



INTERNATIONAL WORKSHOP ON
WOMEN & HIV 2025
FROM ADOLESCENCE TO MENOPAUSE AND BEYOND



2025

ABSTRACT BOOK

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ORAL ABSTRACT PRESENTATIONS

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Hybrid Meeting

4-5 April 2025
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1

Conceptualizing Climate-Informed HIV Prevention: Associations Between Extreme Weather Events and Resource Insecurities with HIV Vulnerabilities among Climate-Affected Adolescent Girls and Young Women in Nairobi and Kisumu, Kenya

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Background: There is increased focus on the relationships between extreme weather events (EWE) and HIV vulnerabilities. Regions most impacted by climate change and EWE are also disproportionately affected by HIV. Recent evidence has conceptualized potential pathways linking EWE to HIV vulnerabilities and poorer HIV prevention outcomes, including via increased poverty, transactional sex, sexual and gender-based violence, and disrupted healthcare. Yet knowledge gaps persist regarding pathways from EWE to HIV vulnerabilities among adolescent girls and young women (AGYW) in contexts that are both climate and HIV affected, such as Kenya. To address this knowledge gap, we examined associations between EWE, resource insecurities (food, water, sanitation), and HIV vulnerabilities among AGYW in Nairobi and Kisumu, Kenya.

Materials and Methods: We collected cross-sectional data (April-June 2024) with a purposive sample of AGYW aged 16-24 years in Nairobi and Kisumu. Eligibility criteria included reporting in the past 14 days: a) at least one resource insecurity (food, water or sanitation) and/or EWE (e.g., flood, drought) and b) any HIV vulnerability (e.g., transactional sex, intimate partner violence, being an AGYW parent, condomless sex). We conducted linear and logistic regression with backward

stepwise methods to examine associations between socio-demographics, resource insecurities (food, water, sanitation), and EWE (past-year EWE types and frequency, eco-anxiety) with HIV vulnerabilities (past 12-month transactional sex; past 12-month intimate partner violence [IPV]; sexual relationship power [SRP]; pre-exposure prophylaxis [PrEP] awareness, use, and acceptability).

Results: Among participants (n=597; mean age: 20.13 years; standard deviation: [SD]=2.5), half (51.9%) reported 2-4 past 12-month EWE, one-third (31.8%) >5 EWE, and 16.2% one EWE. Half (n=302; 51.4%) reported past 12-month transactional sex and most (n=411; 71.4%) reported past-year IPV. Over three-quarters had heard of PrEP (n=453; 78.4%); of these, 7.8% (n=45) were currently using PrEP. Most experienced water insecurity (n=360, 62.7%), food insecurity (severe: 49.8%, n=294; moderate: 32.0%, n=189), and one-third were in the highest tercile of sanitation insecurity (n=189; 33.27%). In adjusted analyses, sanitation insecurity (adjusted odds ratio [AOR]=1.02, 95% confidence interval [CI]: 1.01-1.04) and water insecurity (AOR: 2.26, 95% CI: 1.51-3.39) were associated with increased transactional sex odds. Increased past-year EWE types (>5 vs. 1) (AOR=1.76, 95% CI: 1.08-2.88) and eco-anxiety (adjusted beta coefficient $\alpha\beta$ =1.05, 95% CI: 1.02-1.08) were associated with higher IPV odds. Sanitation insecurity (AOR=0.97, 95% CI: 0.95-0.99) and EWE frequency (>1 vs. 1) (AOR=0.32, 95% CI: 0.11-0.91) were associated with reduced, and water insecurity with increased (AOR: 1.84, 95%CI: 1.11-3.06) PrEP awareness. Sanitation insecurity (AOR: 10.2, 95% CI: 1.00-1.03) and EWE frequency (>1 vs. 1) (AOR: 3.64, 95%CI: 1.16-11.43) were associated with PrEP acceptability. Food insecurity ($\alpha\beta$ = -0.14, 95%CI: -0.27, -0.01), sanitation insecurity ($\alpha\beta$ = -0.08, 95%CI: -0.16, -0.02), and EWE frequency (>5 vs. 1) ($\alpha\beta$ = -3.52, 95%CI: -5.32, -1.72), were associated with reduced SRP.

Conclusions: Among this sample of AGYW in Nairobi and Kisumu, resource scarcity and EWE-related factors were associated with several relational-level HIV vulnerabilities (i.e., transactional sex, IPV, reduced SRP) and lower biomedical HIV prevention awareness (i.e., PrEP). Future climate-informed HIV prevention research with AGYW can integrate EWE and resource insecurity-related priorities.

2

Five-Year Trends in Characteristics and Care of Women Diagnosed with HIV During Pregnancy in England, 2018 to 2022

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Background: Early identification of HIV and initiation of antiretroviral therapy (ART) are key strategies to prevent vertical transmission and safeguard the health of women living with HIV and their infants. We aimed to describe characteristics and treatment of women diagnosed antenatally in England in 2018-2022.

Methods: The Integrated Screening Outcomes Surveillance Service within the NHS Infectious Diseases in Pregnancy Screening Programme (IDPS) conducts population-based surveillance of pregnancies in women with diagnosed HIV-1 in England. Analyses (by UK financial year) included all pregnancies booked 01/04/2018-31/03/2023 and reported by 31/06/2024. Delivery viral load was defined as the latest HIV RNA measurement, dated within 30 days before or seven days after delivery. Trends were assessed using logistic regression and Cuzick's non-parametric test for trend.

Results: There were 342 women diagnosed antenatally, representing 11.0% (342/3106) of all pregnancies reported (10.2% [79/774] in 2018, 13.5% [72/533] in 2022, $p=0.067$ for trend over time in proportion). Diagnoses fell by 25.3% (79 to 59) between 2018 and 2020 but rose by 22.0% (59 to 72) between 2020 and 2022. Overall, 71.9% (246/342) were reported by non-London hospitals, increasingly from the North East and Yorkshire (3.8% [3/79] in 2018, 18.1% [13/72] in 2022, $p=0.005$) and decreasingly from the North West (15.2% [12/79] in 2018, 5.6% [4/72] in 2022, $p=0.034$). There were 305 (89.2%) live-births, 17 (5.0%) miscarriages, seven (2.0%) terminations,

and 13 (3.8%) unknown outcomes (12/13 went abroad).

Median age was 31 years (interquartile range [IQR] 28-36). Most (84.0% [283/337]) were born outside the UK: 59.6% (201/337) in Africa, 16.0% (54/337) elsewhere in Europe, 8.3% (28/337) in other regions, with time trends in the proportion born in Africa (rise from 51.9% [40/77] in 2018 to 68.1% [49/72] in 2022, $p=0.007$) and Europe (decline from 24.7% [19/77] in 2018 to 5.6% [4/72] in 2022, $p<0.001$). Of 220 non-UK-born women with arrival timing, 18.2% (40/220) arrived in England during pregnancy and 31.4% (69/220) in the year before conception.

HIV diagnosis occurred at median 12 weeks gestation (IQR 9-15), via the IDPS for 90.9% (311/342). Median first reported CD4 count in pregnancy among 310 (90.6%) was 356 cells/mm³ (IQR 236-528); first count was <200 cells/mm³ in 19.4% (60/310). All women delivering live-born infants received antenatal ART – started at median 16 weeks gestation (IQR 13-20) and median 2.9 calendar weeks (IQR 1.1-4.4) following HIV diagnosis, with 9.7% (29/300) starting in the third trimester (T3) (≥ 27 weeks) (5 missing date) (28/29 diagnosed in T3). T3 diagnoses increased from 5.6% (4/68) of all antenatal diagnoses in 2018 to 12.5% (8/64) in 2022 ($p=0.056$), and more women diagnosed in T3 had a delivery viral load of ≥ 50 copies/mL over time (1/4 in 2018 versus 4/7 in 2022). Overall, 88.5% (223/252) had delivery viral load of <50 copies/mL (compared to 93.6% [1748/1868] of those diagnosed before pregnancy, $p=0.003$).

Conclusion: Women diagnosed with HIV antenatally in England are diagnosed and initiated on ART promptly. However, late identification (in pregnancy as well as clinically) persists in some cases.

3

Breastfeeding in Women Living with HIV: a South East London Clinic's 9 Years' Experience

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Background: British HIV Association (BHIVA) guidelines for the management of HIV infection in pregnant women 2012 updated infant feeding guidance to state that if a woman is on effective cART with a repeatedly undetectable viral load and chooses to breastfeed, this should not constitute grounds for automatic referral to child protection teams. There should be careful monitoring of maternal cART continued until 1 week after all breastfeeding has ceased. Breastfeeding is exclusive and should be completed by 6 months. WHO recommendations for infant feeding 2016 was updated to not restrict the duration of breastfeeding in settings that support lifelong cART.

The PROMISE trial where women received cART throughout the breastfeeding period found the transmission rate was 0.3% at 6 months and 0.6% at 12 months.

Current BHIVA guidance 2018 state: if a woman is virologically suppressed with good adherence to cART and chooses to breastfeed, they should be supported to do so, but should be informed about the low risk of transmission of HIV through breastfeeding in this situation and the requirement for extra maternal and infant clinical monitoring.

There is limited data on the risk of HIV transmission via breast milk in high-income countries.

Our aim is to report on the outcomes of babies that were breastfed at our service in South East London between June 2015 and October 2024 following update of guidelines and a challenge from a patient for us to adopt WHO 2016 recommendations in specific patients.

Material and Methods: Retrospective note review of women who had their antenatal HIV care at our clinic and delivered a live birth from 01.06.2015 – 03.10.2024.

Results: During this period there have been 140 live births. 43 babies (30% of live births) have been breastfed by 36 women. Of women breastfeeding: 89% were Black African; 33 (92%) heterosexual acquisition of HIV with 2 (5.5%) vertically infected. All breastfed mothers had a viral load of <50 copies/mL at time of delivery with a median CD4 of 579. Six babies were breastfed for less than 7 days. Of the remaining 37 babies who were breastfed for 7 days and more 2 are still currently breastfeeding.

35 babies completed breastfeeding for more than 1 week and we report on these.

Median duration of breastfeeding was 16 weeks with range of (1 – 95 weeks). 10 babies were breastfed by 6 mums for more than 6 months the longest 22 months (vertically infected mum). There has been no HIV transmission in this cohort of patients including those who breastfed for more than 6 months.

Conclusions: Thirty percent of babies in our service have been breast with 10 babies and 6 mums supported to breastfeed for more than 6 months following WHO 2016 recommendations. Our cohort is predominately Black African women where breast feeding is the cultural norm. Not breastfeeding could raise challenges and stigma within their community. Our data though a small cohort provides reassurance that supported breastfeeding even beyond 6 months resulted in no HIV transmissions.

4

Tele-Lactation as a Tool for Equitable HIV Care: An Examination of Lactation Consultant HIV Knowledge, HIV-related Stigma, Tele-lactation Experience, and Willingness to Support Breastfeeding/Chestfeeding People with HIV in North America

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Background: Lactation consultants (LCs) are critical in supporting breastfeeding/chestfeeding (BF/CF) and enhancing maternal and infant health. For people living with HIV (PWH), BF/CF guidance requires specialized knowledge to address unique challenges and reduce stigma. Although HIV is no longer a contraindication to BF/CF, stigma deters PWH from seeking lactation support. Tele-lactation, a telehealth innovation, offers a promising solution to improve equitable access to care. This study examines how LCs' levels of HIV-related stigma and HIV experience influence their HIV-specific BF/CF knowledge and willingness to support PWH, and their experiences with tele-lactation.

Methods: This cross-sectional, mixed-methods study surveyed certified LCs in the United States and Canada with at least two years of certification from February 23 to May 3, 2024. Participants were recruited via email through professional organizations. Quantitative assessments measured HIV BF/CF knowledge, stigma, tele-lactation experience, willingness to support PWH, and telehealth usability. HIV stigma was assessed using a standardized stigma scale (0 to 36), with higher

scores indicating lower stigma. Qualitative data were collected through free-text responses and analyzed using thematic analysis. Descriptive and inferential statistics explored relationships between HIV experience, stigma, and knowledge.

