

HIV NURSING MATTERS



A publication by the Southern African HIV Clinicians Society



HIV Nursing Matters focuses on integrated and differentiated care.

Strengthening Prevention, Treatment, and Psychosocial Support for Older Adults (50+) in the Era of HIV Test and Treat All in South Africa

Promoting Authentic Transgender Women's Health through Integration of Gender Affirming Health Care Model from Aurum POP INN

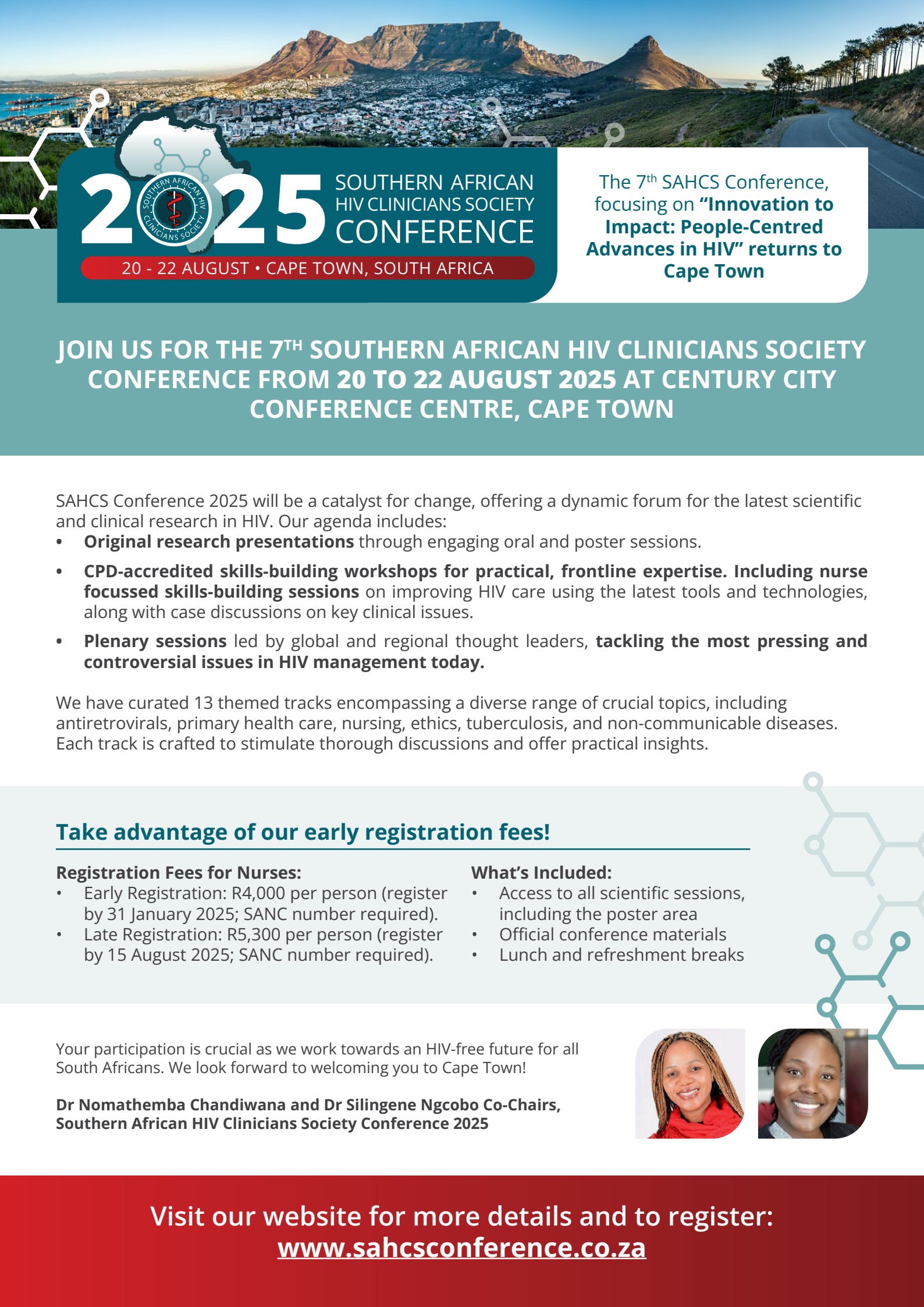
PURPOSE 1: Long-acting lenacapavir for PrEP

Quality Improvement for improved integration of HIV-TB services: Evidence from the MERGE & SUTHI studies

Community pharmacy staff competency to initiate PrEP in South Africa, Baseline insights from pilot pharmacy delivered PrEP project

South African National Aids Council (SANAC) Consultation with Nursing Education Institutions: Strengthening HIV Treatment Literacy to End the HIV Epidemic in South Africa

Palliative Care for People living with HIV and Cancer



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Integrated care in primary care nursing discusses an approach that brings together different healthcare professionals, services, and systems to provide comprehensive and coordinated care to patients especially the Human Immunodeficiency Virus (HIV), Tuberculosis (TB) and Non-Communicable Diseases (NCDs) comorbidity. The goal is to ensure that patients receive comprehensive, high-quality care that addresses their physical, emotional, and social needs.

The theme for this edition of *HIV Nursing Matters* is “*Integrated and Differentiated care*”. The articles cover topics such as the unique needs of Transgender Women (TGW), managing HIV and cancer co-morbidities, pharmacy staff competencies in PrEP delivery, and embedding Quality Improvement (QI) within health systems for better HIV and TB care. Integrating HIV literacy and undetectable equals untransmittable (U=U) messaging into nursing education also empowers future healthcare providers to enhance care

for people living with HIV (PLHIV). This collection of articles highlights the importance of strengthening integrated care to ensure it is both comprehensive and interdisciplinary.

In the article entitled “Promoting Authentic Health for Transgender Women (TGW) through the Integration of a Gender Affirming Health Care (GAHC) Model from Aurum POP INN,” Xaba and colleagues discuss the unique healthcare needs of TGW and present peer-reviewed studies highlighting the disproportionately high prevalence of HIV among TGW compared to other key populations. The authors emphasise that integrating the GAHC Model from Aurum POP INN is essential for providing comprehensive, gender-affirming care that meets the specific health needs of TGW. In addition, Moodley and colleagues highlight the urgent need for effective strategies to enhance the quality and scope of services for patients with HIV and TB, aiming to reduce morbidity and mortality among people living

with HIV (PLWH) and those newly diagnosed with TB. Integrating quality improvement (QI) activities within the health system offers an innovative, low-cost approach to strengthen health system performance and deliver more comprehensive HIV and TB services.

Mkansi and colleagues conducted a pilot study to assess the feasibility of delivering HIV pre-exposure prophylaxis (PrEP) for HIV prevention through community pharmacies in Gauteng and the Western Cape, following NDOH guidelines. The qualitative findings revealed knowledge and training gaps among pharmacy staff, with some unable to differentiate between PrEP and PEP, partly due to regulatory restrictions on prescribing. These results highlight the need for training to improve pharmacy staff's capacity for PrEP delivery.

More formulations for PrEP are becoming available in South Africa, including injectables. Prof Bekker and researchers report that new PrEP formulations, including injectables, are becoming available in South Africa. Prof Bekker reports that researchers studied the effectiveness of Lenacapavir (a long-acting injectable given 6 monthly) and F/TAF (a new HIV prevention tablet) in preventing HIV among cisgender women over 12 months. Results from the controlled clinical trials showed that Lenacapavir prevented HIV in 100% of women, with most participants adhering to the prescribed regimen. In contrast, the overall F/TAF group did not show reduced HIV incidence due to low adherence; however, women who took F/TAF as prescribed were protected.

Integrated care can only be realised if nurses are comprehensively trained. On 21 August 2024, the South African

National Aids Council (SANAC) met with South African Nursing Education Institutions (NEIs) to advance patient empowerment through HIV literacy. Discussions underscored the need for integrating health literacy and the undetectable equals untransmittable (U=U) message into the nursing curriculum, standardising HIV content, and strengthening SANAC-NEI collaboration. Recommendations included involving postgraduate students in SANAC programmes, sharing updated HIV statistics with NEIs, and forming a working group to address research priorities and curriculum gaps. This consultation marked a key step towards empowering future healthcare professionals in HIV care.

Integrated and differentiated care is essential in the holistic offering of care to PLHIV, TB and related co-morbidities to achieve best outcomes.





Strengthening Prevention, Treatment, and Psychosocial Support for Older Adults (50+) in the Era of HIV Test and Treat All in South Africa

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Background

In South Africa (SA), 7,8 million people have been reported to be living with Human Immunodeficiency Virus (HIV) of which 5.7 million are on Antiretroviral Therapy (ART)¹. The South African National HIV Prevalence, Incidence, Behaviour & Communication Survey (2022) findings further indicated that 1,2 million People Living with HIV (PLHIV) on ART were aged 50+. This highlights the need to address the quality of health and social care needs of an Aging population living with HIV² and Non-Communicable Diseases (NCDs). The two epidemics (HIV and NCDs) negatively interact with one another, within a context of poverty, inequality, and inequitable access to healthcare, resulting in those aged 50+ living with HIV experiencing an increase in NCD comorbidity³.

SA Partners responded to the gaps identified above and sought funding from the Gilead Foundation to conduct a scoping exercise to understand

prevention, treatment, and psychosocial support needs for OPLHIV aged 50+ in the era of HIV Test and Treat All (STEPSSA 50+)⁴ in SA.

Problem Statement

Older Persons Living with HIV (OPLHIV) face a significantly elevated risk of developing chronic conditions such as hypertension, diabetes, and renal insufficiency, with their risk being four times greater compared to the general population⁵. This increased vulnerability is attributed to a combination of factors including the effects of Aging, the long-term impact of HIV, and the prevalence of NCDs like diabetes and hypertension in this demographic. The intersectionality of HIV, Aging and Comorbidities⁶ present a syndemic challenge in sub-Saharan Africa, particularly among older individuals.

Methods

A literature review on policies, programs, HIV, Aging & comorbidities in OPLHIV

in SA was conducted using keywords like "HIV," "AIDS," "50+," and "aging" across Google Scholar, PubMed, and Ebscohost databases. Qualitative data were gathered through listening sessions, focus group discussions (FGDs), and audio-visual activities to gather challenges faced by OPLHIV in fifteen districts. Key informant interviews included clinicians, senior health officials, and two individuals living with HIV. Voice and video recordings were transcribed & translated from Nguni to the English language. Quantitative data were collected via a questionnaire addressing sociodemographics, HIV history, ART initiation, comorbidities, chronic medications, sleep patterns, mental health, and sexual activity among OPLHIV aged 50 and older.

Analysis of this quantitative data was performed using PowerBI software. Ethical considerations involved obtaining informed consent for participation and media releases for all recorded content.

Table 1: Findings: Summary of Desktop Literature Review

Policies and Programmes	HIV, Aging & Comorbidities
- Lack of targeted tailored policies or programmes addressing HIV, Aging & Comorbidities for the 50+. - Stigma, ageism, and discrimination in healthcare and community settings. - OPLHIV face challenges related to healthcare costs and potential loss of income.	- Fragmented healthcare delivery leads to missed appointments. - Polypharmacy results in treatment interruptions and discontinuations. - Lack of access to proper nutrition. - Overcrowded health facilities and long queues. - Unemployment and inadequate old-age pensions affect the continuum of care for 50+.

Table 2: HIV, Aging & Comorbidities Survey

There were 422 respondents in the HIV, Aging, and Comorbidity Survey. Some opted out due to discomfort but expressed a willingness to complete the survey.

