, as well as interventions to specifically target those who have not engaged. AHO believes that achieving this will require structural improvements and the strengthening of healthcare systems, including investments in community-based facilities and staff recruitment.

a. Accessible and confidential testing

AHO advocates that national HIV guidelines assert that HIV tests should be free, and provider-initiated in areas where HIV is prevalent in the general population. Services should provide both pre-test information and post-test counselling, whilst concurrently respecting patients' right to decline testing and keeping results confidential. Index case finding, in which the family members and sexual partners of people diagnosed with HIV are tested, should be promoted as a highly effective method of increasing diagnosis rates (UNAIDS, 2018). For key populations, AHO advocates for the use of peer-distributed self-testing. Countries should also take measures to encourage testing uptake in men.

b. Access to ART

The time between a positive diagnosis and accessing care should be as short as possible; and everyone living with HIV should have access to a regular supply of ART. AHO will therefore work with governments on a local and national scale to ensure the strengthening of drug supplies, a clampdown on falsified and substandard drugs, and community-based ART services. Additionally, second- and third-line treatments must be widely available. AHO will work with governments to ensure that the viral load of people living with HIV is monitored at regular intervals to check for drug resistance, with results informing both individual health plans and national ART guidelines.

c. Support with ART adherence

People living with HIV should be supported to adhere to ART across their life. This support should be driven by community-based schemes such as peer support, as well as behavioural nudges like text message reminders. AHO will promote these approaches with local governments, health leaders and NGOs. As the relationship between patients and healthcare workers plays a significant role in treatment adherence, AHO believes that evidence-based guidance for this should be included in national training programmes (Cluver et al., 2018). Furthermore, AHO will support the development of schemes to maintain ART adherence at common dropout points, such the transition between child and adult services and the movement of people between clinics. Likewise, there should be procedures in place to understand why people stop taking treatment and to reengage them. As part of a longer-term solution, research should be funded into long-acting ART and a cure for HIV.

d. Diagnosis and treatment of opportunistic infections

AHO will work with governments to build on national health promotion and HIV-TB prevention guidelines, to tackle AIDS-related deaths. This is particularly important in sub-Saharan Africa, which accounted for 84% of all HIV-associated TB deaths worldwide in 2018 (WHO, 2018b). People living with HIV should be educated on and regularly monitored for symptoms of opportunistic infections. Screening for TB should be provided to all people living with HIV who show symptoms; and conversely, HIV testing should be offered to all TB patients. TB prevention therapy and treatment must also be widely available.

e. Integrated HIV/AIDS services

If done effectively, the integration of HIV services into wider healthcare systems can improve both HIV/AIDS and overall health outcomes. AHO will promote this by facilitating discussions between health leaders, and by sharing information about successfully integrated services. For HIV prevention this is exemplified by how women using combined HIV and family planning services are more likely to use efficacious birth control than those attending basic family planning services (Lopez et al., 2016). In addition to this, AHO will promote the integration of HIV services in healthcare planning carried out by local governments.

Equality

Making progress towards equality is essential to tackling social determinants of health and improving HIV/AIDS outcomes not only for women and key populations, but across the whole of society. AHO will facilitate discussions between academics, charities, governments, activists, and community groups to determine the best approach to instigating these changes. Subsequently, AHO will advocate governments to develop national frameworks for social, legal and political equality. These frameworks should have ambitious targets, with specific measures for monitoring and implementation. They should also include the strengthening of broad social protection programmes, such as expanding access to education and reducing poverty.

Additionally, AHO will work with health leaders to promote services which are tailored to meet the specific needs of women and girls, people living with HIV, and key populations. One way of achieving this is the meaningful involvement of people from these groups in policy decisions, which would also help to improve the accountability of healthcare systems. AHO will also campaign for peer support and psychological help to be prioritised in funding decisions. Finally, AHO will organise events with key organisations to promote intersectional healthcare services, which take into consideration that people belonging to multiple marginalised groups face unique challenges.

a. Comprehensive data collection

As noted throughout this report, HIV/AIDS services frequently fail to have positive impact of key populations. AHO believes that the first step to tackling this issue is the collection and analysis of granular data on population subgroups in public health surveillance, and when monitoring and evaluating health services. This includes factors like gender identity, age and HIV status. AHO will therefore work with governments to ensure that each country has up-to-date data on key populations, including breakdowns of HIV diagnosis and ART coverage.

b. Gender equality

Gender inequality is inseparably linked to the disproportionate impact of HIV/AIDS on women and girls. AHO will therefore work with governments and NGOs to encourage greater action in this area, including increased funding, an end to the requirement of spousal and parental consent for accessing HIV/AIDS services, and interventions to promote gender equality. Alongside this, AHO will support broad social protection programmes that increase the economic power of women. Additional research should be carried out to identify the best approach to solve the problem of men restricting women's access to HIV services and treatment.