Results: The study included N=207 LCs with 99% identifying as female and 86% > 35 years old. Most participants (87%) were based in the United States, and 13% in Canada. The majority (78%) identified as White, with 17% as Black, Indigenous, and People of Color. Nearly all participants (99%) were internationally certified (IBCLC), 58% had more than 10 years of experience, and 94% reported prior tele-lactation experience. The majority of LCs (74%) had no experience working with PWH. LCs with HIV-related experience scored significantly higher on BF/CF-specific HIV knowledge (mean 12.6/21) compared to those without experience (mean 10.2/21; $p < 0.001$). The mean overall stigma score was 26.2/36 (SD = 3.21). Those with higher HIV-related knowledge had lower levels of stigma [mean 25.0/31 (SD = 3.76, $p = 0.0059$)], and participants with lower levels of stigma were more willing to support BF/CF PWH [mean 22.5/31 (SD = 3.66, $p < 0.001$)]. Conversely, LCs with higher stigma levels were less likely to support BF/CF among PWH. Participants described tele-lactation benefits, including improved access (91%), flexible scheduling (52%), time savings (36%), and reduced exposure to illnesses (29%). However, lack of hands-on care (79%) was noted as a barrier. Qualitative findings emphasized tele-lactation's potential to improve equity and access to specialized support for PWH. Importantly, 98% of participants expressed willingness to learn about HIV BF/CF, and 96% were open to tele-lactation training.

Conclusions: LCs with lower HIV stigma demonstrated greater HIV knowledge and willingness to support BF/CF in PWH, underscoring the importance of education in reducing stigma and improving care. Tele-lactation offers an innovative, accessible approach to supporting PWH while advancing equity in care. However, this study highlights the urgent need for specialized HIV education to address stigma and knowledge gaps among LCs. Inclusive, informed practices can significantly improve infant feeding outcomes for families impacted by HIV, demonstrating tele-lactation's critical role in promoting maternal and child health.



5

The Well Project Survey Reveals Dramatic Shift in Provider Support of Breast/Chestfeeding After 2023 HIV Guideline Updates

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Shared, informed decision-making is a support strategy recommended in the “Infant Feeding for Individuals with HIV in the United States” section of the US Department of Health and Human Services (HHS)’s Perinatal HIV Clinical Guidelines for navigating conversations with women living with HIV. This strategy is at the heart of significant updates made in January 2023 to the guidelines, which now reflect current evidence about the less than 1% chance of HIV transmission through breast milk when the lactating parent is taking HIV medications and has an undetectable viral load. The American Academy of Pediatrics (AAP) followed HHS in May 2024, releasing updated guidance on infant feeding in the context of HIV in the journal *Pediatrics*. The Well Project, a US-based non-profit organization, conducted a survey in 2024 to assess the impact of the guideline updates on stakeholder knowledge and attitudes, with a primary focus on healthcare providers.

In 2021, The Well Project launched BEEBAH (Building Equity, Ethics, and Education on Breastfeeding and HIV) – a comprehensive, multi-tiered project that expands upon the organization’s work around breast/chestfeeding and HIV. Through this programming, The Well Project administered an online survey via the SurveyMonkey platform recruiting participants beginning February 20, 2024 and ending March 30, 2024. The survey was developed in partnership with ETR, a non-profit organization providing science-based training, evaluation, and other services to improve health equity. ETR also provided the statistical analysis of the survey results for our report. The survey was disseminated through trusted listservs, community/provider networks, and partner organizations. We received a total of 226 complete survey and healthcare providers who work with

people living with HIV (n=117) made up 52% of the survey respondents.

Results from the survey showed a dramatic shift in healthcare provider support of breast/chestfeeding after the 2023 guideline updates: 82% of healthcare providers indicated they were “mostly/very supportive” of breast/chestfeeding for parents living with HIV after the 2023 guideline updates, compared to just 32% retrospectively indicating such support prior to the updates.

Healthcare providers indicated the top 3 ways they can support the shared decision-making model outlined in the guidelines:

1. Initiate non-judgmental discussion(s) around infant-feeding options
2. Provide evidence-based information on HIV transmission for all infant-feeding options
3. Ensure the parent and infant’s entire care team (OB/GYN, ID, pediatrician, lactation consultant, etc.) is supporting the woman’s decision on how to feed her child

Updated infant-feeding guidelines are already proving to be powerful tools to support shared, informed decision-making. While strides have been made in disseminating updated guidelines, gaps in awareness of these changes remain. Additionally, healthcare providers cited the top obstacles they face when considering infant-feeding decisions with women living with HIV including the lack of culturally responsive educational resources, support from others on the care team, and explicit policies in institution/organization that support breast/chestfeeding.

Continued efforts are needed to increase knowledge and resources among healthcare providers, women living with HIV, and other key stakeholders to support parents in knowing their options and making optimal decisions for themselves and their families.

6

Unravelling the Pharmacokinetic Mechanism Explaining Lower Bictegravir Exposure During Pregnancy

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Introduction: Plasma concentrations of bictegravir have been shown to be lower in pregnant women than in non-pregnant individuals. It is not yet known which pharmacokinetic mechanism is responsible for these lower concentrations. During pregnancy enzymatic metabolism is induced, protein binding is altered, and total body volume is increased. We describe preliminary data on total concentrations and main metabolites of bictegravir in pregnancy and post partum in order to understand the mechanisms leading to lower exposure. Free concentrations will be measured as well and can be reported during the conference.

Methods: In this multicenter, open-label, non-randomized trial pregnant women living with HIV and using a bictegravir containing regimen were included. Pharmacokinetic sampling was performed in the third trimester and 4-6 weeks postpartum. If possible, cord blood and maternal plasma at delivery were also collected. Plasma concentrations of bictegravir and its main metabolites (hydroxy-BIC-sulfate (M20) and BIC-glucuronide (M15)) were determined with the use of LC-MS/MS. Pharmacokinetic parameters were determined with noncompartmental analysis. Metabolite-to-parent drug exposure ratios were calculated for each metabolite versus parent (BIC) using the area under the curve over 24 hours (AUC_{0-24h}): M15 AUC_{0-24h}/BIC AUC_{0-24h} and M20 AUC_{0-24h}/BIC AUC_{0-24h}. To evaluate the influence of pregnancy on the pharmacokinetics of bictegravir and its metabolism, a linear mixed-model (with pregnancy as fixed-effect and random effect for participant) was used on the log

transformed pharmacokinetic parameters to calculate the geometric mean ratios and 90% confidence intervals (CI). Bictegravir trough levels (C_{trough}) were compared to the protein-adjusted IC₉₅ (PA-IC₉₅) value of 0.162 mg/L. In addition, clinical efficacy and safety outcomes were collected.

Results: 12 women were included from whom 12 pregnancy and 11 post partum curves were obtained. The geometric mean (CV%) of the BIC AUC₀₋₂₄ (μmol/L) was 108.38 (27.3) in pregnancy and 229.89 (29.3) post partum, resulting in a ratio (90% CI) of 47.14% (41.2%-54.0%). C_{trough} was also decreased; 62% lower in pregnancy (GMR 38.33 (90% CI 31.5-46.6)). T_{1/2} increased by 71% (GMR 71.48 (90% CI 62.4-81.9)). The metabolic ratios in pregnancy for both metabolites were significantly increased compared to postpartum; 266% (90% CI 182 -389) for M15 and 207% (90% CI 149-286) for M20. None of the bictegravir C_{trough} were below the PA-IC₉₅. No virologic failure or vertical transmission occurred in this cohort.

Conclusion: Bictegravir concentrations are lower during late pregnancy compared to postpartum. Induction of UGT1A1 and (to a lesser extent) CYP3A4 play a role in this phenomenon, causing the increased metabolic rates for M15 and M20 in pregnancy compared to postpartum. Even though clearance is enhanced, drug levels remained above the PA-IC₉₅ and no virologic failure or vertical transmission occurred.

7

Pre-Exposure Prophylaxis among a Cohort of Cis and Transgender Female Sex Workers in Buenos Aires, Argentina: Not All Women Are the Same

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Background: Pre-exposure prophylaxis (PrEP) is a key component of the comprehensive HIV prevention package. Sex workers are at high risk of acquiring HIV due to high exposure to the virus and multiple barriers to access healthcare services, including HIV prevention. Oral PrEP became available at no cost in Argentina in 2021 and has expanded slowly. This analysis aimed to assess knowledge and acceptance of PrEP in a cohort of female sex workers (FSW) in Buenos Aires, Argentina.

Methods: "MAS por Nosotras" is a prospective cohort of FSW at a non governmental organization in Argentina. At the baseline visit, medical and psychosocial information was obtained, including structured questions on PrEP (knowledge, prior use, acceptance). Participants were tested for HIV and PrEP was offered for those who tested negative. Baseline descriptive data is presented using Pearson's Chi-squared test; Fisher's exact test and Wilcoxon rank sum test.

Results: From June 2023 to Mar 2024, 200 FSW were enrolled -101 cisgender women (CGW); 99 transgender women (TGW). Median age was 29 years (IQR 24-39) for TGW and 36 years (IQR 30-47) for CGW ($p < 0.001$). Higher proportion of TGW

(44,8%) reported having >20 sexual partners in the prior month compared to CGW (22.8%; $p = 0,001$). Condomless anal/vaginal intercourse during that month at least once was reported by 58% of TGW and 53% of CGW ($p > 0,005$). HIV prevalence was higher among TGW (34.3%) compared to CGW (3%), with 4 TGW and 1 CGW diagnosed at baseline. At enrollment, 16,7% of TGW and 3.1% of CGW were on PrEP.

Among 150 participants without HIV and not currently receiving PrEP (96 CGW and 54 TGW), prior PrEP use was more frequent among TGW than among CGW (16.7% vs 3.1%, $p = 0,009$), and TGW reported higher levels of knowledge of PrEP purpose than CGW (50.0% vs 18.8%, $p < 0,001$). When PrEP was offered, acceptance was higher among TGW than CGW (55.6% vs 30.5%, $p = 0,003$). Reasons for not initiating PrEP were: considered it not necessary (CGW: 45.3%; TGW:15%); reluctance to start despite recognizing the need (TGW: 35%; CGW: 29.7%); other medical concerns (TGW:5%; CGW: 1.6%). Other reasons included not feeling at risk, concerns about potential side effects, reluctance to take medication, and postponing PrEP initiation.

Conclusions: The findings highlight significant disparities in knowledge, prior use, and acceptance of PrEP between trans and cis FSW in Buenos Aires. TGW were more likely to be aware of and accept PrEP, yet overall uptake remains suboptimal. These results underscore the need for targeted interventions to address barriers to PrEP uptake, particularly among CGW, and to provide culturally sensitive education about PrEP benefits. Expanding access to PrEP through community-tailored messaging and peer support could help bridge these gaps and reduce HIV vulnerability among FSW.

8

A Game Changer: Acceptability of Long-Acting Injectable PrEP (Cabotegravir) Among Female Sex Workers and Men Who Have Sex with Men in Nakonde District, Zambia

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Background: In February 2024, Zambia became the first country in sub-Saharan Africa to introduce long-acting injectable PrEP (Cabotegravir, CAB-LA) outside of a study setting. This rollout, implemented in Nakonde District under the USAID CHEKUP II Activity, targeted female sex workers (FSWs) and men who have sex with men (MSMs), populations at substantial risk of HIV. CAB-LA offers a convenient alternative to oral PrEP, addressing adherence challenges and stigma, while enhancing HIV prevention outcomes. This study evaluated the acceptability and early outcomes of CAB-LA among FSWs and MSMs in this high-risk border district.

Methods: A mixed-methods study was conducted from February to September 2024, engaging 250 individuals (150 FSWs and 100 MSMs) enrolled in the CAB-LA program. Quantitative data on uptake, retention, and satisfaction were extracted from program records, while qualitative data were gathered via focus group discussions and interviews. The study explored factors influencing willingness to initiate CAB-LA, barriers, and retention over the first six months.

Results: Among those approached, 85% of FSWs (128/150) and 78% of MSMs (78/100) initiated CAB-LA. High acceptability was driven by:

- Convenience: 94% (121 FSWs) and 89% (69 MSMs) preferred bi-monthly injections over daily pills.
- Discretion: 87% (111 FSWs) and 82% (64 MSMs) valued CAB-LA's reduced stigma compared to oral PrEP.

- Perceived Efficacy: 90% (115 FSWs) and 85% (66 MSMs) expressed confidence in CAB-LA's effectiveness.

Retention was high, with 91% of FSWs and 88% of MSMs returning for their second dose. Side effects were minimal, with 10% (13 FSWs) and 12% (9 MSMs) reporting mild injection-site reactions.

Barriers to uptake included fear of needles (27% FSWs, 25% MSMs) and limited initial knowledge about CAB-LA (33% FSWs, 30% MSMs).

The rollout was supported by peer educators, key population civil society organizations, and micro-planning approaches. These strategies enhanced education, addressed misconceptions, and strengthened community engagement, leading to increased demand for CAB-LA.