Variable	Respondents	%
Nationality	n = 415	
• South Africa	407	96%
• Mozambican	8	2%
Gender	n = 409	
• Females	318	78%
• Males	86	21%
• Non – Binary	5	1%
Age	n = 277	
• 50-59 years	193	70 %
• 60-70 years	72	26%
• 71+ years	12	4%
HIV status (all)	313	74%
HIV status (50+)	n = 277	
Art Initiation Dates		
• 2006 to 2016	170	61%
• 1993 to 2005	37	13%
• 2017 to 2022	18	6%
Unemployment	86	31%
Access to social support		
• Older persons grant	87	31%
Dependents		
• Support to dependants (1-5)	171	62%
Mental Health		
• Anxiety	174	63%
• Depression	146	53%
Sleeping Patterns		
• Disrupted sleeping patterns	140	51%
• Use of sleeping tablets	18	6%
Sex & Sexuality		
• Are you sexually active (Yes)	109	39%



Emerging themes from qualitative data

Treatment interruption

'There was a time when I wanted to stop treatment. Monday to Friday I will take my medications but at weekends I will take a break and live a little. **FGD Participant-Ekurhuleni, Gauteng**

Opportunistic infections

'There was a time when I stopped taking my treatment. I got tired because each time I took treatment something new would develop. And remember I am not working, the person who had to pay for all these bills doctors and hospitals was my mother who is also not working just a pensioner'. **Participant-Ekurhuleni, Gauteng**

Stigma (family & health facilities)

'Some of us get sick and hide our sicknesses from our children and family members because of age and being scared of being discriminated against and isolated. **Participant-Qunu, Eastern Cape**

'Whenever we are at the clinic, we are referred to as Shabalala's people, Shabalala is the person who gives us medication at the clinic. If he is not there we will be isolated and told to wait for him mind you this is said in front of everyone, the minute they hear we are Shabalala's people then they know we are here for ARVs'. **Participant-Harrismith, Free State.**

Distance and waiting times and lack of adherence to DMOC strategies

'Whenever I go to the clinic I leave the

house at 6 and get there at 7 in the morning and I always carry a lunch box I know I will leave when they leave the clinic at 4 in the afternoon. We are suffering because of that and when the collection date comes our blood pressure rises because we are going to spend the whole day at the clinic". **Participant-Ndzhelele, Vhembe district, Limpopo**

Lack of Screening for NCDs

'During collection, they would check my weight and vitals they would tell me my blood pressure was too high but they would ask me to step aside and drink water'. **Participant-Harrismith, Free State**

Discussion

A significant portion of the cohort of the 50+ were South African females with the attendance of males & those identifying as non-binary being lower. These numbers were sufficient to offer valuable insights into their daily lived experiences. ART initiation in SA began through clinical trials before the national rollout announcement in 2004⁷. The cohort of OPLHIV who began treatment in 2006 aligned with progress made in accessing life-saving medications. Their history of ART usage spans 18 to 31 years, which is associated with various biomedical complications resulting from long-term use⁸.

Age and prolonged ART contribute to a complex inflam-Aging process, exacerbated by the emergence of chronic conditions such as hypertension and diabetes⁹. This dual burden complicates adherence to treatment

regimens for multiple conditions, placing additional strain on health systems. OPLHIV are then predisposed to the development of comorbid metabolic disorders¹⁰ that increase the risk of type 2 diabetes and cognitive impairments, ultimately diminishing quality of life.

Long-term ART combined with treatment for NCDs leads to polypharmacy¹¹, further complicating adherence. Socioeconomic factors such as unemployment and lack of social support exacerbate these challenges, hindering sustained viral suppression and healthy Aging¹². The coexistence of HIV and chronic conditions can also escalate mental health issues as indicated in a systematic review which found a significant prevalence of anxiety disorders among PLHIV, with females experiencing rates as high as 20.8%, and 32.1% in key populations.

Another important discussion point for OPLHIV is how sexual activity and intimacy are affected by aging, lifestyle factors, and medication. Integrating sexual and reproductive health (SRH) in 50+ programming¹³ and policies like Positive Health, Dignity, and Prevention (PHDP) provide a rights-based approach for PLHIV framework and should be enhanced to address age-specific SRH) needs for 50+ OPLHIV with emphasis on the Undetectable = Untransmittable (U=U) message, which is vital for healthy Aging and maintaining viral suppression.

Recommendations

- Integrate Healthcare Services by tailoring programs to address age-related comorbidities and mental health within HIV care.
- Combat stigma & social exclusion in healthcare, social services, and employment for OPLHIV aged 50+
- Provide Economic Support to OPLHIV to alleviate healthcare costs and income loss.
- Foster Community Engagement: Implement programs to reduce stigma, promote inclusivity, and create supportive environments for OPLHIV.

Conclusion

The STEPSSA 50+ findings show that while ART coverage has improved since its national rollout, older individuals aged 50+ living with HIV face compounded health issues due to HIV and chronic conditions like hypertension and diabetes. Socioeconomic factors such as; stigma, insufficient healthcare support impede treatment adherence and affect quality of life. It is therefore essential to implement integrated healthcare services tailored to meet the unique needs of OPLHIV addressing physical and mental health inclusive of a supportive healthcare environment for this cohort.

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Promoting Authentic Transgender Women's Health through Integration of Gender Affirming Health Care Model from Aurum POP INN

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Introduction

Transgender people are individuals who do not identify with the gender that is associated with the sex they were assigned at birth.¹ Transgender women are assigned male at birth but identify and live as women.¹ Transgender women (TGW) are among the most marginalised populations and face significant health issues, particularly those related to the HIV prevention and treatment. This marginalisation can occur in several ways, including limited

access to employment opportunities, stigma, systemic discrimination and transphobia, which entails the fear, hatred, discomfort, or mistrust of individuals who are transgender.^{2,3} The experience of this marginalisation permeates into the healthcare sector affecting TGWs access to healthcare,⁴ resulting in a disproportionately high burden of HIV.⁵

Studies have shown a high HIV prevalence amongst TGW compared to other key populations.^{6,7,8,9} The 2023

UNAIDS report revealed that TGW had higher median global HIV prevalences of 9.2% as compared to other key populations namely men who have sex with men (MSM) with 7.7%.¹⁰ This is due to several social, structural, and behavioural factors, including gender and sexuality-related stigma, violence and overall discrimination, which significantly affect their risk of acquiring HIV and their ability to access and engage with healthcare services that address their unique needs.^{6,11,12,13} The unique healthcare needs of TGW are

related to gender transition, including hormone replacement therapy (HRT), and continuous mental health support.¹¹

Recognising these challenges, the Aurum Institute adopted the MPowerment-based Gender Affirmative Healthcare (GAHC) model within its POP INN clinics in 2022 to provide holistic, gender-affirming care specifically adapted to the needs of TGW. GAHC refers to a variety of healthcare services that provide support and affirmation of a person's gender identity. For transgender women, GAHC includes hormone replacement, and mental health support aimed at helping them transition physically and socially in a way that aligns with their gender identity. These services help enhance the overall wellbeing of TGW.

This article gives an overview of the GAHC model and outlines its principles. It will describe the GAHC model and detail the outcomes this has had in the trans-community in the five POP INN districts (Ehlanzeni, Ekurhuleni, eThekweni, Tshwane and uMgungundlovu) over the past year.

The MPowerment-Based GAHC Model

The MPowerment-based GAHC model builds upon the original MPowerment project which was initially designed as a community-based intervention to reduce and prevent HIV infections among young men who have sex with men (MSM) in the United States (US).^{14,15} The core principle of the

initial MPowerment model emphasises community-building through a peer-led approach, which empowers marginalised groups to take control of their health.^{14,15,16} Additionally, the peer-led program consists of three components, namely, outreach, small groups, and a publicity campaign. Adapting this model to the needs of TGW acknowledged that there are specific social and structural challenges encountered by TGW that are not faced by MSM, and it is important to address these challenges through a gender-affirming approach.¹⁷

When applied to TGW, the GAHC implementation within the POP INN clinics integrates the core principle of the MPowerment model with a holistic approach to strengthen HIV case finding by offering an inclusive and supportive environment where TGW can access essential services without fear of stigma or discrimination and social exclusion, ultimately improving both HIV-related outcomes and their overall well-being.¹⁷ The POP INN clinics forms part of the Aurum Institute POP INN project, established in response to the increased risk of HIV and sexually transmitted infections (STIs) among TGW and MSM. The project addresses gaps in healthcare facilities that do not meet the specific needs of these individuals. The POP INN clinics provide multiple services that include HIV testing, mental health support, hormonal therapy and peer-led approach. These services have led to high numbers of TGW reached; for example, in the period of October 2023 - July 2024, 785 TGW have

been reached across the five clinics, with eThekweni reporting the highest number at 186 TGW.

Studies have shown that the provision of these services can significantly improve engagement in health services, reduce risk behaviours, and better adherence to HIV treatment schedules, thus enhancing overall wellbeing.^{18,19,20} The adherence to HIV treatment has been observed in the POP INN clinics, where the viral load suppression rate is 84% across all the districts. uMgungundlovu is the best-performing site regarding viral load suppression, with a 100% suppression rate.

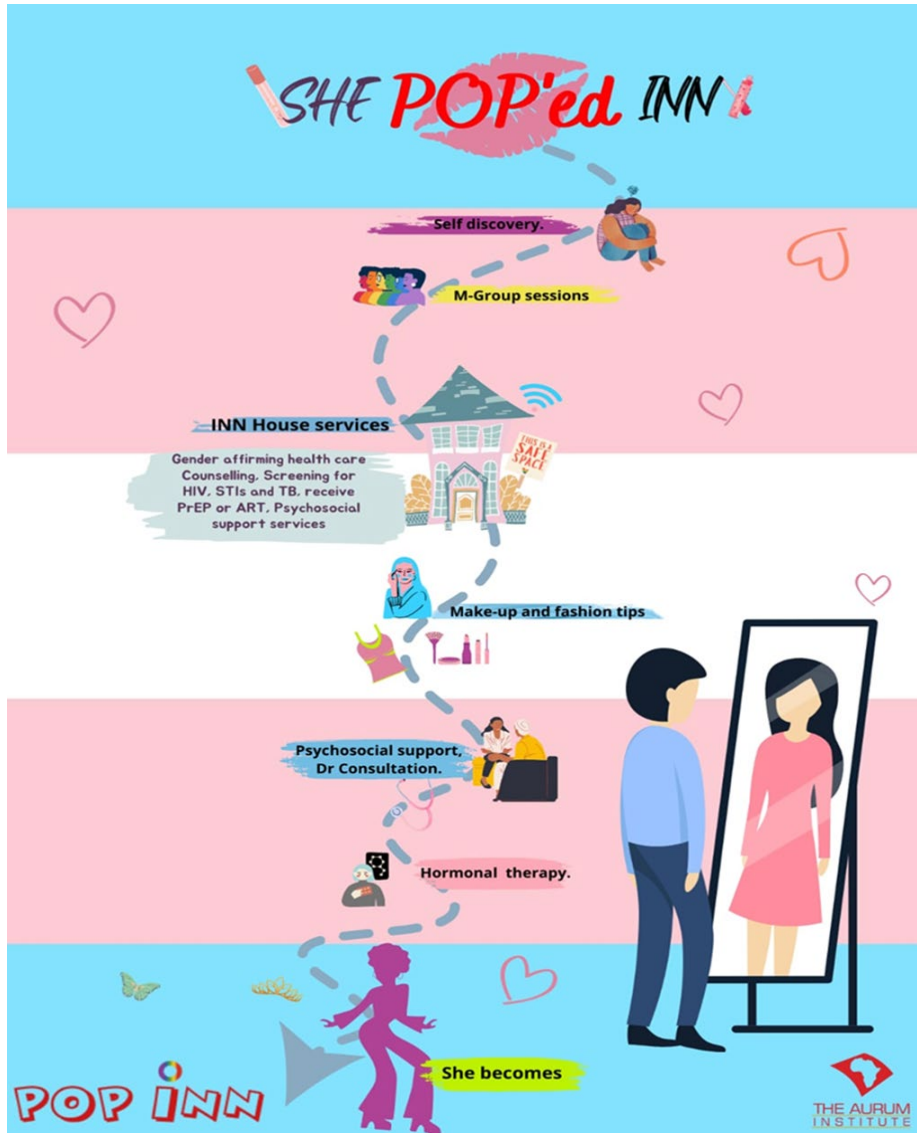
Peer-led approach

The success of the MPowerment-based GAHC model is rooted in its comprehensive peer-led approach. This approach argues that people are more likely to engage in healthcare services when they are delivered by peers with similar experiences and backgrounds.²¹ A peer-led approach is crucial in reaching marginalised individuals who may otherwise be reluctant to access proper healthcare services due to past experiences of stigma and discrimination. Research has consistently shown the effectiveness of peer-led approaches in HIV prevention among key populations, including TGW. For instance, research by Hirshfield et al., (2019)²² & Rebchook et al., (2022)²³ revealed that peer support groups for transgender women living with HIV were associated with improved mental health outcomes, reduced feelings of isolation, and increased



The POP INN clinics forms part of the Aurum Institute POP INN project, established in response to the increased risk of HIV and sexually transmitted infections (STIs) among TGW and MSM.