To confront violence against women, AHO believes that education is key (see *Policy and Strategy Proposal for Addressing SGBV in Africa*). Moreover, AHO advocates that all countries provide women with legal protection from GBV. Healthcare systems should provide secondary interventions, such as post-rape counselling and PEP; and national training for healthcare workers should include guidance surrounding GBV.

c. Freedom from discrimination for people living with HIV/AIDS

AHO will advocate on a national and international level for the legal protection from discrimination for all people living with HIV; and that countries include the *Positive Health, Dignity and Prevention* framework in their plans for HIV prevention and treatment (Global Network of People Living with HIV, 2013). Nations should end the criminalisation of HIV transmission; ban mandatory HIV testing; and end the use of HIV status when making residency decisions. Human rights should also be protected and promoted in health systems and healthcare worker training, with a human rights-based approach that enforces patient confidentiality.

d. Freedom from discrimination for key populations

AHO believes that healthcare services should be accessible to all. This includes, but is not limited to, providing health information in multiple languages, wheelchair accessible clinics, and systems that are actively inclusive of transgender people. AHO will work with partners to strengthen programmes which meet the needs of key populations; and with governments so that an understanding of the legal, socio-political and health barriers faced by key populations is included in the training of healthcare workers. Beyond this, there should be legal protection against hate crimes and discrimination, which is reinforced with accessible legal services.

To improve the health outcomes of specific groups, the AHO will work with governments to support the following changes on a national and international level:

- *Transgender women*: There should be legal recognition of transgender people and an end to the criminalisation of same-sex relationships. There should also be greater research into gender nonconformity across in different cultures.
- *Sex workers*: Sex work should be decriminalised. Governments should conduct policy analysis and train law enforcement to better protect sex workers from violence.
- *Disabled women*: Existing healthcare services should be evaluated in terms of accessibility for disabled people; and this evaluation process should be fundamental in the design of new programmes. There should be specific education programmes and public health messaging targeted towards disabled people.
- *Women in prison*: Living conditions in prisons should be improved, including a reduction in overcrowding. Women in prison should be able to continue with HIV treatment with ease, and the provision of confidential HIV and STI testing should be a top priority.
- *Migrants*: There should be an end to legal restrictions on migration based on HIV status.

Financial Implications

Meeting the goal of ending AIDS as a public health threat by 2030 has been predicted to cost \$36 billion per year (Piot et al., 2015). Funding will therefore need to be sourced from a combination of governments, NGOs and philanthropic donors. Countries should increase their domestic funding in proportion to their HIV burden and national wealth, and the Abuja Declaration should be met across the continent. It is vital that these financial investments are sustained across the next 10 years, despite likely competing priorities such as COVID-19 and the consequences of climate change.

To some extent, some of this financial burden can be mitigated by stakeholders prioritising evidence-based programmes and effective resource distribution. This is highlighted by the current lack of investment into services supporting key populations. One model suggests that focusing HIV prevention interventions on key population groups and local epidemiological hotspots in Kenya could prevent up to 150,000 more infections across a 15-year period, in comparison to the uniform distribution of the same resources (Anderson et al., 2014). It should also be noted that tackling HIV/AIDS will reduce future costs. For example, prevention is significantly cheaper than providing a lifetime supply of ART, which is currently estimated to cost \$480 per person per year (Glassman and Temin, 2016). Similarly, increasing the provision of ART would decrease the funding required to support children who have been orphaned by AIDS.

Monitoring and Evaluation

HIV cases should be tracked in real-time, and results shared widely with all relevant stakeholders, so that resources can be directed to areas where they will have the most impact. In terms of evaluation, AHO's objectives should be broken down into short, medium- and long-term goals, and incorporated into national targets. Corresponding to the objectives above (see [Page 12](#)), key success indicators are:

- 1) Prevention
 - a. Population-wide HIV knowledge and attitudes surveys
 - b. % coverage for HIV/AIDS prevention services; % condom use
 - c. % of eligible population who have undergone VMMC
 - d. % of MTCT of HIV; % pregnant women tested for HIV
 - e. % coverage of harm-reduction programmes; number of syringes distributed per person who uses drugs

- 2) Healthcare
 - a. % coverage of HIV testing, including for infants
 - b. % of people living with HIV who receive ART; % of people living with HIV who are virologically suppressed
 - c. Number of AIDS-related deaths; % of people diagnosed with TB who know their HIV status
 - d. % of primary care centres with integrated HIV services
- 3) Equality
 - a. Number of countries with up-to-date data on key populations and gender, including breakdowns of HIV diagnosis and treatment rates
 - b. Population-wide attitude surveys on gender equality; number of countries with strategies in place to address GBV; number of countries with legal protection for women who experience GBV
 - c. Number of countries with legal protection from discrimination for people living with HIV; population-wide attitude surveys on HIV/AIDS
 - d. % coverage of prevention programmes in key populations; number of countries with legal protection from discrimination for key populations; population-wide attitude surveys on key populations

Others important measures are the number of countries with strategies in place to address these objectives; and the coverage of programmes which are designed to achieve them.

Conclusion

AHO plans to collaborate with governments, NGOs, and health leaders to realise this Plan of Action. Mobilisation across multiple sectors of healthcare will be required to build on existing effective and evidence-based interventions aimed at preventing the transmission of HIV. Healthcare systems must also be strengthened, so that no group is left behind in the provision of HIV testing and ART. Meeting the health needs of key populations, empowering people from marginalised communities and making strides towards gender equality are equally vital. Henceforth, these behavioural and biomedical changes take place alongside progress in tackling the social determinants of health.

In conclusion, the course of the HIV/AIDS epidemic has been significantly altered over the past 10 years. AHO therefore recognises the target of ending HIV/AIDS as a public health crisis by 2030 as one which is ambitious, yet achievable.

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