Conclusions: The introduction of CAB-LA under the USAID CHEKUP II Activity was a game changer for HIV prevention among FSWs and MSMs in Nakonde, with strong uptake and retention. This experience demonstrates the potential for scaling long-acting PrEP to diverse key populations in sub-Saharan Africa. Sustained education, peer involvement, and targeted outreach remain critical to overcoming barriers and maximizing the impact of CAB-LA.

9

Concordance Between ASCVD and PREVENT Cardiovascular Risk Models in Women Living With and Without HIV

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Background: Primary prevention of cardiovascular disease (CVD) uses risk estimators developed based on risk factors in the general population. Though commonly used, these models show inconsistent risk stratification in men and women living with HIV. Predicting Risk of cardiovascular disease EVENTS (PREVENT) is a novel race/ethnicity-free sex-specific model with a wider age range and a modern reference cohort compared to older calculators. It considers cardiovascular-metabolic-kidney disease risk factors and offers an optional incorporation of the social deprivation index (SDI, available in the US only). PREVENT is recommended in place of the pooled cohort equations (PCE, aka ASCVD risk score) - a model widely used in research and trials on primary CVD prevention in women living with HIV that considers race. Both calculators consider age, sex, total cholesterol, high-density lipoprotein, blood pressure, history of diabetes, smoking, and anti-hypertensive medication use, while PREVENT additionally incorporates body-mass index, estimated glomerular filtration rate, and history of lipid-lowering medication use. Here, we report the concordance between PREVENT and PCE for 10-year risk of atherosclerotic CVD (ASCVD) in women living with and without HIV.

Methods: British Columbia CARMA-CHIWOS Collaboration (BCC3) is a prospective cohort study enrolling women living with and without HIV ≥ 16 years in British Columbia, Canada since 2020. Women aged 40-79 years with no history of coronary heart disease, stroke, or heart failure, were included. The 10-year risk of ASCVD was calculated by the base PREVENT model (without SDI), and by PCE. Concordance was examined by Cohen's kappa (κ), and weighted κ , to account for the order of the categories and close matches. The data used were self-reported or based on the study visit laboratory blood tests. Substance use was by self-report, and did not include alcohol, tobacco, or cannabis. Groups were compared by Chi-Squared or Mann-Whitney tests.

Results: Women living with HIV (n=141) and women without HIV (n=147) had many similar socio-demographic characteristics, including age (52 [47-58] vs 54 [46-60] y), tobacco smoking, substance use, history of homelessness, diabetes, and use of anti-hypertensive medications (all $p > 0.05$). Women living with HIV were more likely to report a history of hepatitis C (38% vs 16%) and use of lipid-lowering medication (19% vs 6%), both $p < 0.001$. PREVENT and PCE agreed in 225/288 (78%) of cases, showing moderate agreement ($\kappa = 0.46$, weighted $\kappa = 0.59$). Among disagreements, 59/63 (94%) were from PCE assigning a higher risk category. Agreement remained moderate when stratified based on socio-demographic characteristics, including current/past/never substance use ($\kappa = 0.34/0.53/0.47$), lifetime history of homelessness yes/no ($\kappa = 0.37/0.54$), living with HIV ($\kappa = 0.42$ in women living with HIV and $\kappa = 0.50$ in controls), and history of hepatitis C ($\kappa = 0.43/0.47$ for seropositive/seronegative participants).

Conclusions: PREVENT and PCE show only moderate agreement, both overall and within socio-demographically defined subgroups in our study. Discrepancy between risk models could affect primary CVD prevention in women living with HIV in the future. The optimal model for use in the HIV population and correlates of model discordance should be investigated further.

10

Non-HIV Chronic/Latent Viral Infections Are Associated with Markers of Inflammation in Males but Not Females Living with HIV and Not Living with HIV.

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Background: Unlike in the general population, where women have a longer lifespan than men, women living with HIV in Canada have a shorter life expectancy than men living with HIV. Non-HIV chronic/latent viruses (NHV) such as cytomegalovirus (CMV), Epstein-Barr virus (EBV), human herpes virus 8 (HHV-8), herpes simplex virus 1 and 2 (HSV-1 and HSV-2), hepatitis C and B viruses (HCV and HBV), are associated with markers of aging and/or age-related diseases and play a role in accelerated cellular aging. We investigated association(s) between sex, HIV status, NHVs, and selected markers of inflammation in a cohort of people living with HIV (PLWH) and controls.

Methods: For this analysis, we selected 296 CARMA cohort participants well balanced for age (1-76 years), sex (165 female, 131 male), and HIV status (144 PLWH, 152 controls). Seropositivity for CMV, EBV, HHV-8, HSV1 and HSV2 were determined by ELISA; HBV and HCV were self-reported. Three gut inflammation markers, lipopolysaccharide-binding protein (LBP), regenerating family member 3-alpha (Reg-3 α), intestinal fatty acid-binding protein (I-FABP), and the soluble immune marker CD163 were quantified using ELISA. The effect of HIV status, sex, and age were assessed using Mann-Whitney, Kruskal-Wallis, and Spearman's tests. Multivariable linear regression determined independent

associations between the markers of aging, NHV, and sex.

Results: Despite being balanced for age, sex and HIV status, female participants had more NHV compared to male participants (median, [interquartile range] 3[2-4] vs 2[1-3], $p < 0.0001$). Univariately, females exhibited lower levels of all inflammation markers compared to males, including IFABP (420[270-600] vs 580[350-1000]pg/mL), REG3- α (2.7[2.0-4.8] vs 5.1[2.3-8.5]pg/uL), LBP (1.2[0.7-2.0] vs 2.4[1.0-4.4]pg/uL), and sCD163 (190[130-310] vs 420[210-780]pg/mL, all $p < 0.0001$). No difference in inflammation was observed between PLWH and controls, except for IFABP (550[300-970] vs 430[270-630], $p = 0.005$), an effect also seen in the sex-segregated analysis. Higher IFABP, REG-3 α and sCD163 were associated with a greater number of NHV ($p = 0.02$, 0.0002 , 0.02 respectively), but LBP was not ($p = 0.22$). In sex-segregated analyses, we observed no association between inflammation and increasing number of NHV in females. However, in males, an increase in number of NHV was associated with higher levels of all inflammation markers ($p < 0.0001$ for all). Living with HIV and older age were independently associated with an increase in IFABP, whereas being female and HHV8 seropositive were independently associated with a decreased IFABP when controlling for smoking, ethnicity and all other NHVs ($\beta > 0.11$ and $p < 0.04$ for all). Similar models were constructed for the three other inflammation markers, and female sex was associated with lower REG3- α , LBP and sCD163, while older age was associated with an increase in all markers ($\beta > 0.13$ and $p < 0.04$ for all). CMV seropositivity was associated with increased REG3- α and sCD163, and HCV was associated with increased sCD163 ($\beta > 0.15$ and $p < 0.04$ for all).

Conclusions: Our findings suggest that having more NHVs is associated with greater inflammation in male participants but not female participants –despite male participants harbouring fewer such viruses. This exposes sex differences, the health impact of which begs further research, and highlights the importance of sex-segregated analyses.

11

Sleep Quality among Women Living with HIV by Reproductive Stage in the United States-Based HOPE Study

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Background: Sleep quality affects and is affected by physical and mental health, yet few studies have examined whether sleep quality varies by reproductive stage in individuals with HIV. Understanding social and behavioral factors related to sleep quality at each reproductive stage can inform interventions to improve sleep quality.

Methods: Women living with HIV, ages 18-45 years, are eligible for enrollment in the HOPE study at 12 United States-based sites. Reproductive stage was defined based on participants' status at entry [nulliparous, pregnant or within 3 days post-delivery (pregnant), >3 days to 1 year postpartum (1-yr pp), or parous (>1-yr pp)]. Sociodemographic and behavioral information was collected and screening for depression (PHQ-9), anxiety (GAD-7) and PTSD was performed at entry. Participants reported on sleep quality in the last month using the Brief Pittsburgh Sleep Quality Index (B-PSQI), a validated instrument with 6 items and scoring of 0 to 15, with poor sleep quality defined as a score >5. Prevalence of poor sleep quality by reproductive stage was calculated, and risk ratios (RR) with 95% confidence intervals (CI) for social and behavioral factors observed to be associated

with poor sleep quality in previous studies were calculated using univariable analyses by reproductive stage.

Results: Of 561 participants completing the entry survey between Aug-2022 and Sep-2024, 412 (74%) had evaluable sleep quality. Overall, 52.0% had a B-PSQI score >5, with poor sleep quality prevalence highest among participants within 1-yr pp (55.9%), followed by >1-yr pp (52.5%), pregnant (46.9%), and nulliparous participants (46.8%). Differences in factors associated with poor sleep quality were noted by reproductive stage. For example, only participants who were pregnant or >1-yr pp with housing stability concerns had a significantly higher risk of poor sleep quality versus those of similar reproductive stage without housing concerns [RR 1.82 (95% CI 1.04, 3.18)], [RR 1.41 (95% CI 1.05, 1.89)], respectively. This was not the case for participants nulliparous and 1-yr pp. Persons >1-yr pp experiencing household food insecurity in the past 12 months had a significantly higher risk of poor sleep quality versus persons of similar reproductive stage without food insecurity [RR 1.36 (95% CI 1.07, 1.74)]. However, food insecurity was not associated with higher risk of poor sleep quality among participants nulliparous, pregnant, or within 1-yr pp. Pregnant persons and those within 1-yr pp or >1-yr pp with a positive PHQ-9 screening for moderate to severe depression had higher risk of poor sleep quality compared to participants of similar reproductive stages who did not screen positive [RR 1.98 (95% CI 1.12, 3.50)], [RR 1.55 (95% CI 1.06, 2.26)], and [RR 1.85 (95% CI 1.50, 2.27)], respectively. However, a positive depression screen was not associated with higher risk of poor sleep quality among participants who were nulliparous.

Conclusions: More than half of participants had poor sleep quality, with highest prevalence among 1-yr pp women. Factors associated with poor sleep quality varied by reproductive stage, suggesting that interventions to improve sleep quality may need to be tailored to reproductive stage among women living with HIV.

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History of Abnormal Ovarian Function Not Associated with Fibrosis-4 Index among Women Living with or without HIV in British Columbia, Canada.

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on behalf of the Children and women: AntiRetroviral therapy and Markers of Aging (CARMA; CTN 277) and British Columbia CARMA-CHIWOS Collaboration (BCC3; CTN 335) studies.

Introduction: Ovarian function is critical to women's health, given the protective effects of ovarian sex hormones. We previously reported that women living with HIV in British Columbia (BC), Canada, were more likely to experience prolonged amenorrhea, defined as ≥ 12 months without menses unrelated to pregnancy/lactation/contraception/surgery/menopause. Low ovarian hormone levels have been associated with accelerated liver fibrosis. Thus, abnormal ovarian function (early menopause onset or history of prolonged amenorrhea) may place women at risk for liver disease. We therefore examined the potential association between a history of abnormal ovarian function and liver disease in women living with and without HIV.

Methods: We included all women ≥ 16 y participating in two BC cohorts, CARMA and BCC3, with available data to assess liver disease fibrosis-4 (FIB4) index. FIB-4 index calculated as; age times Aspartate aminotransferase (AST) level divided by

platelet count times the square root of Alanine aminotransferase (ALT). The resulting values were then categorized into low (< 1.3), intermediate ($1.3-2.67$), and high (> 2.67) fibrosis risk. History of abnormal ovarian function was defined as either a history of prolonged amenorrhea (described above), premature ovarian insufficiency (biochemically confirmed menopause < 40 y), or early menopause (< 45 y). FIB-4 variable was modelled through multivariable linear regression analyses adjusted for covariates/confounders (age, ethnicity, body mass index, tobacco smoking ever, average alcohol consumption (≥ 1 drink/day), and opioid use ever). All analyses were segregated according to hepatitis C (HCV) seropositivity to allow the inclusion of opioid use in the models, as opioids can induce amenorrhea. Data is presented as estimate and [95% confidence interval].

Results: In total, 318 women living with HIV and 396 women without HIV were included in the analysis. Stratification by HCV serostatus resulted in 175 (71.4% women living with HIV) included in the HCV seropositive group and 539 (35.8% women living with HIV) women in the HCV seronegative group. Increased FIB-4 was significantly associated with living with HIV in both unadjusted (HCV seropositive: 0.37, [0.12 to 0.63]; HCV seronegative: 0.12, [0.02 to 0.23]) and adjusted analyses (HCV seropositive: 0.38 [0.12 to 0.64]; HCV seronegative: 0.11, [0.01 to 0.21]). However history of abnormal ovarian function was not associated with FIB-4 in either HCV seropositive/seronegative women, in both unadjusted (HCV seropositive: -0.21, [-0.48 to 0.05] ; HCV seronegative: -0.16, [-0.35 to 0.04]) and adjusted analyses (HCV seropositive: 0.05, [-0.22 to 0.32]; HCV seronegative: -0.11, [-0.28 to 0.06]).