Figure 1 She POP'ed INN model



adherence to antiretroviral therapy (ART). Additionally, peer leaders can assist in promoting HIV testing, safe sex practices, and linkage to care due to their shared lived experiences and understanding of the challenges faced by their peers.^{24,25}

In the POP-INN clinics, the peer-led approach involves TGW in providing services through MPowerment groups.

These groups, which involve peer-led meetings, provide a safe space for TGW to share their experiences, and discuss any health-related issues they encounter in their journey, and support one another in navigating the healthcare procedures.¹⁷ The role of peer leaders extends beyond group facilitation to incorporate outreach activities, where they connect with TGW in the community, raise awareness about

available services in the clinic, ultimately linking them to care. At the POP INN clinics, monthly schedules outline dates for meetings and outreach activities. All efforts are highly structured and coordinated. This approach enhances service uptake and promotes a sense of community and belonging, which is essential for the well-being of TGW.

Multi-Disciplinary Based

The GAHC model's is multi-disciplinary based, addressing the complex and intersecting health needs of TGW. This involves integrating medical, psychological, and social services to provide comprehensive care.¹⁷ This is well illustrated in the She POP'ed INN model (Figure 1).

The justification behind this model is that focusing on the physical health of TGW without considering their mental and social well-being would be futile, since these factors are deeply linked and significantly impact health outcomes.²⁶ Thus, the multi-disciplinary teams in the POP INN clinics including clinicians, psychologists, social workers, and peer educators work together to provide holistic care including hormonal therapy, physical and mental health support that addresses all aspects of a TGW's health. Including GAHC services, such as hormonal therapy, is fundamental among TGW. The hormonal therapy includes the daily use of estrofem (which provides estrogen) and spironolactone (which suppresses testosterone). Research has shown that access to gender-affirming care such as hormonal therapy can improve mental health and increase engagement in HIV care among TGW.^{27,28}

The alignment of the GAHC with integrated care principles has been a crucial factor in its success. The Aurum Institute's POP INN clinics have initiated

A peer-led approach is crucial in reaching marginalised individuals who may otherwise be reluctant to access proper healthcare services due to past experiences of stigma and discrimination.

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140 TGW on hormonal therapy since the model's implementation, which represents a significant step towards integrating gender-affirming care with HIV services.¹⁷ Integrated care highlights the coordination and collaboration of different healthcare providers and services to address the broad needs of patients.^{29,30} In the context of the GAHC model, integrated care involves the uniform coordination of medical, psychological, and social services to provide holistic care for TGW. For example, a TGW patronising the POP INN clinic for HIV testing can also receive hormonal therapy, counselling for gender dysphoria, and support with social services, all within the same facility.

Conclusion

Integrated care is imperative to assessing the needs of TGW. Since the implementation of the GAHC model in the five POP clinics, significant improvements have been made in service uptake and healthcare outcomes. These successes contribute to the growing literature on integrated care models and their role in addressing complex health needs among TGW. The principles alongside GAHC strategies further provide important insights for healthcare providers, policymakers and government organisations seeking to improve the quality and accessibility of gender-affirming care services for TGW.

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PURPOSE 1: Long-acting lenacapavir for PrEP

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Introduction

Cisgender women account for about half of the 1,3 million new HIV infections worldwide every year¹ with adolescent girls and young women being particularly vulnerable to contracting HIV. More than 6 million people have used daily oral pre-exposure prophylaxis (PrEP), since 2012 when it was first approved by the Food and drug administration (FDA)². While oral PrEP is effective if taken as directed,

there are gaps in women's up-take of, adherence to, and persistence in the use of oral PrEP, necessitating development of other acceptable options^{3,5}.

Lenacapvir is a new, first-in-class, HIV-1 capsid inhibitor with high potency and a long half-life. It is administered by subcutaneous injection twice yearly^{6,7}. TAF (tenofovir alafenamide) in combination with emtricitabine (F/TAF) is a new daily oral PrEP drug, similar in efficacy to the standard of care once daily emtricitabine tenofovir disoproxil

fumarate (F/TDF) but with a reduced side effect profile and currently only licensed for use in men and transwomen in high-income countries. Both lenacapavir and F/TAF, in combination with other antiretroviral agents, are used for HIV treatment. In the PURPOSE 1 study, researchers looked at cisgender women who received lenacapavir or F/TAF for HIV prevention over 12 months to see how well these medicines worked at preventing HIV compared to standard of care F/TDF.

Study methods

PURPOSE1 was a phase 3, multicenter, double-blind, randomized, active-controlled trial taking place in South Africa (25 sites) and Uganda (3 sites) in areas with high levels of new HIV infections⁸. The trial looked at safety and efficacy of Lenacapavir and F/TAF. Due to the fact that effective PrEP options exist, a true placebo group (with no active drug) would be unethical and researchers therefore had to use the “background HIV rate” as a comparison. This background HIV rate was calculated by testing women for HIV at the screening visit. Researchers took positive samples and tested them with a special recency test which can determine if people had acquired HIV recently, then used that information to calculate the expected rate of new HIV infections in woman not on PrEP. Women receiving standard of care oral PrEP (F/TDF) were used as an internal control group to assess relative efficacy of lenacapavir and F/TAF.

Of the 8094 women screened, 5338 women tested negative for HIV and were randomly assigned in a 2:2:1 ratio to receive one of the study drugs (Lenacapavir, F/TAF or F/TDF). Women were eligible if they were aged between 16 and 25 and had not had an HIV test in the 3 months prior to screening. Women received study medication and the complementary subcutaneous or oral placebo to ensure that participants and investigators remained blinded.



All participants or guardians provided written informed consent; adolescents 16 or 17 years of age provided assent with guardian consent unless local ethics guidelines allowed them to consent for themselves. Participants attended visits at weeks 4,8,13 and every 13 weeks thereafter. Participants were tested for STI's at baseline and every 26 weeks and offered treatment. Participants also received HIV risk reduction counselling, condoms and lubricant and contraception if they did not desire a pregnancy. Participants also answered questions about intimate partner violence and any social harms related to trial participation and were referred for appropriate support and counselling.

Participants who became pregnant could choose to remain in the trial and continue the trial drug after a new informed consent process reviewing the benefits and risks was performed.

Participants with incident HIV infection received counselling and referral to local HIV care, including antiretroviral therapy initiation and follow-up through virologic suppression. Participants who chose to discontinue the blinded trial product were offered open-label F/TDF.

Results

The trial was stopped early after an independent data and safety monitoring board (DSMB), at a scheduled review of the trial data, found the regimen to be safe and highly effective, with no infections seen among trial participants who received injectable lenacapavir. Taking F/TAF did not reduce the incidence of HIV compared to the background HIV rate and was due to poor adherence to study medication. 90% of study injections were given on time and overall study retention was above 95%

Figure 1. Study design

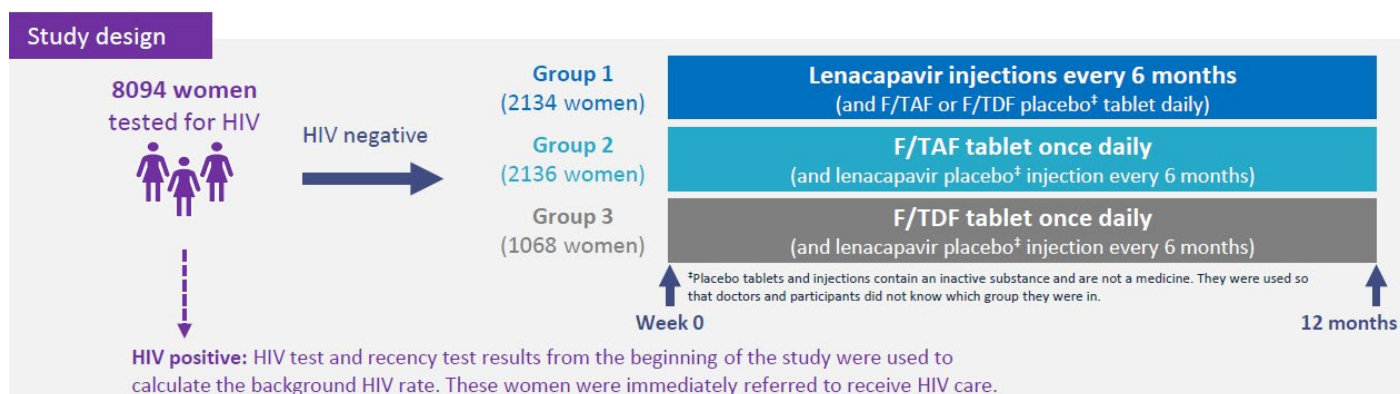
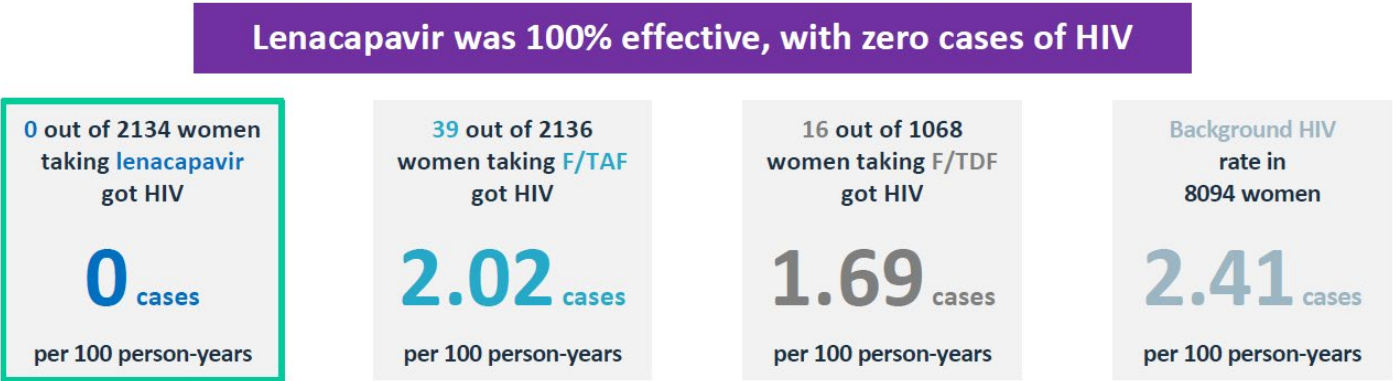


Figure 2. Study results



Safety

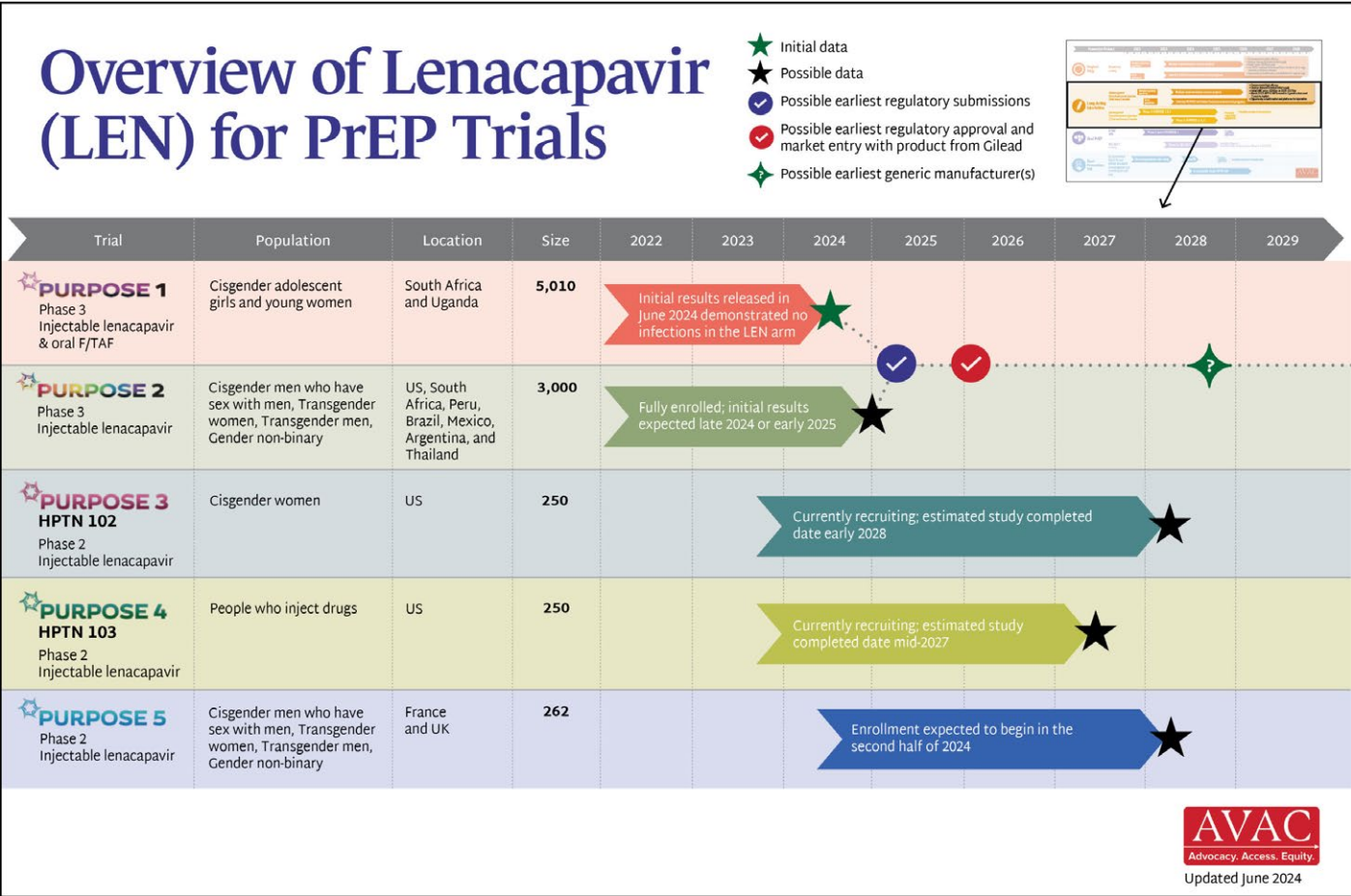
Lenacapavir and F/TAF were well tolerated and few women stopped medications because of side effects. Injection site reactions were more common in the lenacapavir group and resulted in 4 participants discontinuing trial medication. Available pregnancy outcomes were similar to those expected for the population in the

510 pregnancies reported during the blinded phase of the study and the investigators continue to assess ongoing pregnancies and monitor outcomes.

PURPOSE in other populations

A companion trial, PURPOSE 2, is underway in Argentina, Brazil, Mexico, Peru, South Africa, Thailand and the US, testing twice-yearly lenacapavir for

PrEP among cisgender men who have sex with men, transgender women, transgender men, and gender non-binary people. Results from PURPOSE 2 were released on Sep 12 2024 and were similar to those for PURPOSE 1. Additional studies in critical populations, including PURPOSE 3 among cisgender women in the US and PURPOSE 4 among people who use injection drugs, are also underway.



Next steps

Following the announcement of the study results, all PURPOSE 1 participants have been offered lenacapavir in an open label extension phase of the study. The drug company, Gilead has committed to providing post-trial access to all study participants until the drug is available in country.

The data from the PURPOSE 1 and PURPOSE 2 trials will support upcoming regulatory filings so that twice-yearly lenacapavir for PrEP, if approved, can be made available to multiple populations and communities around the world who are most in need of additional HIV prevention choices. Gilead will begin a series of global regulatory filings by the end of 2024. This could support the initial launch of the first and only twice-yearly HIV prevention choice in 2025.

Gilead is executing an access strategy that will prioritize high-incidence, low-resource countries, which are primarily low- and lower-middle income countries. Gilead is committed to making lenacapavir available in the countries where the need is greatest, including expediting voluntary licensing partners to supply high-quality, low-cost versions of lenacapavir⁹.

Why is the PURPOSE 1 study considered groundbreaking?

The study design using the estimation of background HIV incidence to measure the efficacy of the trial drugs was very innovative. Other groundbreaking features of this study included showing that a twice-yearly injection could prevent HIV by 100% and including adolescents (16 and 17 years of age) and pregnant and lactating women for the first time in an adult pivotal HIV prevention study.

Box 1: Key take home points

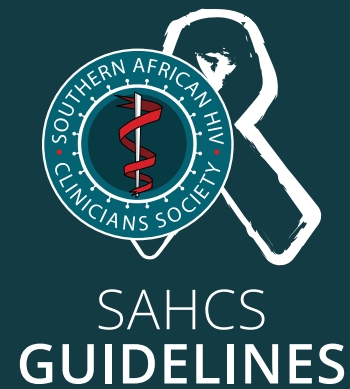
- Zero women receiving lenacapavir acquired HIV, it was 100% efficacious and better than F/TDF
- The rate of HIV infections was not reduced by F/TAF, however women who took the F/TAF tablets as prescribed had a lower chance of HIV infection than those who did not
- Lenacapavir, F/TAF and F/TDF were safe and well tolerated
- Twice yearly lenacapavir works well, is safe and is a discreet choice to potentially help more cisgender women use and stay on PrEP and hopefully reduce HIV in cisgender women worldwide.



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THE SOUTHERN AFRICAN HIV CLINICIANS SOCIETY 2022 GUIDELINE FOR THE MANAGEMENT OF SEXUALLY TRANSMITTED INFECTIONS: MOVING TOWARDS BEST PRACTICE



Sexually transmitted infections (STIs) are among the most common acute conditions globally, with sub-Saharan Africa bearing a particularly high burden. Key populations disproportionately affected include adolescent girls and young women, people living with HIV, pregnant women, and other vulnerable groups. Social determinants of health, gender inequality, and stigma contribute to the ongoing prevalence of STIs.

These infections can cause various conditions like urethritis, cervicitis, and genital ulcers, and lead to serious complications such as pelvic inflammatory disease, infertility, and adverse pregnancy outcomes. STIs also increase susceptibility to HIV and, with the rise of antibiotic-resistant gonorrhoea, managing these infections has become a growing public health challenge.

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**Southern African HIV Clinicians Society 2022 guideline
for the management of sexually transmitted
infections: Moving towards best practice**

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This comprehensive guideline, authored by leading experts in the field, addresses key topics to comprehensively diagnose and manage STIs and improve clinical outcomes:

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- Screening for STIs
- Diagnostic testing for STIs
- Clinical management of symptomatic patients
- Pathogen-directed treatment of specific STIs
- Clinical management of patients with recurrent or persistent symptoms
- Engaging sex partner/s in care

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Let's work together to move towards best practice in STI management and ensure healthier patients and communities.



Quality Improvement for improved integration of HIV-TB services: Evidence from the MERGE & SUTHI studies

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Background

The Human immunodeficiency virus (HIV) drives the resurgence of active tuberculosis (TB), accounting for approximately two-thirds of all new TB case notifications in Southern Africa.¹ To address the burden of disease in

HIV and TB endemic, resource-limited settings, global and national HIV and TB policy and programme guidelines strongly advocate for integrated HIV-TB service delivery, and highlight key focus areas for HIV-TB integration (Fig.1).¹⁻³ Despite this, characteristics of vertical healthcare delivery of HIV

and TB services still prevail.⁴⁻⁶ Without cross-referral between HIV and TB care programmes, delivery of HIV and TB services continue in separate clinics by different healthcare staff. Suboptimal implementation of integrated HIV-TB care results in a greater burden to patients, worsening of healthcare

facility congestion and greater resource requirements from health services to deliver healthcare. Patients coinfecting with HIV and TB are burdened with travel, time, inconvenience, and costs of duplicate clinic visits to access separate HIV and TB care services.^{5,6} Overburdened, resource-constrained healthcare services, coupled with high staff turnover, often leads to inadequate staff skills and capacity for delivery of comprehensive integrated HIV-TB services, poor guideline implementation, inadequate delivery of key diagnostic, preventative, and therapeutic services, and poor identification, referral and management of complex HIV, TB, or associated comorbidities.^{6,7}

Figure 1: Key areas of focus for HIV-TB integration adapted from SUTHI protocol by Naidoo et al., 2017

Key focus areas

- Intensified HIV case-finding in people with TB (PWTB) and TB case-finding in people living with HIV (PLWH)
- Isoniazid preventative therapy (IPT) for PLWH
- Cotrimoxazole therapy (CPT) for PLWH
- Timely antiretroviral therapy (ART) initiation for all PLWH
- Enhanced retention-in-care strategies including post-test counselling and use of community-based outreach workers
- Enhanced treatment adherence strategies including the use of community care workers for adherence support and community-based management of selected patients
- Fully integrated data management system adopting the approach of one patient, appointment, file, and data management system

What is QI for HIV-TB integration?

The South African department of health defines quality improvement (QI) as achieving the best possible results within available resources.⁸ Hence, QI includes ongoing and continuous activities or processes designed to improve acceptability, efficiency, and effectiveness of service delivery toward better health outcomes. The MERGE and SUTHI studies adopted QI as an implementation strategy to address health system gaps in HIV and TB diagnosis and treatment, for comprehensive coverage of integrated HIV-TB service delivery within public health facilities.⁹⁻¹¹ Published literature highlight several quality gaps and suboptimal implementation of integrated HIV-TB care services in primary healthcare (PHC) facilities, including missed opportunities to screen patients for TB, provide HIV testing, and improve linkage and retention in treatment and care.⁶ Strengthened health systems delivery of integrated HIV-TB care through improved access to HIV and TB screening, TB diagnostic testing, timely antiretroviral therapy (ART) initiation, and timely TB preventive therapy (TPT) in health facilities helps ensure universal health coverage of comprehensive HIV and TB related services. Evidence of the impact of QI activities in the scale-up of

Vertical transmission prevention (VTP) within public services is visible in the reduction of perinatally acquired HIV infection to <1.7% in South Africa.¹² There is scarcity of data and knowledge on the impact of QI activities supporting integrated HIV-TB service delivery. Two implementation science studies (MERGE and SUTHI) evaluated the impact of QI on integrated HIV-TB services within South African PHC clinics.