Conclusions: In this analysis, history of abnormal ovarian function showed no association with liver fibrosis. However, HIV amplified liver fibrosis independently of older age, alcohol and opioid use.

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Beyond Pills: A Holistic Approach to Supporting Priority Female Populations Living with HIV - Lessons from the Operation Triple Zero (OTZ) Youth Kilifi Chapter

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Background: Priority female populations, including adolescents, young women, sex workers, and incarcerated women, face unique challenges in managing HIV due to stigma, discrimination, limited access to care, and structural barriers. In Kilifi County, Kenya, these challenges are exacerbated by limited resources and a high prevalence of HIV among youth aged 10–24 years. Recognizing these gaps, the Operation Triple Zero (OTZ) initiative was launched to empower adolescents and young people living with HIV (AYPLHIV) by addressing medical, psychosocial, and structural barriers to care.

Objectives:

1. To assess the impact of a youth-centered model on adherence to antiretroviral therapy (ART) and viral suppression among priority female populations.
2. To explore how psychosocial and structural barriers can be addressed to enhance care outcomes for adolescents and young women living with HIV.
3. To provide evidence for scalable models targeting priority female populations, including those living within closed systems, sex workers, and young mothers.

Methods: Between January 2021 and December 2023, the OTZ initiative supported 2,560 AYPLHIV aged 10–24 years, with a specific focus on young women and other vulnerable groups. The program was implemented in Kilifi County, utilizing a youth-centered approach that included:

- Flexible clinic hours tailored to the schedules of young people.
- Peer-led education sessions focusing on treatment literacy and life skills.

- Psychosocial support to reduce self-stigma and build self-efficacy.
- Targeted outreach to young mothers, sex workers, and incarcerated women to address their unique needs.

Data on adherence, viral suppression, and psychosocial outcomes were collected and analyzed by age and gender to assess the program's impact.

Results: The OTZ initiative achieved significant success, with a viral suppression rate of 91% among participants. Young women aged 10–24 recorded a viral suppression rate of 92.4%, highlighting the effectiveness of tailored interventions. Adolescents aged 10–14 achieved the highest suppression rates at 95.5%, while older youth (15–24 years) recorded 89.5%. Young mothers reported improved ART adherence and reduced self-stigma due to peer-led support groups, while incarcerated women and sex workers benefited from outreach services that integrated HIV care with mental health support and life skills training.

Participants reported increased confidence, improved health literacy, and enhanced access to social support networks. Flexible clinic schedules and peer involvement emerged as critical enablers of adherence and retention in care.

Conclusions: The OTZ initiative demonstrates that a holistic, youth-centered approach can significantly improve health outcomes for priority female populations living with HIV. Beyond achieving high viral suppression rates, the program addressed psychosocial barriers, reduced stigma, and empowered young women and other vulnerable groups to actively manage their health. Scaling up such models in resource-limited settings has the potential to transform care for adolescents, young women, and other priority populations globally. The lessons from Kilifi County align with UNAIDS guidelines and contribute to global targets for ending the HIV epidemic. By focusing on integrated care and community-driven approaches, OTZ provides a replicable framework for supporting vulnerable groups from adolescence to adulthood and beyond.

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A Novel Approach to Weight Loss: Bringing SatPro into the HIV clinic.

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Background: Two thirds of UK adults are living with obesity or are overweight, with associated morbidity and mortality risk. People living with HIV (PLHIV) may face additional challenges in losing weight due to medications, socio economic deprivation, and higher rates of poor mental health. Helping PLHIV who would like to lose weight is an integral part of helping them to live well with HIV.

The Imperial Satiety Protocol (I-Satpro) is an evidence-based, holistic approach to weight loss. Participants learn the scientific rationale behind making sustainable changes to eating habits, movement, sleep and self-care which in combination result in clinically meaningful weight loss (\geq 10% body weight loss in previous work) as well as improvements in cardio-metabolic health. Here we present preliminary results from the first two cohorts of I-SatPro participants delivered in a large urban HIV clinic. The programme was available to all patients with no specific referral criteria.

Methods: Baseline data were collected on all participants including weight, lipid profile, HBA1C, and basic demographics.

Participants were asked to register weekly weights by email.

The programme was delivered fortnightly, over 12 weeks in both Spring and Summer 2024. Sessions were delivered online and in person.

Daily emails were sent to reinforce learning.

Results: 22 women and 21 men enrolled and engaged with the programme across the 2 cohorts. 19 women and 2 men were Black (African). 3 women and 19 men were white (British or other). Attendance at the sessions gradually decreased although some participants who did not attend the final session were still engaged with the programme (e.g. by email).

1 woman and 3 men were discounted from the analysis because they were taking a weight loss medication (GLP-1 receptor agonist). 1 man and 1 woman participated in the programme but did not return any follow up weights so were also discounted from the analysis.

The mean weight loss in women was 5.71Kg (range 2.1-11) and in men was 6.54Kg (range 2-18).

Women lost on average 6.17% of their baseline body weight (range 1.6-12.5) and men lost 6.48% of their baseline weight (range 1.6-17.1). The greatest weight loss was observed in those who engaged fully with the programme until its completion.

In women, for whom the data was available (n=11), HbA1c fell on average by -0.63 mmol/mol (range -4 to $+3$) and in men (n=10) by -5.9 (range -27 to $+1$).

The mean difference in LDL in women (n=17) was -0.01 (range -0.7 to $+1.1$) and in men (n=7) was -0.64 (range -2 to $+0.1$)

Discussion: These PLHIV participating in I-SatPro lost a clinically meaningful amount of weight. In these real world data, greater improvement in biochemical metabolic markers was seen in men, however significance is not possible and interpretation is limited by the small sample size. Patient feedback on improvements in quality of life was highly positive. These results suggest significant potential benefits of I-SatPro for PLHIV.

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Clinical Outcomes among Women Receiving CAB+RPV LA in the OPERA Cohort: Subgroup Differences Based on Race, BMI, and Age

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Background: Cabotegravir + rilpivirine long-acting (CAB+RPV LA) injectable is the first complete long-acting antiretroviral regimen for HIV-1 treatment. It is indicated for virologically suppressed (viral load [VL] <50 copies/mL) individuals on a stable antiretroviral regimen. CAB+RPV LA has many advantages that may make it an ideal therapy option for women with HIV, who represent >50% of people with HIV worldwide and experience unique challenges with HIV treatment. Administered monthly (Q1M) or every 2 months (Q2M), outside the home or workplace, it may be more convenient, reduce pill burden, stigma and other psychosocial concerns, and minimize disruption of daily responsibilities. This study investigated differences in clinical outcomes among women receiving CAB+RPV LA based on race, BMI, and age.

Methods: Women ≥18 years old with HIV in the US-based OPERA cohort who received ≥1 CAB+RPV LA injection between 21JAN2021-31AUG2023 were followed from first injection through 29FEB2024. Persistence was measured as time on regimen, adherence was based on injection timing (on-time, delayed, or missed compared to the 30 [Q1M] and 60 [Q2M] day targets), and discontinuation was defined as >67 (Q1M) or >127 (Q2M) days since last injection. Among women with VL <50 copies/mL at initiation, maintenance of VL <50 copies/mL throughout follow-up and at last follow-up was assessed. Among women with VL ≥50 copies/mL at initiation, virologic suppression to <50 copies/mL at any point

throughout follow-up and at last follow-up was assessed. Confirmed virologic failure (CVF) was defined as 2 consecutive VLs ≥200 copies/mL or 1 VL ≥200 copies/mL followed by discontinuation within 2 (Q1M) or 4 (Q2M) months. Those who initiated with VL ≥50 copies/mL had to suppress to <50 copies/mL before meeting the CVF definition.

Results: Of 532 women who initiated CAB+RPV LA, 356 (67%) were Black (166 [31%] non-Black; 10 [2%] missing), 251 (47%) had BMI ≥30 kg/m² at initiation (251 [47%] <30 kg/m²; 30 [6%] missing), and 189 (36%) were ≥50 years old at initiation (343 [64%] <50 years). Persistence was similar across subgroups (median follow-up = 12 months [IQR: 7, 19]). A higher proportion of Black (17%) than non-Black (7%) women received their 2nd initiation injection 23-37 days after the 30-day target, but among women with both initiation injections within 67 days, a lower proportion of Black (23%) than non-Black (33%) women discontinued. 43% of women received all maintenance injections on time. Among women with VL <50 copies/mL at initiation, a higher proportion of women aged <50 years than ≥50 years maintained VL <50 copies/mL throughout follow-up (84% vs. 78%) and at last follow-up (97% vs. 87%). Among women with VL ≥50 copies/mL at initiation, a higher proportion of women with BMI ≥30 kg/m² than <30 kg/m² achieved VL <50 copies/mL at any point (95% vs. 89%) and at last follow-up (91% vs. 83%). Overall, 1.5% experienced CVF.

Conclusions: This real-world data of women receiving CAB+RPV LA demonstrated high effectiveness sustained over time despite some differences based on race, BMI, and age. Over two-thirds of women were Black and about half had BMI ≥30 kg/m² at initiation.

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Real-World Efficacy and Tolerability of Long-Acting Cabotegravir/Rilpivirine in Older Woman with Polypharmacy and Comorbidities

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Background: Women, particularly older adults with comorbidities and polypharmacy, are underrepresented in clinical trials of long-acting (LA) antiretroviral therapy (ART). This real-world study aimed to evaluate the efficacy and safety of LA cabotegravir/rilpivirine (CAB/RPV) in a cohort of men and women in Spain with extensive prior ART, multiple comorbidities, and polypharmacy. The study focuses on comparing virologic suppression, adverse events, and treatment discontinuations by sex at birth.

Methods: Through propensity score matching based on age, Spanish origin, time on ART, baseline BMI, and CD4 counts, 41 women were paired with 128 men. We evaluated rates of ART withdrawal, viral blips, virologic failure, adverse events (including injection site reactions), and whether initiation of LA ART was driven by patient or physician preference.

Results: The analysis included a total of 169 participants, with 41 women and 128 men. High Comorbidities rates were observed in women vs. men (n,%) 35 (85.37) vs. 72 (56.25) (P=0.004). Virologic suppression was comparable between sexes, although, viral blips were more frequent in women (4.88% vs. 2.34% in men, p=0.405), and one woman experienced virologic failure. Adverse events were significantly higher in women, affecting 14.63% compared to 3.91% of men (p=0.015). Treatment discontinuation rates were also elevated in women (12.2% vs. 3.91%,

p=0.050), with women having 3.14 times higher odds of discontinuing treatment (OR: 3.14, 95% CI: 0.91–10.86, p=0.071).

Physician-driven initiation of CAB/RPV was more common among women (70.73% vs. 50.81% in men, p=0.026), while men more often initiated therapy at their request.

Conclusions: While virologic suppression rates were similar between men and women, women had higher rates of adverse events, treatment discontinuation, and viral blips, suggesting potential sex-based differences in tolerability to LA ART. These findings highlight the need for sex-specific considerations in the management of older adults with HIV, especially those with comorbidities and polypharmacy, and point to the importance of personalized treatment strategies to optimize long-term outcomes.

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Enhancing Cervical Cancer Screening Coverage in Selected Primary Health Care Clinics in South Africa Using Lean Thinking: The CerviScreen Programme

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Background: Cervical cancer is the leading form of cancer impacting women of reproductive age in South Africa, with a greater prevalence among women living with HIV (WLWH). The South African Department of Health recommends that WLWH be screened for cervical cancer upon HIV diagnosis and subsequently every three years if the screening result is negative. Although the World Health Organisation (WHO) recommends a screening target of 70% by 2030, South Africa's current reported rate stands at 19.3%. AIDS Healthcare Foundation (AHF) South Africa embarked on a quality improvement programme (QIP), the CerviScreen programme, in an effort to improve cervical cancer screening (CCS) rates among WLWH, using a Lean thinking approach. The study evaluated the effect of the CerviScreen programme on CCS coverage amongst women of reproductive age who were newly diagnosed with HIV, over a seven-month period at selected sites in the Eastern Cape and KwaZulu-Natal provinces of South Africa.

Methods: This controlled before-and-after study retrospectively evaluated the change in CCS coverage at Eastern Cape and KwaZulu-Natal Primary Health Care (PHC) sites at which CerviScreen was implemented. Purposive sampling was used to select AHF-supported CerviScreen (intervention) sites and an equivalent number of control sites with closely matching monthly patient headcounts and HIV testing data. Data on key QIP indicators were extracted from the Lean A3-tools and analysed using Stata/SE version 18. Descriptive statistics summarized categorical variables, while repeated measures ANOVA tested changes in cervical cancer screening proportions over time at a 5% significance level. Ethics and

gatekeeper approvals were obtained from SAMAREC (280808016/039/2024) and the Department of Health, respectively.

Results: Eighteen intervention sites (nine from each province) and 18 matched control sites were evaluated. Significant improvement was demonstrated in the mean proportion of eligible HIV-positive women screened for cervical cancer over the seven-month study period at intervention sites in KwaZulu-Natal (from 5% to 62.9%; $F=8.336$, $p<0.001$) and Eastern Cape (21.2% to 82.4%; $F=15.525$, $p<0.001$). However, differences in the change of mean proportion over time between intervention and control sites were not statistically significant in KwaZulu-Natal ($F=0.022$, $p=0.884$) and Eastern Cape ($F=0.882$, $p=0.362$). Of clinical significance, however, the estimated marginal mean at KwaZulu-Natal intervention sites consistently surpassed that of the control sites from Month 3 onwards, and in Eastern Cape, the estimate marginal mean drastically improved over time from a baseline of 21.2%, and was maintained above 80% after Month 4. Between provinces, the change in percentage of screened women over time significantly differed ($F=11.12$, $p=0.004$).

Conclusion: The CerviScreen programme has demonstrated prominent and sustained baseline CCS improvements amongst eligible women diagnosed with HIV at the PHC level. Health care managers could consider adopting such a programme to augment CCS amongst WLWH in resource-constrained settings to meet the WHO target. The findings underscore the importance of embracing systematic and novel quality improvement approaches for addressing underperforming healthcare indicators and highlight the need for scale-up of Lean thinking in PHC settings. Further research is recommended to explore service integration strategies, cost-effectiveness, and long-term sustainability to enhance programme impact.

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Systematic Review and Meta-Analysis of Human Papilloma Virus Prevalence and Genotype Disparity among HIV Infected Women in Africa

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Background: Human papillomavirus (HPV) is the most prevalent sexually transmitted heterogeneous group of DNA viruses. Women with HIV are more likely to get cervical cancer linked to HPV infection. Only a small number of prior systematic and meta-analyses based on studies which used less advanced diagnostic technologies to show the true HPV distribution. Additionally, to the best of our knowledge, primary research from Northern Africa was not included in these earlier studies. Therefore, this study was carried out in order to determine the most recent pooled prevalence, genotype distribution, and associated factors with HPV among HIV-positive women in Africa.

Methods: The protocol number CRD42024525123 was used to register the study on PROSPERO. To find studies that met the inclusion criteria, a systematic search was conducted across PubMed, Ovid Medline, Scopus, Embase, and Google Scholar. Under the presumption of a random effect model, the Q statistics ($p < 0.1$) and I² test were used to evaluate the heterogeneity of the studies. The forest plot was used to display the prediction interval, the 95% CI, and the pooled effect size. To evaluate publication bias, the Funnel plot and Egger's tests for significance were employed. The qualitative information was also used to identify the risk factors for HPV infection in women with HIV.

Result: Twenty-three (23) studies comprising 9954 HIV-infected women were pooled to estimate the pooled prevalence of HPV infection. The total pooled prevalence of all types of HPV infection among HIV-infected women is 49.4(95%CI: 42.43,

56.38) with a Prediction interval of 0.23 and 0.77 and evidence of heterogeneity ($Q = 520.92$, $DF = 16$, $I^2 = 96.93\%$, $P < 0.0001$). Among HIV-positive women, the combined prevalence of high-risk HPV infection is 45.26 (95%CI: 31.02, 59.91), with heterogeneity across studies ($Q = 439.1812$, $DF = 10$, $P < 0.0001$, $I^2 = 97.72\%$). Low-risk HPV infection had a pooled prevalence of 24.98 (95%CI: 12.27, 40.41) with variation across the studies ($Q = 134.39$, $DF = 6$, $P < 0.0001$, $I^2 = 95.54\%$). Human papillomavirus genotypes 16, 18, 52, 33 and 35 consecutively are the most frequently reported genotypes. Higher CD4 count is associated with lower HPV prevalence and self-collected specimen detects more oncogenic HPV than specimens collected by healthcare providers.

Conclusion: Our analysis indicated lower pooled prevalence of HPV infection as compared with previous studies conducted in Africa. However, the decline in the prevalence is sluggish indicating only roughly 10% decline between 2020 and 2024. If this trend continues with the same tempo, it is probably impossible for Africa to catch the world health organization (WHO) call for eliminating HPV related cervical cancer by 2030.

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Strengthening HIV and Cervical Cancer Prevention through Community Engagement in Tanzania: Community-Led Monitoring (CLM) as Mechanism to Understand Gender Inequality and Address Barriers that Women Face in Accessing Comprehensive Healthcare

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Background: Worldwide, women living with HIV are six times more likely to develop cervical cancer than women who are not living with HIV. In Tanzania, HIV and cervical cancer disproportionately affect women due to the lack of access to screening and treatment. We outline the findings from a CLM initiative conducted in Bahi and Kongwa districts, focused on cervical cancer prevention, screening and treatment services for women living with HIV. This women-led process aimed to highlight how community engagement participates in shaping effective prevention strategies.

Methods: We implemented our CLM and feedback Accountability Toolkit in Tanzania in 7 stages 1) Reflection and Engagement Assessment; 2) Inception and Planning; 3) Workshop Training; 4) CLM Implementation; 5) Data Analysis; 6) Findings into advocacy; 7) Outcome sharing and continuous monitoring. Data collection includes KIIs (N=188) with 59% of WLHIV, FGDs (N=5) comprising 12 members each, and IDIs (4) with community advocates and healthcare providers. Data analysis on the availability, accessibility, affordability, acceptability, and quality of cervical cancer services provided within Global Fund HIV programmes were conducted; exploring 4 approaches to measuring results: Formal-quantitative, Participatory quantitative, Formal-

qualitative, and Participatory-qualitative. A total of 4 health facilities were chosen, based on the fact that there is a high level of loss to follow-up and lack of adherence to Antiretrovirals, worsened by challenges connected to high unemployment rates (66.7%).

Results: 16% of women were found with different stages of cervical cancer, 80% were women living with HIV. Of the 188, only 18.1% confirmed using contraceptives and seeking family planning services at healthcare facilities, underlying high risk of transmission of HIV and other STIs. 12.2% of women who tested VIA positive in screenings experienced Gender-Based Violence, resulting in immediate divorce, emotional distress, and physical abuse. Only 36.3% of these cases received support. Among the major barriers in accessing healthcare, distance from healthcare facilities was predominant. The affordability of HIV and cervical cancer services, such as screening, poses a significant challenge for women residing in remote areas, typically located further 20km from healthcare facilities. Shortage of acetic acid and lack of skilled staff to professionally operate equipment, were among the most prevalent impediments to quality services.

Conclusion: CLM underscores the role of community engagement and women-led responses, in comprehensive HIV and cervical cancer services. While women-led work has effectively raised awareness and addressed stigma, the persistent challenge of GBV, mental health issues, discrimination, and lack of skilled professionals and supplies; highlight the urgent need for collaborative actions between the government, Civil Society Organisations, healthcare providers, and communities to ensure comprehensive, effective, and gender transformative HIV responses. Monitoring HIV comprehensive services and producing evidence-based information around women's healthcare needs, enhance the integration of cervical cancer services within existing HIV programs to reach and support women living with HIV effectively. Women-led CLM demonstrates to foster discussion platforms and involve women in all their diversity, living with HIV and at most risk of, ensuring their integration, inclusion, and meaningful engagement in key decision-making spaces.

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Integration of Cervical Cancer Screening and HIV Care and Treatment at Mama Lucy Kibaki Hospital

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Background: Cervical cancer (CACX) is the second most common cancer (12.9% in 2018) and the leading cause of cancer-related mortality in women in Kenya (11.48%). Only 16.4% of women in Kenya 30-49 years had ever been screened as of 2018. Screening allows for treatment in the asymptomatic precancerous stage. Women living with HIV(WLHIV) have 6 times more risk of developing cacx, its more aggressive and occurs a decade earlier. The high burden of both HIV and cervical cancer in developing countries makes it necessary to integrate services that offer early detection and treatment for both. It is preventable and curable if diagnosed early. As of the end of May 2023 out of 1774 women of reproductive age (WRA), 39% (689) had been screened for cacx, 1% (9) lesions were identified, and all were treated. This is an ongoing practice at Mama Lucy Kibaki Hospital (MLKH) comprehensive care clinic (CCC) geared towards achieving the 90-70-90 global targets.

Description: Implementation started at MLKH from June 2023 to June 2024, and all WLHIV 18-65 years were included. Three clinicians received a one-week partner-supported training on cervical lesion treatment and follow-up. A gynecologist was assigned to support the treatment of lesions at the CCC. Client flow was reorganized to flag all the eligible women due for screening at the triage desk and fast-tracking for the service. Scale-up of HPV screening was done alongside the routine visual inspection with acetic acid (VIA). All healthcare providers offered clients education on the importance of routine screening virtually and in person. Weekly tracking of follow-up VIA for the women who tested HPV positive and monthly data review to track progress was done as a continuous quality improvement aspect of monitoring and evaluation.

Results: As of the end of July 24, 74% (1423) of women had been screened for cacx. Of these, 10% (148) had lesions identified and 78% (116) received treatment: LEEP 62% (72) and thermo-ablation 38% (44%). Following LEEP, 66% (39) women were diagnosed with pre-cancerous lesions, 12% (7) with Carcinoma in situ, 14% (8) with other benign lesions, and another 8% (5) had a normal biopsy result. Overall turn-around time for diagnosis to treatment improved from 90 to 25 days.

Impacts and Lessons: Cacx and HIV care integration is an effective intervention for achieving the 90-70-90 strategy. Efforts should be made to educate clients on the importance of early cacx screening. Screening with a high-performance test by 35 and 45 years plays a major role in lesion identification for prompt treatment.

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Type-Specific Human Papillomavirus and Its Association with Human T Lymphotropic Virus-1 among Women Accessing HIV Care at Kenyatta National Hospital

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Background: Cervical cancer causes 311,000 annual deaths globally, disproportionately affecting low- and middle-income countries like Kenya, with a mortality rate of 27 per 10,000 women. Women living with HIV (WLHIV) face increased susceptibility to HR-HPV and HTLV-1 due to compromised immunity, with HR-HPV linked to cervical cancer and HTLV-1 to adult T-cell lymphoma. WLHIV have reduced HPV clearance, increasing persistence, yet data on HR-HPV distribution, progression, and HTLV-1 co-infections in this group is limited..

Objective: This study aimed to determine the distribution of type-specific HR-HPV genotypes and their correlation with HTLV-1 among women accessing HIV care at Kenyatta National Hospital (KNH), Kenya.

Method: A prospective cohort study of women accessing HIV care at KNH was conducted. Participants were recruited from the HIV clinic. Cervical specimens were obtained for HR-HPV genotyping using Gene Xpert® assays and HPV Genotypes 14 Real-TM and for cytology to check for cervical epithelial abnormalities. Blood samples were collected for HTLV-1 DNA detection. Follow-up included re-screening for HR-HPV after 12 months. Data analysis was performed using SPSS version 23.0 at a significance level of $P \leq 0.05$. Results were reported as proportions with 95% confidence intervals. Descriptive statistics were presented as frequencies for categorical variables

and as mean or median values for continuous variables. Data analysis focused on HR-HPV and HTLV-1 co-infections as the primary outcome. Bivariate analysis explored factors associated with abnormal cytology. A multivariate logistic model adjusted for potential confounders.

Results: There were 647 WLHIV enrolled with a mean age of 42.8 years (SD 8.7) and a mean age at sexual debut of 18.3 years (SD 3.0). Majority (97.2%, n=629) were on antiretroviral treatment (ART) with 79% (n=496) achieving viral suppression (<50 copies/ml plasma). There were 224 WLHIV with HR-HPV infections (34.6%) of which 190 (29.4%) were 9-valent-vaccine-preventable, the commonest being types 52 in 86 WLHIV (38.4%), 16 in 64 (28.6%) and 18 in 53 (23.7%). Those with HR-HPV were more likely to be on a second-line ART regimen compared to those without HR-HPV infection (53.1%vs 46.7%, aOR=2.3, 95%CI 1.3-4.1, $p = 0.005$). Multiple HR-HPV occurred in 106 WLHIV (16.4%) and this was significantly associated with a higher likelihood of abnormal cytology (34.9%vs 9.3%, aOR 6.2, 95% CI 2.7-14.1, $p = 0.001$). There were 20 WLHIV who had HTLV-1 (3.1%) of which 17 had HR-HPV and HTLV-1 co-infection (85%). In the follow-up phase, 152 women with HR-HPV were monitored over 12 months and 136 (89.5%) had persistent infections. Only 16 (10.5%) successfully cleared the infections. HR-HPV co-infection with HTLV-1 was associated with the persistence of HR-HPV infections with a 100% persistence rate among the co-infected.