Quality improvement of HIV-TB integration (MERGE & SUTHI trials)

The MERGE study was conducted in 18 PHC clinics within the Ekurhuleni District in Gauteng, between 2011-2012.⁹ The primary outcomes of the trial were to assess the impact of improved integrated HIV-TB service delivery on rates of morbidity (hospitalization) and mortality in the TB and HIV cohorts and the 12-month retention in care within the HIV-TB coinfecting cohort.^{9,13} The trial intervention was the placement of additional study-supported clinic staff members in intervention clinics. These additional staff included an HIV-TB integration officer (a professional nurse with prior HIV and TB experience), and a TB screening officer (a lay worker with experience working in public facilities).¹³ Integration officers were

responsible for direct integrated HIV-TB patient care, documenting HIV and TB activities, identifying gaps in the delivery of integrated services, and mentoring clinic managers and staff in transitioning toward a single provider of integrated HIV-TB services.¹³ Tuberculosis screening officers were responsible for TB screening among people living with HIV (PLWH) and following up diagnosed people with TB (PWTB).¹³ Control clinics functioned as per standard of care (SOC).¹⁴

The South African department of health defines quality improvement (QI) as achieving the best possible results within available resources.⁸ Hence, QI includes ongoing and continuous activities or processes designed to improve acceptability, efficiency, and effectiveness of service delivery toward better health outcomes.

The MERGE study enrolled 3328 patients, among whom 3024 were PLWH and 731 were PWTB.⁹ There were 427/3328 HIV-TB coinfecting patients.⁹ The primary outcome analysis showed no significant differences in morbidity and mortality in the HIV and TB cohorts enrolled in intervention and control group clinics.⁹ Incidence of hospitalization or deaths among PLWH in the intervention and control groups was 12.5 vs. 10.4 per 100 person-years, and among newly diagnosed PWTB was 17.1 vs. 11.1 per 100 person-years, respectively (Table 1). Furthermore, at 12 months of follow-up, retention in care in the HIV-TB co-infected cohort was similar in both study groups at 63.0% and 55.9%.⁹ There were no significant differences in the intervention vs baseline performance of: ART initiation among newly diagnosed PLWH by the end of 10 weeks (67% vs 70.4%); ART initiation by 10 weeks

post-HIV testing among PLWH newly diagnosed with TB (39.3% vs 38.8%); and IPT initiation by 12 months post-HIV testing among newly diagnosed PLWH (39.8% vs 42.6%).⁹ The MERGE study findings demonstrate that placement of additional clinic staff to support HIV-TB service integration alone is not enough to directly impact morbidity and mortality among PLWH and PWTB. Optimal HIV and TB service delivery requires strategies and personnel dedicated to improving coverage, quality, processes, and health care delivery systems at each point of the HIV and TB care cascade (Fig. 1).

The open label Scaling Up TB and HIV Treatment Integration (SUTHI) study was conducted in 40 PHC clinics within two rural districts in KwaZulu-Natal (KZN), between 2016-2018.¹⁰ In this study, clinics were randomized into 16 clusters where a cluster was defined

as a PHC supervisor that managed three to five PHC clinics (n=8 clusters and 20 clinics per study group).¹⁵ The QI intervention in this study comprised three components: 1) healthcare worker training and capacity building; 2) in-person QI mentorship of clinic staff; and 3) QI for improved reliability of routinely collected clinic data to advise measures of program performance. The Breakthrough Series Collaborative (BTSC) model adopted in delivery of the QI intervention was used to support key aspects of HIV-TB service integration.¹⁵ A BTSC consisted of the PHC nurse supervisor and their respective clinic QI teams which were made up of the clinic QI champion, clinic's operation manager, selected clinic staff members, and a QI nurse mentor.¹⁵ The QI champion was the clinic's senior nurse who was trained to lead the clinic's QI team using QI methods. The research team provided



Table 1: Primary outcomes from the MERGE study: Incidence of morbidity (hospitalizations) and mortality among patients newly diagnosed with HIV and patients newly diagnosed with TB

MERGE study				
	PLWH		PWTB	
Study groups	Intervention group	Control group	Intervention group	Control group
Incidence of morbidity or mortality per 100 person-years	12.5	10.4	17.1	11.1

Adapted from <https://doi.org/10.1016/j.cct.2018.07.013>

the QI nurse mentor who made bi-weekly, in-person clinic visits to support QI activities implemented toward achieving comprehensive HIV-TB service integration.¹⁵ The collaborative met at three in-person QI workshops scheduled 6-monthly, for QI and clinical skills training, and sharing of successes, challenges, lessons learned and best practices. Improved clinic performance in delivery of integrated HIV-TB services was measured by specific process indicators (Fig.2). Intensity and focus of QI activities were tailored to the clinic's performance in key HIV-TB service integration.¹⁶

The SUTHI study enrolled 21 379 participants: 10.2% HIV-TB co-infected, 81.4% PLWH, and 8.4% with TB only. The primary outcome of this study was to assess the impact of QI supported integrated HIV-TB service delivery on all-cause mortality rate among patients newly diagnosed with HIV and/or TB (Table 2).¹⁰ Mortality rates in PLWH and in HIV-TB coinfecting patients at 12-months of follow-up was not significantly reduced by QI supported HIV-TB integration activities.¹⁰ Observed overall mortality rates were 4.5 (95% CI: 3.4-5.9) and 3.8 (95% CI: 2.6-5.4) per 100 person-years in the intervention and control group clusters, respectively.¹⁰ Among HIV-TB co-infected patients, mortality rates in intervention and control groups were 10.1 (95% CI: 6.7-15.3) and 9.8 (95% CI: 5.0-18.9) per 100 person-years, and among PLWH only, mortality rates were 2.6 (95% CI: 1.8-3.7) and 2.2 (95% CI: 1.2-4.3) respectively (Table 2).¹⁰ Quality improvement support did not confer significant increases

HIV-TB process indicators

- HIV testing in PWTB
- TB screening among PLWH
- IPT initiation in new ART patients
- ART initiation in HIV-TB co-infected patients
- Viral load testing at month 12 after ART initiation

in ART initiation or viral load testing rates in the intervention compared to the control group clinics.¹¹ Compared to SOC clinics, clinics receiving QI intervention support demonstrated a 19% increase in HIV testing rates and 66% increase in IPT initiation rates.¹⁶ Furthermore, a SUTHI sub-study assessed the association of organizational contextual factors within a QI collaborative intervention on delivery of integrated services. This study observed that factors such as physical infrastructure, availability of key staff, flexibility of clinic hours, monitoring data for improvement (MDI) activities, and leadership support was not associated with improved integrated service delivery.¹⁶ Monitoring data for improvement was however significantly associated with increased IPT initiation rates.¹⁶ It is noteworthy that MDI activities were identified as an important practice to be sustained within public health facilities due to its potential for supporting success of future QI collaboratives for improved service delivery.¹⁶

The SUTHI study showed that QI activities significantly improved HIV testing and IPT initiation rates but did not impact other HIV-TB integration

that did not improve with QI were already performing well with high coverage rates observed in both in the intervention and control arm clinics throughout. Public health facilities have well established HIV testing services, targeting patients who chronically access healthcare services and very often already know their HIV status. The challenge of improving access to HIV testing services for hard-to-reach populations that remain undiagnosed

The SUTHI study enrolled 21 379 participants: 10.2% HIV-TB co-infected, 81.4% PLWH, and 8.4% with TB only. The primary outcome of this study was to assess the impact of QI supported integrated HIV-TB service delivery on all-cause mortality rate among patients newly diagnosed with HIV and/or TB (Table 2).¹⁰

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- TB Diagnosis and Case Finding in Adults and Adolescents

Module 4: Management

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- When to Refer a TB Patient

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Table 2: Primary outcomes from the SUTHI study: Mortality rates in person-years per study group in those PLWHA only, TB only, and HIV-TB co-infected

MERGE study								
	All patients		PLWH only		TB only		HIV-TB co-infected	
Study groups	Intervention group	Control group	Intervention group	Control group	Intervention group	Control group	Intervention group	Control group
Mortality rate per 100 person years (95% confidence interval)	4.5 (3.4-5.9)	3.8 (2.6-5.4)	2.6 (1.8-3.7)	2.2 (1.2-4.3)	18.2 (10.8-30.7)	18.3 (13.9-24.1)	10.1 (6.7-15.3)	9.8 (5.0-18.9)

Adapted from <https://doi.org/10.1016/j.eclinnm.2022.101298>



activities. The integration activities that did not improve with QI were already performing well with high coverage rates observed in both in the intervention and control arm clinics throughout. Public health facilities have

well established HIV testing services, targeting patients who chronically access healthcare services and very often already know their HIV status. The challenge of improving access to HIV testing services for hard-to-reach

populations that remain undiagnosed and are at greatest risk for HIV and TB infection remain. Strategies to improve HIV testing services coverage rates include pretest HIV testing and group counselling in waiting areas of health facilities, and decentralized HIV testing programs outside of healthcare facilities.^{11,16} and targeted acute The improvement of TPT initiation rates in PLWH in the intervention group in this study is attributed to suboptimal baseline performance.¹¹ This provided an opportunity to identify and improve existing gaps in TPT services with the support of QI activities. The quality improvement activities implemented to address gaps in TPT implementation included: enhancing TB screening skills among nurses; clearly defining and coordinating staff responsibilities for IPT recording, stock control and data quality checks; establishing a specific time-frame to start IPT after ART initiation (either 7, 14 or 30 days); and development of an early identification system for IPT eligible patients.¹¹ The study did not show a significant increase in TB screening rates in the intervention group due to large numbers being screened already, exaggerated by including patient' caregivers and accompanying family members to TB screening numbers.¹¹ Given the ongoing high burden of TB especially in PLWH, universal TB screening and testing targeting population at high-risk is warranted. Successful ART program scale-up and strong national policy led to an already high performing ART coverage at baseline and limited the impact of QI on this service.

Conclusion

Effective strategies for improving quality and comprehensiveness of services offered to HIV and TB patients are urgently required to achieve the goals of reduced morbidity and mortality in PLWH, and those newly diagnosed with TB. Embedding QI activities within the health system offers an innovative, low-cost intervention for improved health systems performance for delivery of comprehensive HIV and TB services. Quality improvement interventions evaluated in the SUTHI and MERGE studies did not impact morbidity i.e. hospitalisation, or mortality. This is likely due to the unmeasured impact of undiagnosed co-morbidities, advanced HIV disease, and late presentation to care. Importantly, failure to show an impact on mortality in the MERGE and SUTHI studies reflect the challenges in designing and implementing these studies and does not signify that QI interventions are not beneficial. Further research aimed at understanding appropriate interventions for patients at high risk for morbidity and mortality is required, this includes studies such as patient pathway analyses among hospitalised patients and verbal autopsy

studies directed to families of recently demised patients. Ongoing awareness, training, and capacity building among health service providers covering key activities for optimal HIV-TB service delivery is required. Ongoing, accurate, and complete capture of patient service

engagement in electronic medical records provides an important tool for assessing clinic performance on process indicators to inform activities that identify bottlenecks and address gaps in integrated HIV-TB services.