Conclusion: This study highlights a significant presence of non-16 and non-18 HR-HPV genotypes, particularly genotype 52, among WLHIV at KNH, often linked with low-grade lesions. While HTLV-1 co-infection rates were low, its occurrence alongside HR-HPV suggests additional risk factors that merit further research. The persistence of HR-HPV reinforces the need for routine repeat genotype testing within cervical cancer screening for WLHIV in Kenya to support timely detection and intervention.

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Associations between Maternal Hormones and Birth Anthropometrics Differ between ARV classes⁴

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Background: Antenatal antiretroviral (ARV) use has been associated with adverse birth outcomes, but underlying mechanisms are not fully understood. We compared maternal hormone levels across different ARV drug classes in pregnant women with HIV (PWH) and without HIV (HIV-) and evaluated associations with birth anthropometrics.

Methods: Maternal plasma (N=168) collected between gestational weeks 24-28 from participants with singleton gestations in the Canada-based AAPH cohort (PWH = 37, HIV- = 71) and the US-based PHACS cohort (PWH = 97) were analyzed. Among PWH 51 received protease inhibitor (PI), 40 non-nucleoside reverse transcriptase inhibitor (NNRTI), and 43 integrase strand transfer inhibitor (INSTI)-based ART. Using ELISA or multiplex bead array, we assayed factors in six categories: 1) Growth hormone-IGF axis (GH1, GH2, IGF1, IGF2, IGFBP1, IGFBP3, PAPP-A); 2) Steroid hormones (SHBG, estradiol, bioavailable estradiol, progesterone); 3) Angiogenesis (angiopoietin (Ang) 1, Ang2); 4) Metabolism (serpinA12, human placental lactogen (hPL), prolactin); 5) Placentation (fetal fibronectin, alpha fetoprotein, activin A, inhibin); and 6) inflammation (TNFR2, osteopontin). Spearman correlations were used to assess correlations between biomarkers and birth weight (BWAZ) and length (BLAZ) z-scores by group.

Results: Median estradiol (32.1ng/ml) and SHBG (660nmol/L) levels were higher in the PI group compared to all other groups (estradiol range 17.1–21.9, SHBG range 460–587), and progesterone was lower in the PI group compared to the HIV- group (53.0 vs. 65.8ng/ml). Maternal

hormones and their relationship with BWAZ and BLAZ differed between groups. In the INSTI group serpinA12 was the strongest positive correlate with BWAZ and BLAZ, while GH1 negatively correlated with both. In the NNRTI group, progesterone and IGF1 were positively associated with BWAZ and BLAZ. In the PI group, progesterone was negatively associated with BLAZ; bioavailable estradiol was positively and hPL was negatively associated with BWAZ. TNFR2 was negatively associated with BLAZ in the PI and NNRTI groups.

Conclusion: Association between antenatally-assessed maternal hormones and birth anthropometrics differed across ARV classes. SerpinA12 findings suggest INSTI-associated adipocyte alterations that could lead to pregnancy-associated dysregulation of insulin homeostasis. A negative association between TNFR2 and BLAZ, which was more prevalent in PI and NNRTI groups, may represent a length-restriction mechanistic pathway.

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Women With HIV Receiving Bictegravir/ Emtricitabine/Tenofovir Alafenamide (B/F/TAF): 24-Month Effectiveness, Safety, and Patient-Reported Outcomes (PROs) From the Prospective Observational BICSTaR Study

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Background: Although women account for over half of people with HIV globally, they are historically underrepresented in research studies. We present effectiveness, safety, and PROs through 24 months (M) of B/F/TAF in treatment-naïve (TN) and treatment-experienced (TE) women with HIV from the multi-country, prospective, observational BICSTaR study.

Methods: Pooled subgroup analysis of women (identified as female sex at birth) with HIV receiving B/F/TAF in routine clinical care in 12 countries. 24-month outcomes included virologic effectiveness (missing=excluded analysis [M=E]); change in CD4 cell count; drug-related adverse events (DRAEs); discontinuations; BMI change; pregnancies; and quality of life (QoL; 36-Item Short Form Health Survey Physical/Mental Component Summary [PCS/MCS] scores, HIV Symptom Index

[HIV-SI] overall bothersome count). HIV Treatment Satisfaction Questionnaire change version (HIVTSQc) scores at 12M in TE participants are also reported.

Results: 307 female participants with available data were included. At baseline, among TN (n=44)/TE (n=263) participants: 66%/52% were White; median (Q1, Q3) age was 39.5 (33.0, 52.5)/48.0 (41.0, 55.0) years; 27%/43% were aged ≥50 years; 41%/71% reported ongoing comorbidities; 33% (13/39)/57% (141/248) were receiving ≥1 concomitant medication. 63% (26/41) of TN participants had CD4 count <350 cells/μL and/or ≥1 AIDS-defining event.

At 24M, 97% [29/30] of TN and 94% [187/198] of TE participants had undetectable viral load (M=E; HIV-1 RNA <50 copies/mL). No treatment-emergent resistance to B/F/TAF was reported. CD4 count increased by a median (Q1, Q3) of 212.0 (137.0, 286.0) cells/μL from 336.0 cells/μL at baseline in TN and by 49.7 (-98.2, 137.0) cells/μL from 687.0 cells/μL at baseline in TE participants (P<0.001 and P=0.02, respectively).

DRAEs occurred in 17% of participants overall (8 TN, 44 TE); none were classified as serious. DRAEs led to treatment discontinuation in 10% of participants (7 TN, 23 TE), the most common of which were weight gain (3%; 3 TN, 6 TE) and headache (2%; 1 TN, 4 TE). BMI increased by a median (Q1, Q3) of 1.4 (0.8, 4.8) kg/m² from 24.0 kg/m² at baseline in TN and by 0.4 (-0.3, 1.5) kg/m² from 24.4 kg/m² at baseline in TE participants (both P<0.001). B/F/TAF persistence at 24M was 85% (33/39) and 88% (215/244) for TN and TE participants, respectively. Through 24M, pregnancies were reported in four participants. At 24M, QoL in TN participants was improved: PCS and MCS scores (n=24) increased from baseline (median [Q1, Q3]: +6.1 [-0.4, +11.4], P=0.009, baseline 50.4; and +1.5 [-0.9, +7.3], P=0.152, baseline 48.5, respectively) and HIV-SI overall bothersome count (n=28) decreased (-2.0 [-6.5, 0.0], P=0.006, baseline 7.0). In TE participants, PCS and MCS scores (n=127) and HIV-SI overall bothersome count (n=169) remained stable (median [Q1, Q3]: +0.2 [-3.7, +4.8], P=0.728, baseline 55.1; 0.0 [-5.5, +5.8], P=1.000, baseline 51.2; and 0.0 [-3.0, +2.0], P=0.014, baseline 3.0, respectively). Treatment satisfaction improved in TE participants (n=165) at 12M, as HIVTSQc scores increased by a median (Q1, Q3) of 27.0 (19.0, 30.0).

Conclusions: In women with HIV, B/F/TAF demonstrated high levels of effectiveness and safety through 24M in routine clinical practice,



with improvements in QoL and treatment satisfaction.



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Perinatal and Early Infant Outcomes After Bictegravir Exposure in Pregnancy: a Canadian Surveillance Study

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Background: In January 2024, despite limited data, bictegravir (BIC) was upgraded to an alternative antiretroviral therapy in pregnancy in the United States. Our study aimed to examine the perinatal and early infant outcomes following BIC exposure in pregnancy in Canada.

Methods: Data was obtained from the Canadian Perinatal HIV Surveillance Program (CPHSP), which is a prospective cohort of infants born to women living with HIV across Canada. Liveborn infants from July 28, 2018, to December 31, 2023 were included in the analysis. Using univariate analyses, BIC-exposed infants were compared to infants born within the same timeframe with exposure to other integrase strand transfer inhibitors (INSTIs). To identify whether preterm births were independently associated with BIC exposure, a logistic regression analysis adjusting for relevant preterm birth risk factors.

Results: In our included cohort, 161 infants were exposed to BIC in pregnancy, compared to 723 infants exposed to non-BIC INSTIs. In the BIC-exposed group, 81 (52%) had pre-conception BIC with continued use in pregnancy, 34 (22%) had pre-conception BIC with discontinuation in pregnancy, and 41 (26%) were started on BIC in pregnancy. The median duration of BIC exposure in pregnancy was 35 weeks (interquartile range: 11 to 38 weeks). Among pregnant individuals started on BIC during pregnancy, the median gestational age of initiation was 23 weeks (IQR: 12 to 29 weeks) Among pregnant individuals on pre-

conception BIC and discontinued in pregnancy (n=34), the median gestational age of discontinuation was 10 weeks (IQR: 7 to 12 weeks). Compared to infants exposed to non-BIC INSTIs, infants exposed to BIC were more likely to be born to mothers identified as Indigenous (38% vs. 21%; $p < 0.001$) and with a mode of transmission associated with injection drug use (28% vs. 14%; $p < 0.001$). Infants exposed to BIC in pregnancy were more likely to be born preterm (19.4% vs 11.7%; $p=0.008$), and their mothers were more likely to discontinue antiretroviral therapy by delivery date (1.9% vs. 0.1%; $p=0.021$) and in the postpartum period (5.0% vs. 2.0%; $p=0.037$). However, after adjusting for ethnicity, maternal mode of HIV transmission, and viral load at delivery, preterm birth was no longer associated with BIC exposure (OR: 1.47; 95% CI: 0.80-2.71; $p=0.214$). There were no differences in maternal HIV viral load at delivery, mode of delivery, rate of small for gestational age, rate of perinatal transmission, or rate of congenital anomalies.

Conclusions: BIC was not independently associated with adverse perinatal and early infant outcomes when compared to other INSTIs in the Canadian cohort. Indigenous populations and people who use injection drugs were disproportionately exposed to BIC use in pregnancy prior to guideline updates, emphasizing a gap in preconception counselling in these populations.

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The RISE Infant Feeding Framework: A Conceptual Multi-Level Approach to Understanding Infant Feeding Among People with HIV in Higher-Income Countries

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Background: Advancements in antiretroviral therapy (ART) have significantly reduced the risk of HIV transmission through breast/chest feeding (BF/CF), leading high-income countries (HICs) to revise recommendations to support BF/CF for people with HIV (PWH) through informed shared decision making. However, challenges remain for PWH, who must navigate complex factors across multiple socioecological levels as they, their health providers, and other influential individuals approach infant feeding. An integrated framework rooted in health behavior theories is needed to guide research, clinical care, and policy around infant feeding for PWH.

Method: A scoping review of the literature was conducted, searching PubMed, CINAHL, and Embase to identify theoretical models and frameworks relevant to infant feeding in the context of HIV. Findings informed the Relational, Integrated, and Socioecological Framework (RISE Infant Feeding Framework) for People with HIV, which integrates relational, behavioral, and socioecological perspectives to guide research, clinical care, and policy. The framework applies aspects of behavioral science theories, intersectionality theory, and public health frameworks, including the Biopsychosocial Model, the Social Ecological Model, the Health Stigma and Discrimination Framework, and the Interactive Theory of Breastfeeding. Trust was identified as a

cross-cutting element influencing decisions and practices across levels.

Framework Description: The model conceptualizes infant feeding decisions and practices among PWH as shaped by factors across five interconnected levels:

1. Individual: Biological factors (e.g., HIV assessments, ART use, engagement in care, maternal/infant comorbidities), psychological well-being, risk adversity/tolerability, self-efficacy, and knowledge about BF/CF and HIV.
2. Interpersonal: Relationships with partners, family, and healthcare providers that shape emotional, informational, and practical support dynamics.
3. Organizational: Institutional policies, healthcare provider knowledge, attitudes, practices, access to resources supporting BF/CF (e.g., lactation consultants), and the quality of stigma-free, patient-centered care.
4. Community: Availability of culturally sensitive programs, peer support networks, and stigma-free community-based resources that foster acceptance of BF/CF.
5. Societal: Cultural norms, media representation, economic conditions, and public policies influencing BF/CF practices and perceptions of PWH in the broader community.