Important box:

- Effective strategies for improving quality and comprehensiveness of services offered to PLWH and PWTB are urgently required
- QI activities within the health system offer an innovative, low-cost intervention for improved health systems performance for delivery of comprehensive HIV and TB services
- The SUTHI study showed that QI activities significantly improved HIV testing and IPT initiation rates
- The QI interventions evaluated in the SUTHI and MERGE studies did not impact morbidity i.e. Hospitalization, or mortality
- Failure to show an impact on mortality in these studies does not signify that QI interventions are not beneficial
- Ongoing awareness, training, and capacity building among health service providers for optimal HIV-TB service delivery is required
- Ongoing, accurate, and complete capture of patient service engagement in electronic medical records provides an important tool for assessing clinic performance

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Community pharmacy staff competency to initiate PrEP in South Africa: Baseline insights from pilot pharmacy delivered PrEP project

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Introduction

In 2016, South Africa (SA) became the first nation to approve oral pre-exposure prophylaxis (PrEP) for sex workers and other populations at substantial risk of HIV¹. This was achieved through differentiated service delivery models, such as community-based, school-based, and facility-based approaches, following the World Health Organization's (WHO) 2015 recommendations^{2,3}. Despite these implemented models, PrEP uptake remains low due to limited access to healthcare, stigma related to PrEP use, and cultural beliefs about sexuality and HIV⁴. This low uptake is consistent with reports from other regions in Sub-Saharan Africa (SSA), where similar challenges impact the

adoption and implementation of PrEP to reduce incidents of HIV infection⁵. Pharmacy-delivered PrEP has potential to increase uptake and support continuation^{6,7,8,9} and Pharmacy-Initiated Management of Antiretroviral Therapy (PIMART) can enhance capacity among pharmacists and nurses¹⁰. There has been a noticeable lack of evidence on pharmacy staff capabilities in delivering PrEP in South Africa¹¹. To address this, we are conducting a pilot study, to evaluate the feasibility of providing PrEP through community pharmacies in Gauteng and Western Cape provinces and a novel online platform. PrEP is provided in accordance with National Department of Health (NDOH) guidelines. This paper presents preliminary qualitative findings on pharmacy staff experiences,

competencies, and PrEP delivery implications.

Methods

Design - This study utilized a qualitative research approach to explore the competency of staff in selected community pharmacies in Johannesburg and Cape Town, South Africa.

Sample and data collection - Using convenient sampling, eleven participants were selected from nine community pharmacies. In-depth interviews were conducted face-to-face for an average of 30 minutes, interviews were audio-recorded with participant consent. The study objectives informed the interview guide design, which

included open-ended questions to allow participants to freely express their thoughts and experiences.

Data analysis - The audio recordings were transcribed verbatim, cleaned, and analyzed thematically. Following this, data was analyzed by understanding the data, creating initial codes, and reviewing themes.

Results

Pharmacy staff enrolled included 9% administrative, 18% nurses, 46% pharmacists, 9% interns, and 18% assistants. The participants mean age was 35 years old and they had 1 to 26 years of pharmacy experience (Table 1).

Themes reflecting gaps and need for improvement

Key findings included the staff's knowledge of PrEP, their experience with initiating PrEP, and perceived gaps in their training. The themes are elaborated below.

Knowledge of PrEP

Pharmacy staff had varying levels of knowledge about PrEP. Some participants were unable to explain what PrEP is, as exemplified by this participant's statement.

"What I think I know about PrEP? Trying to explain to people about having precaution for HIV" [Pharmacy nurse, Western Cape Province].

Other scenarios depicting knowledge gaps are illustrated in the quotes below.

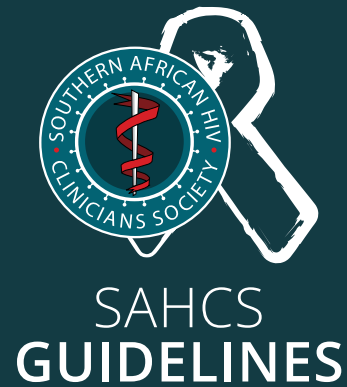
"A patient was taking Truvada in particular. So I was under the impression that it was PrEP,... I didn't know that you take the PrEP like throughout for a long period of time. Also, I thought you only take it for a month... So, but because I couldn't figure out (difference between PrEP and PEP to clients requesting it), I would refer them to a doctor and then they consult"

Table 1: Description of pharmacy staff interviewed at baseline prior to the PrEP implementation study in selected pharmacies in Johannesburg and Cape Town, South Africa

Variables	Number	Percentage (%)
Age	Number	Percentage (%)
20 – 30 years	4	36
31 - 40 years	3	27
41 – 50 years	2	18
> 50 years	2	18
Sex		
Male	3	27
Female	8	73
Duration of service in the community pharmacy environment		
< 2 years	4	36
2 – 5 years	2	18
6 – 10 years	2	18
> 10 years	2	18
Missing response	1	9
Role in pharmacy		
Pharmacy manager	2	18
Primary Care Drug Therapy Pharmacist (PCDT)	1	9
Pharmacist	2	18
Pharmacy intern	1	9
Pharmacy assistant	2	18
Registered nurses	2	18
Admin manager	1	9

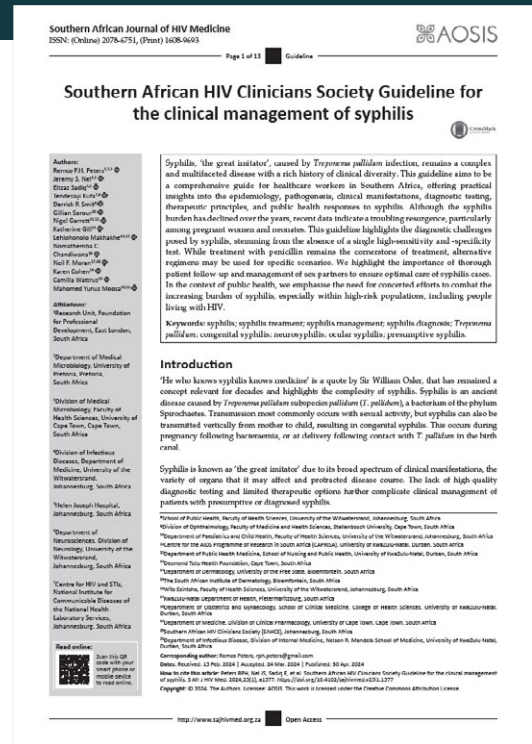
In 2016, South Africa (SA) became the first nation to approve oral pre-exposure prophylaxis (PrEP) for sex workers and other populations at substantial risk of HIV¹.

THE SOUTHERN AFRICAN HIV CLINICIANS SOCIETY GUIDELINE FOR THE CLINICAL MANAGEMENT OF SYPHILIS



Syphilis, 'the great imitator', caused by *Treponema pallidum* infection, remains a complex and multifaceted disease with a rich history of clinical diversity. This guideline aims to be a comprehensive guide for healthcare workers in Southern Africa, offering practical insights into the epidemiology, pathogenesis, clinical manifestations, diagnostic testing, therapeutic principles, and public health responses to syphilis. Although the syphilis burden has declined over the years, recent data indicate a troubling resurgence, particularly among pregnant women and neonates.

This guideline highlights the diagnostic challenges posed by syphilis, stemming from the absence of a single high-sensitivity and -specificity test. While treatment with penicillin remains the cornerstone of treatment, alternative regimens may be used for specific scenarios.



The guideline covers the following topics:

- Epidemiology of syphilis in Southern Africa
- Pathogenesis of *T. pallidum* infection
- Clinical manifestations of syphilis
- Diagnostic testing for syphilis
- Therapeutic principles
- Follow-up of patients treated for syphilis
- Public health response

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Together, we can strengthen our response to syphilis and enhance care for all patients, especially those at high risk.

[Pharmacist and pharmacy manager, Gauteng Province]

"As one pharmacist put it "uhm a pharmacist here... she has done PrEP before... So mainly there's like one patient we have, so he had a scare previously about being HIV positive, but he tested negative, so he is on a regular basis he gets his PrEP to prevent him from going through that again. Yes so, the ARV's (PrEP), so we use it before and you use it after for a while for certain period of time, the period I am not aware of, but I know it needs to be taken before and still afterwards and during"

[PCDT Pharmacist, Western Cape Province]

Experience with ability to initiate PrEP initiation

We noticed a lack of experience among pharmacy staff in initiating PrEP as most of their expertise stemmed from their practical knowledge of dispensing medications prescribed by doctors, as highlighted by a quote from one of the pharmacists:

"Okay, it (PrEP) won't be a new thing per se. The only new thing is that now it will be us who will be initiating it. But all along we've been dispensing it with prescriptions from doctors or hospitals" [Pharmacist, Gauteng Province]

In contrast to the participant's assertion above, we noted that certain pharmacies particularly in the Western Cape province, have not yet provided PrEP at the time of this interview, suggesting that they have not yet had experience with PrEP initiation, as described in the participant's response to the question; do you know if this pharmacy is dispensing PrEP to anyone?

Response:

"Not yet" [Pharmacy Nurse, Western Cape Province]; "No it's not" [Pharmacy Intern Western Cape Province]

Training gaps reflecting needs to enhance capacity to initiate PrEP

Across the pharmacies there was varied levels of trainings received related to PrEP initiation, with some reporting no training received and others having

Thus, this study highlights the importance of pharmacy staff training and capacity building to address knowledge, skills, and experience gaps in PrEP delivery.

prior exposure to HIV and ART guidelines. In some instances the only training people could report having was COVID vaccination administration and stock management.

"The other courses that I have done, this immunization courses, immunization because of the COVID. They introduced these COVID courses, they wanted us to be able to vaccinate, so I did that apart from pharmacy"

[Pharmacist and pharmacy manager, Gauteng Province]



"We once had training. I think it was last year. Ja, we had training with one of the suppliers, is it suppliers or manufacturers?... Suppliers, they came in. They were telling us about their product. About how, like it's incorporated into the PrEP program. So, we had training on that. So, I don't know what happened for it not to start, because we were supposed to. I don't know that happened there. Ja, that's how I started knowing about it in retail pharmacy. Ja, it was mostly like the tablets that you're supposed to take, when to take them and who's supposed to take them"

[Pharmacy Assistant, Western Cape Province]

Only 4 of the 11 participants interviewed; 3 from Gauteng and 1 from the Western Cape province, had received Pharmacist-Initiated Management of Antiretroviral Therapy (PIMART) training at various time points prior to the study and at the time of the interview, and one of them admitted to not knowing whether they had received the training.

"I did the PIMART course, the one for the pharmacist ... A few years ago. I don't know why I did it as a nurse"

[Pharmacy Nurse, Gauteng Province]

Some other pharmacy staff members indicated that they had not received any training and others expressed a desire to learn more about PrEP guidelines and improve their ability to provide this service especially through PIMART.

"I haven't done any formal training as such, no. No additional training so it's basically learning every day"

[Pharmacy Admin Staff, Gauteng Province]

"I'd like to learn more. I'd like to learn more and currently not much. Yeah, but I'd like to, definitely like to learn more"

[PCDT Pharmacist, Western Cape Province]

Additionally, some pharmacy staff highlighted the need for training in counseling. A pharmacist mentioned, "Like for an example I talked about counselling. If someone comes and trains us about counselling it improves my knowledge on counselling, I'm motivated"

[Pharmacist, Gauteng Province]

Discussion

Overall, there were gaps in knowledge, experience, and training needs among pharmacy staff. Pharmacists and nursing staff had little experience initiating PrEP, possibly due to current regulations requiring only doctor prescriptions¹⁰. In some instances, staff could not differentiate between PrEP and PEP. These findings are consistent with previous studies across Sub-Saharan Africa^{3,4,9,11} and the United States^{12,13,14} that found pharmacy staff barriers to PrEP delivery included lack of: PrEP awareness and knowledge¹¹; skills and PrEP training^{13,14,15}. Thus, this study highlights the importance of pharmacy staff training and capacity building to address knowledge, skills, and experience gaps in PrEP delivery.

Conclusion

The approval of PIMART, which is currently under legal review in South Africa can enhance capacity among pharmacists and nurses. This will empower pharmacy staff to continue offering PrEP and increase uptake. The PrEP landscape is evolving with the introduction of long-acting agents and its important the pharmacy staff is kept abreast of these products so that they can hit the ground running once PIMART is approved.