Trust operates as a foundational element: enhancing relationships, fostering communication, mitigating stigma, improving adherence to healthcare recommendations, and strengthening connections between PWH and the systems that support them. Trust may also facilitate relational decision-making, a collaborative process shaped by relationships (e.g., between PWH, family, and healthcare providers) emphasizing open communication and mutual support.

Implications for Research and Practice: The RISE Infant Feeding Framework focuses on the multi-level factors influencing infant feeding practices among PWH, integrating relational, behavioral, and socioecological perspectives to guide research, clinical care, and policy. This framework addresses the dynamic interplay of individual, interpersonal, organizational, community, and societal factors involved in infant feeding among PWH. By considering these multiple levels of influence, the framework supports a relational decision-making process. While tailored to the changing context of infant feeding in HICs, it may be adaptable to other settings. Furthermore, it advances equitable, patient-centered healthcare practices and



underscores the importance of culturally sensitive, patient-focused care for PWH and their families. This framework provides a robust platform for research, intervention development, and policy advocacy to create more inclusive healthcare practices.



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Doravirine in Breastmilk of Healthy, Lactating, HIV-Negative Women After a Single Dose of 100mg

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Background: Breastfeeding in context of HIV-1 infection has long been avoided in high and middle income countries out of fear of vertical transmission. In low income countries, this risk is also recognized, but is weighed out by the risk of pneumonia and diarrheal disease associated with unsafe drinking water used for formula preparation. Due to effective antiretroviral therapy, vertical transmission risk has been proven to be very low. Question remains, however, if exposure to antiretroviral drugs through breastmilk can be hazardous to the infant. The aim of this study is to describe breastmilk transfer of doravirine, a first line antiretroviral agent.

Methods: In this non-randomized, open-label, single center clinical trial healthy, lactating women without HIV were administered a single dose of 100mg doravirine, after which blood- and breastmilk samples were obtained during a 24 hour period. The participants were instructed to provide alternative feeding (formula or previously pumped breastmilk) 4 days after ingestion of study drug, in order to prevent exposure to the study drug through breastmilk of their infants. Doravirine concentrations were measured with the use of LC-MS/MS. Pharmacokinetic parameters in blood were determined with the use of non-compartmental analysis. Milk: plasma ratio was calculated using the area under the curves during 24 hours (AUC_{0-24h}) (Breastmilk AUC_{0-24h} / maternal plasma AUC_{0-24h}). Daily infant dose (mg/day) was calculated using Σ (total drug concentration in each milk collection multiplied by the expressed milk volume in each milk collection) and the relative infant dose (RID) by dividing the infant dosage (mg/kg/day) by the maternal dosage (mg/kg/day) and multiplied by 100. As cumulative expression of breastmilk may vary across participants, a RID will be calculated assuming breastmilk intake of 150mL/kg/day per infant

((AUC/24)*150). A RID <10% was considered safe, in accordance with EMA/FDA recommendations.

Results: 8 healthy, lactating women without HIV were included. The geometric mean (CV%) AUC_{0-24h}(h*mg/L) in plasma was 14.47 (26.1) and 3.86 (25.2) in breastmilk, resulting in a median (IQR) breastmilk : plasma ratio of 0.29 (0.27-0.31). Not all participants were exclusively breastfeeding, resulting in a wide range of expressed milk volumina. So did the daily - and relative infant dosage (%), with a median (IQR) of 0.07 (0.01-0.11) mg/day and 0.86 (0.08-1.42)% respectively. When assuming a daily milk intake of 150mL/kg the median (IQR) daily - and relative infant dosages were 0.18 (0.15-0.26) mg/day and 1.90 (1.50-2.44)% respectively.

Conclusion: Doravirine does transfer from maternal plasma into breastmilk, however, the measured concentrations and subsequent daily- and relative infant dosages do not exceed the safety threshold. Even though no clear relationship between exposure and toxicity has been established for doravirine, a relative infant dose of <10% is reassuring.

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Perinatal and Neonatal Outcomes After 1st vs. 2nd Generation INSTI Use in Pregnancy

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Background: The integrase strand transfer inhibitor (INSTI) class of antiretroviral therapy (ART) is used globally to treat HIV, and frequently used in pregnancy. Recent preclinical research in human stem cell and mouse models has raised concerns regarding decreased cell viability and pluripotency as well as increased fetal resorptions with exposure to second- vs. first-generation INSTIs. Therefore, we aimed to explore differences in perinatal outcomes after exposure to first- versus second-generation INSTIs.

Methods: Data was obtained from the Canadian Perinatal HIV Surveillance Program. This national active surveillance system houses data for pregnant people living with HIV since 1990. Infants born between January 1st, 2007 and December 31st, 2023 with in-utero INSTI exposure were included. Univariate analysis compared demographic factors, maternal HIV factors and perinatal outcomes between pregnancies exposed to first- and second-generation INSTIs. Multivariate logistic regression analyses explored independent associations between INSTI class and significant perinatal outcomes, including preterm birth and small-for-gestational-age (SGA) infants controlling for maternal race, risk category, and HIV viral load closest to delivery.

Results: 1,160 infants were included; 433 infants were exposed to first-generation INSTIs and 727 exposed to second-generation INSTIs. In our cohort, those using second-generation INSTIs in contrast to first-generation INSTI were more likely to be Indigenous ($p < 0.001$), have contracted HIV via intravenous drug use ($p < 0.001$), and report Canada as their country of origin ($p < 0.001$). There were no significant differences between groups regarding time from HIV diagnosis ($p = 0.250$), viral load at delivery ($p = 0.609$), or use of ART during conception ($p = 0.562$), delivery ($p = 0.147$), or postpartum periods ($p = 0.104$). There was a trend toward fewer SGA infants (defined as < 10 th percentile) with second-generation INSTIs (OR: 0.75; 95% CI: 0.55–1.01; $p = 0.058$), but this difference remained not significant in multivariate analyses (OR 0.72, 95% CI: 0.49–1.07; $p = 0.105$). The frequency of very SGA infants (defined as < 5 th percentile) was similar between groups. There was a trend toward increased frequency of preterm birth (< 37 weeks) among those exposed to second-generation INSTIs (OR: 1.40, 95% CI: 0.97, 2.00; $p = 0.070$), however, this relationship remained similar in multivariate analyses (OR 1.01, 95% CI: 0.62–1.66). No significant differences were observed in mode of delivery ($p = 0.275$), breastfeeding practices ($p = 0.394$), HIV transmission ($p = 0.208$), infant deaths ($p = 0.09$) or congenital anomalies ($p = 0.887$) between those exposed to first- vs. second-generation INSTIs. All congenital anomalies and infant deaths were reviewed, and no pattern or safety signal was identified.

Conclusions: Second-generation INSTI use in pregnancy did not have statistically significant independent associations with adverse perinatal outcomes when compared to first-generation INSTIs. When reviewing non-significant trends, second-generation INSTIs are no worse than first-generation INSTIs for small-for-gestational-age infants; however, we cannot rule out a moderate effect of second-generation INSTIs on the frequency of preterm birth. Overall, these findings support the use of second-generation INSTIs as HIV therapy in pregnancy but suggest the need for continued careful observations of outcomes.



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Navigating Futures: The Vital Role of Integrating a Comprehensive Family Planning Approach for Adolescent Girls and Young Women on the DREAMS Initiative in Kapiri Mposhi District, Central Zambia.

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Background: Adolescent girls and young women (AGYW) face unique health challenges that significantly affect their well-being, education, and economic prospects. In many low-resource settings, including those targeted by the DREAMS initiative (Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe), cultural beliefs, norms, religious beliefs, gender roles or policies and prevailing attitudes towards contraception may affect family planning access and utilization. The lack of access to comprehensive family planning services exacerbates vulnerabilities to unplanned pregnancies, sexually transmitted infections, and gender-based violence. The DREAMS initiative aims to reduce the incidence of HIV among AGYW by addressing the social and structural determinants of their health; however, without a robust framework for family planning, these efforts may be undermined. This abstract aims to outline the importance of a comprehensive approach in family planning provision.

Method: Between October 2023 to June 2024, the USAID Controlling HIV Epidemic for Key and Underserved Populations (CHEKUP II) integrated a comprehensive family planning approach under the DREAMS Initiative. The Activity uses female clinicians and Community Based Volunteers trained in Family planning services provision to provide both short term and long- Acting Reversible family planning services every day of the week. The activity promotes dual protection-condom use in addition to Family planning methods of their choice, fostering empowerment

and autonomy over their bodies. These services encompass a broad range of contraceptive methods, counselling and education. By integrating comprehensive family planning within DREAMS sites, the Project not only mitigated the vulnerabilities associated with early pregnancy and HIV infection but also promoted educational attainment and economic independence among AGYW. Data was collected through desk reviews and DHIS2.

Results: The activity reached a total of 6,372 AGYW with a wide range of family planning services. 3,793 accessed condoms, 1,998 accessed injectable contraceptives, 295 accessed oral contraceptives while 286 accessed Long-Acting Reversible Contraceptives (jabelle and Implanon). Access to diverse family planning options empowered AGYW to plan their futures, reduced dropout rates from education, and strengthened community resilience.

Conclusion: Investing in wide-ranging family planning services in DREAMS sites is not merely a health imperative but a fundamental step towards achieving gender equity and improving the quality of life for adolescent girls and young women in vulnerable settings. We recommend comprehensive family planning services that encompass education, access to a variety of contraceptive methods, integration with other health services like HIV testing and treatment and community engagement to empower women and families to address the multifaceted challenges that AGYW go through.

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Is Housing Instability Linked to Poor Health Outcomes in Women Living in the US?

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Background: Housing stress, broadly defined to include housing problems such as affordability, quality, stability, and loss, represents a critical public health issue in the U.S. In 2019, on any given night, more than half a million people experienced homelessness, and 50% of U.S. renter households spent >30% of their income on housing costs. While housing instability itself is a US national challenge, it disproportionately impacts women vulnerable to HIV seroconversion and intimate partner violence (IPV). Crucial questions emerge concerning the possible associations between housing instability and mental health problems.

Materials and Methods: The American Women: Assessing Risk Epidemiologically (AWARE) Cohort Study aims to combine epidemiologic methods, digital technology, and data science approaches to better understand HIV prevention and transmission. AWARE (R01AI172469) is a US-based national longitudinal cohort study aiming to enroll 1,800 cisgender women with greater likelihood of HIV seroconversion between June 2023 and July 2025. Participants complete a survey with items related to demographics, substance use, mental health symptoms (Center for Epidemiologic Studies-Depression-10 and General Anxiety Disorder-7), interpersonal violence (Composite Abuse Scale Short Form Composite Abuse Scale Short Form) and other social factors. Biospecimens include self-collected vaginal and rectal swabs, and

blood in microtainers to test for HIV, syphilis, chlamydia, gonorrhea, and trichomoniasis every 6 months for 2 years.

Results: Women participating in the AWARE cohort who report housing instability have higher rates of depression and anxiety, hazardous alcohol use measured by the AUDIT-C, STI incidence collected through self-sampling and IPV measured through the Composite Abuse Scale Short Form, compared to women who have stable housing. Depression is more than 30% higher among AWARE women who report housing instability compared to those who do not. Similarly, 10% of women who report housing instability have STIs as compared to 7% in women with stable housing. Anxiety is about 13% higher among the women who report housing stability compared to those who do not. About 76% of women who report housing instability report intimate partner violence compared to 68% in women with stable housing. The women who report housing stability have hazardous alcohol use are 4% higher than those who have stable housing.

Conclusions: These findings align with research linking housing instability to poor health and provide valuable insights into the housing and health needs of women experiencing IPV and at risk of HIV seroconversion. Women facing IPV and mental health challenges are more likely to encounter housing instability, a result of intersecting factors such as economic hardship, job loss, difficulty accessing affordable housing, and isolation from support networks due to the abusive partner. Structural issues, including the gender pay gap, further hinder women's ability to secure stable housing, disproportionately affecting racial and ethnic minority women. Women who are unable to secure independent housing are more likely to return to abusive partners. This cycle of revictimization and escalating violence worsens health outcomes. Given the clear link between housing instability, IPV, and poor health, there is a critical need for accessible and effective housing interventions.



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Latina and Black Woman HIV and STI Disparities Can Not Be Dismissed. A 10 Year Analysis of the Situation in Travis County, Texas, 2013-2023.

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Background: Latina and Black women in the United States have the heaviest burden and are disproportionately affected by the HIV and Sexually Transmitted Infections. The factors that affect and increase the odds of HIV infection among females are still under investigated, and thus the heterosexual transmission is the most common, there are more factors that can be evaluated to decrease these disparities. Similar situation happens across all states including Texas.