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South African National Aids Council (SANAC) Consultation with Nursing Education Institutions: Strengthening HIV Treatment Literacy to End the HIV Epidemic in South Africa

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Introduction

Since the inception of the antiretroviral treatment programme in South Africa, nurses have played a central role in decentralising and improving access to HIV treatment and care.¹ On 21 August 2024, the South African National Aids Council (SANAC) invited South African Nursing Education Institutions (NEIs) to a consultative meeting in Johannesburg. The purpose of the meeting was to:

- To share the NSP Goals with Nursing institutions
- To introduce the HIV literacy (HL) framework,² and discuss treatment literacy gaps
- Introduce the Undetectable equals

Untransmittable (U=U) concept

- To deliberate on strategies to incorporate U=U and the broader HIV literacy to the nursing school's curriculum
- To establish a platform to capacitate undergraduate final year nursing students with U=U and the broader HIV literacy concepts

The purpose of this meeting was linked to the South African National Strategic Plan for HIV, TB and STIs (NSP) 2023-2028.³ In 2023, there were 7,700,000 [7,000,000 - 8,300,000] million adults and children living with HIV in South Africa of which only 77% were receiving antiretroviral treatment.⁴

The increasing number of people living with HIV (PLHIV) necessitates the implementation of an integrated chronic disease model that promotes assisted self-management.⁵ Such a model necessitates patient empowerment, hence, the importance of HIV literacy.

There is a general perception that nurses have limited knowledge about HIV and that HIV treatment and care competencies are not integrated into the nursing curriculum. Hence, SANAC approached nursing education institutions for a consultative meeting. Nursing students in colleges and universities should be empowered and capacitated to manage PLHIV. It is

pivotal that students be provided with knowledge on the management of STIs, TB and HIV. The agenda of the meeting was further to enhance the implementation of the HIV treatment literacy program. The meeting was attended by 52 delegates spread across eight provinces: Gauteng (29), Kwa-Zulu Natal (5), Eastern Cape (3), Free State (3), Western Cape (3), Limpopo (2), Northwest (5) and Mpumalanga (2). This article provides an overview of the topics presented and discussed during the meeting.

HIV cascade updates and NSP 2023-2028 overview

South Africa is aligned with the global HIV cascade targets, known as the 95-95-95 goals. The first 95 is the percentage of people who know their HIV status, the second 95 relates to the percentage of PLHIV on antiretroviral treatment (ART), and the third 95 refers to PLHIV with viral load suppression of less than 1000 copies/ml. In order to achieve these targets, it is important to identify gaps, hence the need for the HIV treatment literacy programme.

As of April 2024, South Africa's cascade is at 95-80-93 for the total population serviced through both public and private sectors. To achieve the 95-95-95 target, South Africa must increase:

- the number of total clients on ART by 1,139,059
- adult females on ART by 498,995
- adult males on ART by 565,177
- children less than 15 years on ART by 74,887

Kwazulu Natal has the largest number of people who know their HIV status, followed by Mpumalanga. With the first 95, South Africa has reached the target among women and girls but not among men and children. Women and girls are doing better across the HIV cascade than men and children living with HIV. Concerning the second 95, as of May 2024, 66% of children are not on treatment, highlighting a significant gap. Data from the 2023 South African national dashboard indicate that PLHIV

who are on treatment are decreasing instead of increasing, pointing to a gap in HIV screening and initiating clients on ART.

Current data points to the population, in general, being less cautious in preventing HIV transmission and infection. Further, nurses need to increase efforts to screen people for HIV and initiate those who test positive on ART. Another critical gap is the number of children initiated and followed up on ART by nurses. More can be done to identify missed opportunities and improve the treatment cascade among children. The Global Alliance plan has four pillars and seeks to close the gap in children's HIV care.⁶ Nursing students must familiarise themselves with this plan before entering professional practice, as it will contribute to positive HIV patient care.

The South Africa National Strategic Plan 2023-2028 should serve as a guiding strategy to take the country towards ending AIDS as a public health threat by 2030. HIV prevention efforts must focus on key and priority populations as they face higher risk or specific barriers to accessing HIV services. Key populations include sex workers and their clients, transgender people, men who have sex with men, prisoners and PLHIV. Priority populations include mine workers, people with disability, men living with HIV who know their status but are not on ART, other LGBTQIA+ populations, informal traders, people living in informal settlements, children including orphans and vulnerable children, pregnant women, adolescents and young people and mobile populations, migrants and undocumented individuals.

The goals of the National Strategic Plan (2023-2028)

Goal 1: breaking down barriers to achieving solutions for HIV, TB and STIs. Gender inequality, which increases vulnerabilities, must be tackled with gender-transformative approaches. Reducing stigma and discrimination is essential to improving access to services

The South Africa National Strategic Plan 2023-2028 should serve as a guiding strategy to take the country towards ending AIDS as a public health threat by 2030.

and protecting human rights while promoting access to justice. Integrated mental health services are critical, and anti-discriminatory laws should be strengthened through policy reform.

Goal 2: Maximise equitable and equal access to services and solutions for HIV, TB and STIs. Nurses play a key role in promoting HIV prevention by improving knowledge, attitudes, and behaviours. Reducing HIV infections requires optimising high-impact interventions, such as eliminating vertical transmission. Achieving the 95-95-95 targets will enhance the quality of life for PLHIV and reduce HIV-related deaths, co-morbidities, and complications. Strengthening TB screening, diagnosis, and services is also essential.

Goal 3: Build resilient systems for HIV, TB and STIs that are integrated into systems for health, social protection and pandemic response. This will be achieved through improving access to HIV, TB and STI laboratory testing including molecular diagnostics, serology and culture. The acceleration of the approval of new health products should be supported and the research agenda for HIV, TB and STIs expanded, to strengthen the national response. Adequate human resources are needed to ensure equitable access to services for HIV, TB, STIs and related conditions.

Goal 4: Fully resource and sustain efficient NSP led by revitalized, inclusive and accountable institutions. This can be achieved by resetting

SANAC, all AIDS councils, and civil society organisations to ensure optimal and impactful execution of the 2023-2028 NSP. Additionally, sufficient domestic and external funding should be mobilised and allocated to support the implementation of HIV, TB, and STI programmes while addressing the underlying risk factors that directly impact these conditions.

U=U science and the NSP

A key factor in achieving the 95-95-95 goals is to improve treatment literacy for HIV, TB, and STIs and reinforce the undetectable = untransmittable (U=U) message. Targeted messaging should be enhanced to increase awareness and improve ART suppression rates. A study conducted in 25 countries found that discussing U=U with PLHIV was linked to positive health outcomes.⁷ Therefore, training healthcare workers on U=U is essential, as it is a strong motivator for treatment uptake and retention in care.

Treatment literacy programme implementation

Treatment literacy is the understanding of key issues related to an illness, including its science, treatment, side effects, and guidelines, enabling patients to take responsibility for their care and advocate for their rights

when proper treatment is unavailable (SANAC, 2023). In the context of HIV, treatment literacy involves comprehending HIV medications, their purpose, benefits, and limitations, as well as translating medical information about ART into accessible languages and formats.⁸ Barriers to treatment literacy can include:

- *Family and community factors:* Stigma, exclusion from gatherings, cultural and religious beliefs that discourage antiretroviral (ARV) use, and caregivers failing to administer ARVs to children.
- *Healthcare system issues:* Poor communication of test results, insufficient time for explaining lifelong treatment, limited patient support, high patient volumes, and inadequate peer support.

Group discussions on synergies, collaboration and the way forward

The group identified key capacity-building needs, including the integration of health literacy and U=U into the nursing curriculum and the dissemination of this information to lecturers, clinical facilitators, and graduates. Standardisation of HIV content across all institutions is essential. Strengthening communication between SANAC and nursing NEIs is crucial, as is fostering collaboration among stakeholders.

Introducing postgraduate research students to SANAC programmes can help evaluate their impact, while SANAC should provide NEIs with the latest HIV statistics. A working group should be formed to shape the research agenda and identify knowledge gaps in the nursing curriculum.

Conclusion

The SANAC consultation with NEIs was a crucial step towards strengthening HIV treatment literacy to combat the HIV epidemic in South Africa. By integrating HIV literacy and U=U messages into nursing curricula and enhancing stakeholder collaboration, we can empower future healthcare professionals to improve care for PLHIV.

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Palliative Care for People living with HIV and Cancer

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The success of the antiretroviral (ART) program in South Africa (SA) and increased longevity has changed the spectrum of disease and palliative care needs of people living with HIV (PLH).¹ A large European and North American HIV cohort study demonstrated that the proportion of death due to AIDS declined from 49% in 1996-1999 to 16% in 2016-2020, with an increase in the proportion of non-AIDS-defining cancers from 5% to 19% during the same period.² As AIDS mortality rates decline PLH are living longer and death is more likely due to age-related morbidities.^{2,3}

Most of the cancers seen in association with HIV are related to coinfection with other viruses. Kaposi sarcoma (KS), aggressive B-cell non-Hodgkin lymphoma (NHL), and invasive cervix cancer, are called AIDS-defining cancers because they are associated with severe immunosuppression.³ Despite the reduction in incidence of these malignancies in developed countries with early initiation of effective ART, these remain the most common cancers seen in PLH in SA.⁴ Other cancers associated with HIV include

Hodgkin lymphoma, HPV-associated cancers like anal cancer, and lung cancer (Box 1).³

The interplay of oncogenic viral co-infection and HIV-related immunosuppression leads to accelerated viral carcinogenesis in PLH who generally present with cancer 10-15 years younger than their HIV uninfected counterparts.⁵ Opportunistic infections like tuberculosis can cause a chronic inflammatory state and, coupled with exposure to carcinogens like cigarette smoking, leads to an increased risk of developing cancer.³ Patients tend to present with more advanced disease

due to socioeconomic and cultural factors affecting access to diagnostic and therapeutic services and healthcare-seeking behavior resulting in diagnostic delays and an increased need for palliative care.⁵

Epidemiology

The SA HIV Cancer Match study performed a record linkage analysis on a cohort of 5.2 million PLH seen from 2004 to 2014 and found cervix cancer to be the commonest in women and Kaposi sarcoma the commonest in men as shown in table 1.⁴ In contrast the most prevalent cancers in SA in 2022

Table 1: South African HIV Cancer Match top 5 cancers in PLH

	Females	Males
1	Cervix (66%)	Kaposi sarcoma (72%)
2	Kaposi sarcoma (27.6%)	Non-Hodgkin lymphoma (26.7%)
3	Breast (24%)	Primary site unknown (15.4%)
4	Non-Hodgkin lymphoma (12.3%)	Prostate cancer (14.7%)
5	Conjunctival (Eye) Cancer (7.6%)	Lung Cancer (11.7%)

Table 2: Globocan top 5 cancers in South Africa in 2022

	Females	Males
1	Breast (25%)	Prostate (24.6%)
2	Cervix (17.9%)	Lung (11.6%)
3	Colorectum (5.9%)	Colorectum (7.4%)
4	Lung (5.8%)	Kaposi sarcoma (4.8%)
5	Uterus (3.1%)	Non-Hodgkin lymphoma (3.7%)

according to Globocan are breast cancer in women and prostate cancer in men (Table 2) and the cancer with the highest mortality rate in women was cervix cancer, and lung cancer in men.⁶

The types of cancer seen in PLH vary depending on level of immunosuppression and patient age.^{7,8} The infection-related cancers associated with the lowest CD4 counts are conjunctival cancer followed by KS and NHL.⁷ The rate of cancers associated with infection (Box 1) are highest in young patients with low CD4 counts whereas the cancers not related to infections are more prevalent in individuals over age 54 years. Kaposi sarcoma occurs primarily in young men peaking at 34 years and prostate cancer predominates in older men with HIV.⁸ Palliative care is required throughout the cancer disease trajectory in PLH from diagnosis to eventual outcome be it survival or death.⁹

Palliative care in PLH at cancer diagnosis

Patients who are diagnosed with HIV at presentation with an AIDS-defining malignancy usually have high HIV viral loads, low CD4 counts, and co-existing opportunistic infections like Cryptococcus or tuberculosis. Collaboration between the infectious diseases specialist and oncologist is vital as prompt initiation of ART and treatment and prophylaxis of opportunistic infections is required to administer cancer treatment effectively. PLH must be afforded equal access to curative therapy where indicated e.g. patients with Non-Hodgkin lymphoma. A palliative approach to patients receiving curative treatment ensures effective symptom control, social support, and integration of the psychological and spiritual aspects of care. These patients struggle to cope with the simultaneous diagnosis

of two serious illnesses and require extensive counselling and support. ART adherence is essential to improve survival outcomes and patients should be encouraged to disclose their HIV status to close family or friends who form part of their support network.⁹

Virally suppressed patients on ART at cancer diagnosis are managed like any other person with cancer and may not need palliative care unless they have advanced or metastatic cancer. The SA supportive and palliative care indicators tool (SPICT) recommend referral to palliative care for patients with cancer not amenable to curative treatment, symptomatic metastatic or progressive cancer, and those who are too frail for curative oncological interventions.¹⁰

Palliative care in PLH during cancer treatment

In PLH the side effects of cancer therapy may be more severe and even life-threatening e.g. neutropenic sepsis. It is important to be aware of the continued risk of opportunistic infections like TB or Candida because HIV affects bone marrow function and most chemotherapy drugs influence immune reserve.^{3,7} Drug interactions are less concerning with safer ART regimens like the Tenofovir/Lamivudine/Dolutegravir combination (TLD) but should be considered. Counsel patients about the goals of treatment whether curative or palliative in language they

Box 1: HIV-associated cancers and aetiology

AIDS-defining cancers according to WHO clinical staging of HIV disease		HIV-associated cancers	
Cancer	Aetiology	Cancer	Aetiology
Kaposi sarcoma	KSHV	Hodgkin lymphoma	EBV
Non-Hodgkin lymphoma - Diffuse Large B-cell lymphoma - Burkitt lymphoma - Plasmablastic lymphoma - Primary brain lymphoma	EBV, KSHV, Hepatitis C	Anal cancer Vulva cancer Penis cancer	HPV
		Hepatocellular cancer	Hepatitis B and HCV
Invasive cervical cancer	HPV	Lung cancer	Multifactorial

can understand, and include detailed information on side effects and when to seek medical assistance during the informed consent process. Palliative care intervention can improve retention in HIV care and help patients and their families navigate the psychosocial and economic burden of a cancer diagnosis.⁹

Specific palliative care needs of PLH and cancer

Kaposi Sarcoma

Clinical features of KS include purplish skin lesions that range from flat patches or thick plaques to ulcerating tumours. In advanced disease there may be lymphoedema of the lower legs or other sites like face or genitalia. Oropharyngeal mucosal lesions occur frequently and pulmonary or gastrointestinal involvement are seen in advanced disease.³

Mild, asymptomatic KS is managed with ART only but symptomatic or mutilating cutaneous disease, ulcerated tumours, lymphoedema, extensive oropharyngeal involvement or visceral disease can only be palliated with chemotherapy. Liposomal Doxorubicin is standard treatment in well-resourced settings but is expensive. Paclitaxel is effective and widely used in the SA state health sector, but older chemotherapy regimens like Bleomycin and Vincristine are still widely used. Chemotherapy



is continued until a good response is achieved but ART adherence is essential to achieve a sustained response. KS is never cured and patients who present with severe disease often relapse if they discontinue ART emphasizing the importance of continued palliative care support in this group.^{3,9}

Patients with fungating KS lesions require adequate analgesia and wound management. Lower leg lesions are often profusely exudative and foul-smelling. Keep the wounds dry but refrain from using thick occlusive dressings and never soak the leg to prevent maceration. Cover with a light dressing to prevent flies and maggot infestations, and change it frequently. Metronidazole powder in the wound reduces anaerobic bacteria that contributes to the offensive odour, and topical Ichthammol Glycerin assists with healing. Ichthammol is anti-inflammatory and has antibacterial and antifungal properties in addition to being keratolytic.¹¹ Silver-impregnated alginate dressings can be useful but are expensive. Elevate the leg for

comfort and to reduce fluid secretion, and use linen savers under the leg. Chemotherapy must be continued in these patients and radiotherapy is reserved to treat residual localized skin lesions and chemotherapy-resistant disease.³

PLH with severe debilitating KS who live in poor communities where families share small spaces benefit from referral to step-down facilities for palliative care, wound management, physiotherapy and occupational therapy. In addition, good nutritional support, compliance with medication and access to the oncology unit for chemotherapy gives them the best chance of clinical improvement. Patients with extensive lymphoedema with or without ulcerating wounds are prone to developing flexion contractures that severely hamper mobility and are managed with analgesia, chemotherapy, and physiotherapy. Extensive disease that is resistant to chemotherapy and recurrent pleural effusions not responding to treatment are indications for comfort care at end of life.⁹

The interplay of oncogenic viral co-infection and HIV-related immunosuppression leads to accelerated viral carcinogenesis in PLH who generally present with cancer 10-15 years younger than their HIV uninfected counterparts.⁵

Cancer in women living with HIV

HIV disproportionately affects women in South Africa, and cancer in WLH manifests at a young age resulting in complex palliative care needs. The median age of WLH with cervix cancer is 40 years compared to 52 years in the general population, and the median age at breast cancer diagnosis in SA is 59 years versus 42 years in WLH.^{5,12} These young women often present at an advanced stage and have a more aggressive disease course with higher mortality rates than their HIV negative counterparts.^{5,12,13} The social and financial impact on patients and their families is inestimable with elderly parents and children becoming caregivers, leading to generational trauma suffered by vulnerable orphans.

Symptoms of advanced cervical cancer include severe pelvic pain, both nociceptive and neuropathic, vaginal discharge and bleeding, renal failure due to obstructive uropathy and intestinal obstruction. A multidisciplinary team approach is essential for rational therapeutic decision making to prevent use of futile and invasive therapy for obstructive uropathy, renal failure and intestinal obstruction. Fatigue, weakness, nausea and vomiting, and anxiety and depression can be managed medically, but suffering caused by stigmatization, discrimination and sexual dysfunction is most challenging to address. Metronidazole vaginal tablets or crushed on pads improves malodorous vaginal discharge. Vaginal bleeding is a life-threatening consequence of advanced cervix cancer and is usually treated in hospital with IV fluids, blood transfusions, morphine and benzodiazepines, vaginal packing and Tranexamic acid. Palliative radiotherapy or pelvic vessel embolization are used to control the bleeding. Patients who are not for active treatment can be managed at home with sufficient supplies of morphine and lorazepam, counselling and education of the patient and caregivers, and use of dark linen and towels to lessen the distress caused by massive haemorrhage.¹⁴

Oncological treatment for advanced or metastatic breast cancer depends on the type of breast cancer, comorbid conditions and patient performance status and can include chemotherapy, hormonal therapy, radiotherapy or surgery. Patients with ulcerated fungating breast tumours need effective analgesia and wound care and respond well to palliative radiotherapy. Bone metastases are common in breast cancer often resulting in severe pain, hypercalcaemia and fractures. These are managed with a combination of medical treatment, surgery and radiotherapy. Malignant spinal cord compression needs prompt assessment and treatment to prevent permanent paralysis. Patients with metastatic spread to lungs, liver or brain have a much worse prognosis, and therapeutic decisions are based on their general condition, comorbid illnesses and prior treatment received.^{9,13}

Treating patients with HIV and cancer is particularly complex, and comprehensive interdisciplinary palliative care is mandatory for the relief and prevention of physical, psychosocial and spiritual suffering. The stigmatization of HIV and cancer must be combated to empower patients and families and help them maintain dignity and quality of life as they navigate these dread diseases.

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Clinical tips

1. Antenatal syphilis seroprevalence in SA is increasing. See syphilis guidelines: <https://sahivsoc.org/Files/SAHCS%20syphilis%20guideline.pdf>.
2. Rifampicin markedly lowers concentrations of many drugs, including DR-TB drugs: always check co-administered drugs.
3. If there are DILI risk-factors, do LFTs when starting TB therapy <https://sahivsoc.org/Files/SAHCS%20DILI%20guidelines%20-%202024.pdf>.
4. Good quality specimens and correctly filled laboratory request forms are essential for receiving good quality TB results.
5. Be up to date on TB management with our TB course: <https://sahivsoc.org/Subheader/Index/tuberculosis-management-and-control-online-course>.
6. Investigate for causes of diarrhoea in a patient when they have 3 or more liquid stools per 24 hours.
7. Avoid LP in suspected meningitis if GCS <10, papilloedema, VP shunt, unexplained seizure/new focal signs.
8. PEP can effectively prevent infection in a person exposed to HIV when initiated as soon as possible and at least within 72 h post-exposure.
9. The global recommendation for PEP is a 3-drug regimen involving, whenever possible, an integrase inhibitor (usually TLD for 28 days).
10. HIV Self testing is as an option for initiation/maintenance on oral PrEP and DVR but not for CAB-LA.
11. PrEP should be offered as part of an integrated HIV prevention and sexual and reproductive health (SRH) package
12. First-line treatment of primary (e.g. ulcer) & secondary (e.g. rash) syphilis is benzathine penicillin G 2.4 million units IM single dose.
13. Counsel and offer treatment to all recent sexual partners of patient with syphilis.
14. Report congenital syphilis within 7 days of diagnosis. See <https://www.nicd.ac.za/diseases-a-z-index/congenital-syphilis/>
15. Double dose LPV/r is the only PI to use with RIF-based TB treatment Otherwise darunavir is PI of choice.
16. Tenofovir can cause renal failure or a renal-tubular wasting syndrome. Serum creatinine monitoring at regular intervals is recommended.
17. DTG can cause small increase in serum creatinine (usually <30 µmol/L) but this does not represent a decline in renal function.
18. Screen for TB and crypto meningitis prior to ART initiation as these may necessitate delaying ART initiation.
19. CD4+ count testing is to check if CTX prophylaxis, sCrAg & urine LAM testing is required, & to identify patients with AHD.
20. If ART-naïve patients, use 3TC (300 mg) or FTC (200 mg) + TDF (300 mg) + DTG (50 mg) once-daily as one-tablet FDC.

DTG - dolutegravir; VL - viral load; U=U - undetectable = untransmittable; TB - tuberculosis; TLD - tenofovir/lamivudine/dolutegravir; AZT - zidovudine; 3TC - lamivudine; NVP - nevirapine; ART; antiretroviral therapy; PCR - polymerase chain reaction; PrEP - pre-exposure prophylaxis.

Please contact valencia@sahivcs.org if you would like to receive our bi-monthly clinical tips

National HIV & TB Health Care Worker Hotline

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What questions can you ask?

The National HIV & TB Health Care Worker Hotline provides information on queries relating to:

- Pre-exposure prophylaxis (PrEP)
- Post exposure prophylaxis (PEP)
- HIV testing
- Management of HIV in pregnancy
- PMTCT
- Drug interactions
- Treatment/prophylaxis of opportunistic infections
- Drug availability
- Adherence support
- Management of DS and DR tuberculosis
- Antiretroviral Therapy (ART):
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 - Treatment selection
 - Recommendations for laboratory and clinical monitoring
 - How to interpret and respond to laboratory results
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The Southern African HIV Clinicians Society (SAHCS) is a community of healthcare professionals that work in a variety of spaces, including public, private, and allied healthcare organisations. Our commitment lies in empowering our community to deliver evidence-based, up-to-date, and patient-centred HIV healthcare of the highest quality.

We strive to support and strengthen the capacity of our members. We achieve this through the development of our clinical guidelines and job aids, offering training courses and conferences, publishing the SAJHIVMED scientific journal and the HIV Nursing Matters publication, organizing regular Continuous Medical Education meetings and webinars. We are dedicated to fostering collaboration across cadres and borders to improve the lives of all those affected by HIV.

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