Methods: We reviewed data from 2013 to 2023 of new HIV diagnosis and Sexually Transmitted Infections data in Travis County, the capital of Texas and compared by gender, age groups and race. Descriptive statistics and a multiple regression model were used to analyze the data.

Results: During 2023 there were no new HIV diagnosis among White women 15-24, meanwhile in Black women the rate was 37.3, and Latinas had an 11.6. If comparing the group of 35-44 years old, new HIV diagnosis infections were 4 times higher between Black women than White, and 3 times higher comparing Latina and White. When reviewing the Sexually Transmitted Infections data, only in 2023, Gonorrhea infections were almost 11 times higher, and Syphilis was 16 times higher among Black women ages 15-24 compared with White. The group of Latina women with ages between 45-59 had 5 times higher rates of Gonorrhea than Latino males on the same age group. Chlamydia infections were 1.3 times higher among White women than White males ages 15-24, 2.3 times higher among Black females than males, and 2 times higher among Latina women than males in the same age group. When comparing the age group of females 25-34, the rate of Syphilis was 5 times higher among Black than White, while the Latinas had a rate 4 times

higher than White. Age groups are disproportionately affected across the different stages of life but are even higher rates between 15-34 years old.

Conclusions: HIV/Stage 3 HIV disproportionately affects Black and Latina women in Travis County. Young women between 15-24 years old followed by the 25-34 years old are the groups more impacted by health disparities and there are several factors that can be implicated. Further research and analysis is needed to develop culturally sensitive interventions with a comprehensive and interdisciplinary approach to promote interventions and group support based in the community.

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An Updated Analysis of the Percentage of Specimens with a Count <100 and ≥100-≤200 Cells/μL for Adolescent Girls and Young Women in South Africa for 2023

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Background: South Africa has the world's largest HIV epidemic, with 5.4 million people living with HIV on antiretroviral therapy (ART). CD4 testing is used for disease staging and immune status assessment. Adolescents and young people represent a growing share of people living with HIV. Adolescent girls (AG) and young women (YW) aged 15-19 and 20-24 years are twice as likely to be living with HIV than men of the same age. Globally, 15% of women living with HIV are aged 15-24, of whom 80% live in sub-Saharan Africa. In South Africa, the HIV prevalence was 16.3% among adults aged 15 years and older. Compared to males, HIV prevalence was 2-fold higher in females aged 15-19 (5.7% vs 3.1%) and 20-24 years (8.0% vs. 4.0%) respectively. The objective of this study was to assess the percentage of specimens with a count <100 and ≥100-≤200 cells/μL for AG and YW in South Africa.

Methods: Data for females was extracted from the Corporate Data Warehouse for the 2023 calendar year. Variables included date of testing, age and absolute CD4 count. CD4 results were categorised as <100, ≥100-≤200 and >200 cells/μL. The following age categories were assigned: (i) ≤14, (ii) 15-19, (iii) 20-24, (iv) >24 and (v) unknown. Testing was categorised as AG and YW based on age. The percentage of specimens by CD4 category for AG and YW was compared to national testing for all age groups. The median CD4 and interquartile range (IQR) were reported. Data were analysed using SAS (Cary, NC, USA).

Results: Data is reported for 2,137,281 specimens. There were 45,626 (2.1%) and 110,414 (5.2%)

specimens categorised as AG and YW respectively. Nationally, the percentage of specimens with a count <100 and ≥100-≤200 cells/μL was 10.1% and 10.3%. The overall median CD4 was 465 cells/μL (IQR: 243-706). The percentage of specimens with a count <100 and ≥100-≤200 cells/μL was 5.4% and 7.3% for AG. In comparison, YW reported a percentage of specimens with a count <100 and ≥100-≤200 cells/μL of 5.7% and 7.7% respectively. The median CD4 for AG was of 477 (IQR: 306-683) compared to 491 cells/μL (IQR: 305-707) for YW.

Conclusion: The study findings reveal that at the national level the percentage of specimens with a count <100 and ≥100-≤200 for AG and YW was lower than national testing across all age groups. The levels of specimens with a count <100 and ≥100-≤200 cells/μL were slightly higher for YW when compared to AG. The data reported in this study are similar to findings reported for the 2017 to 2021 period, indicating that there not been an improvement over time.

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Unveiling an Overlooked Population: Climacteric Symptom Prevalence in Women with HIV in Mexico City.

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Research on women living with HIV has primarily focused on pregnancy and breastfeeding, resulting in an information gap regarding aging issues such as menopause. We aim to describe the prevalence of climacteric symptoms among women living with HIV over 40 years old and to compare characteristics between those with and without climacteric symptoms.

We conducted a retrospective study in the HIV Clinic of a tertiary hospital in Mexico City. Women living with HIV over 40 years old receiving HIV care between January 2019 and August 2024, were included. To describe climacteric symptoms (secondary amenorrhea, missed menstrual periods, vaginal dryness, hot flashes, sleep disturbances, fatigue, emotional lability, night sweats) and sexual satisfaction we used a standardized questionnaire that has been routinely applied since 2019. We used the last answered questionnaire during the study period and grouped women as women with climacteric symptoms (WWS) and women without climacteric symptoms (WnS). Demographics, comorbidities (hypertension, dyslipidemia, diabetes, thyroid diseases), use of hormone replacement therapy, and CD4 cell count were collected at the time of the questionnaire from clinical records. We used Student's t-test, Wilcoxon Rank Sum Test, and Chi-Square Test to compare both groups.

Of 173 women living with HIV and with a median age of 51, 122 (70%) answered the questionnaire at least once. We classified 100 (82%) women as WWS: they had a median age in years of 53(IQR:46-59) vs. 46 (IQR:42-48) among WnS ($p=0.00024$). The median time in years since HIV

diagnosis was 16 (IQR:11-21.5) in WWS vs. 18 (IQR:14-22) in WnS ($p=0.431$). WWS reported a median of 2.5 climacteric symptoms (IQR:1-4) and 73 (73%) reported more than one. The most frequent symptoms were amenorrhea (73%), fatigue (54%), and sleep disturbances (35%). 44 (44%) of WWS had at least one comorbidity compared to 3 (13%) of the WnS, $p=0.005$. The median CD4 count was 655 cells/mL (IQR:458-854) in WWS vs. 537 (IQR:427-817) in WnS. Of 122 women included in the study, 25(20%) were sexually active and 34 (28%) reported sexual dissatisfaction. Hormonal therapy was prescribed to only one of the patients who reported climacteric symptoms.

In our cohort, most women living with HIV over 40 years old experience climacteric symptoms yet, only one received hormonal replacement therapy. Older women and those with a more recent diagnosis of HIV, were more likely to have climacteric symptoms. Our findings highlight the gap in screening, treatment, and the need for more information on the impact of climacteric symptoms in quality of life in women living with HIV.

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Current Practice of Healthcare Professionals When Screening for and Managing Low Bone Mineral Density in Women Living with HIV in the UK

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Background: Low bone mineral density (BMD) is more common in post-menopausal women with HIV compared to post-menopausal women without HIV, with women with HIV being at 2-4 times the risk of fractures; these can lead to debilitating acute and chronic pain, disability and frailty. Whilst low BMD can be reversed with appropriate treatment, a recent national UK audit found that less than 50% of people aged >50 years with HIV had undergone bone health assessment. We describe the current practice of healthcare professionals (HCP) when screening for and managing low BMD in women living with HIV in the UK.

Methods: An online REDCAP survey, developed in collaboration with HCPs, investigated how low BMD is screened for and managed in HIV clinical settings. HCPs from UK HIV professional organisations were invited to participate through monthly newsletters between July and October 2024. Quantitative data were summarised using numbers/percentages.

Results: 35 HCPs responded (23 doctors, 6 nurses, 6 other) from 23 clinics across the UK (7 in London, 14 elsewhere in England, 2 from Scotland and 1 from Northern Ireland).

Although the majority of respondents (32/35) reported screening women with HIV for low BMD, 11/32 reported this was not done routinely by HCPs in their clinic. Reasons to not screen included 'too many other things to do in the consultation' (8/11) and 'simply forget' (8/11).

Among HCP respondents who screened, 26/32 were confident investigating low BMD but five were unsure. Two felt they did not have 'formal training' and therefore 'would not be able to prescribe appropriate treatment' and/or would be

'unsure what to do next'. Another two alluded to the 'lack of a well-defined care pathway' including access to bone density (DXA) scans.

The most commonly used screening methods included the Fracture Risk Assessment Tool (FRAX) score (32/32), DXA (27/32) and clinical history (26/32). All respondents reported using a combination of these methods; 20/32 used all three, 6/32 used the FRAX score with DXA, and 5/32 used FRAX with clinical history.

When enquiring about further management of low BMD, approximately 60% of HCPs referred women to primary care (20/35); nine referred participants to (6/35), or provided joint care with (3/35), a specialist team. Only three respondents reported being able to manage patients with low BMD within their service (3/35).

The majority of participants (32/35) were happy to include screening for low BMD in their clinical remit. One in three (12/35) had received some training in bone health screening, with 25/35 expressing a need for further training.

Conclusion: The majority of HCPs reported screening women living with HIV for low BMD using a combination of tools. Lack of time, confidence, and management pathways were identified as key barriers to routine screening. Further work is required to understand how pathways can be developed and streamlined to optimise utilisation, and how training for screening for and management of low BMD can be implemented for HIV HCPs.

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The Intersection of Viral Load Categories and Depression Among Women Living with HIV: A Focus on Mental Health Disparities

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Background: Depression is a prevalent mental health challenge that disproportionately impacts people living with HIV (PLHIV). In this population, depression is linked to poor adherence to antiretroviral therapy (ART), inadequate viral suppression, and unfavorable health outcomes. While achieving viral suppression remains a key clinical objective, the psychological impact of viral load categories. Target Not Detected (TND), Low-Level Viremia (LLV), and High Viral Load (HVL) and their relationship with depression remain insufficiently investigated.

Objective: - Compare the prevalence of depression between men and women among PLHIV in the Otjiwarongo district, within 6 months
- To assess the association between viral load categories (TND, LLV, HVL) and depression among PLHIV in Otjiwarongo district, within 6-month period.

Methods: This cross-sectional study of 849 PLHIV assessed the association between viral load categories (TND, LLV, HVL) and depression using PHQ-9 from November 2023 to April 2024 in Otjiwarongo district. Age and sex were recorded as covariates. Descriptive statistics summarized the data, chi-square tests explored associations, and logistic regression adjusted for confounders determined depression odds. Results were expressed as odds ratios with 95% confidence intervals (CI) to indicate the precision of estimates.

Statistical significance was set at $p < 0.05$. Descriptive statistics were used to summarize participant characteristics. A chi-square test was performed to evaluate the association between

viral load categories and depression. Logistic regression, adjusted for age and sex, was used to calculate odds ratios (OR) with 95% confidence intervals (CI) to quantify risk factors. Additionally, a t-test compared mean depression prevalence between men and women.

Results: The dataset included 849 people living with HIV (PLHIV), comprising 62% women (578) and 38% men (335), with a mean age of 45.3 years (± 12.7 years) and a maximum age of 77 years. Depression was observed in 9.5% of participants, revealing significant disparities between women and men. Women had a mean depression prevalence of 10.73% (SD: 30.97%), nearly double that of men (5.67%, SD: 23.16%). A t-test confirmed this difference as statistically significant ($p = 0.005$). Logistic regression demonstrated that being female is significantly associated with higher odds of depression, with an odds ratio of 2.0 (95% CI: 1.16–2.45, $p = 0.011$).

Participants were also categorized by viral load: 89.3% were in the TND group, 8.0% in LLV, and 2.7% in HVL. A chi-square test revealed a statistically significant association between viral load categories and depression ($p = 0.017$). Logistic regression, adjusted for age and sex, showed that participants in the LLV group were 2.56 times more likely to experience depression (OR: 2.56, 95% CI: 1.34–4.91, $p = 0.006$), while those in the HVL group had 4.23 times higher odds (OR: 4.23, 95% CI: 2.10–8.51, $p = 0.002$) compared to the TND group.

Conclusion: Depression among PLHIV in Otjiwarongo is significantly associated with sex and viral load, with women and those in LLV/HVL categories at higher risk, accentuating the need for targeted mental health interventions and routine depression screening are essential to address these disparities.

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Suicidality and Crisis: a Longitudinal Exploration of Suicidality in Adolescent Mothers Living with and Affected by HIV in South Africa

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Background: Suicidal ideation and behaviours (SIB) are a persistent and devastating public health concern requiring comprehensive prevention and postvention strategies. Understanding suicidal ideation and behaviours over time (especially covering the COVID-19 pandemic years) is needed to provide insight into the mental health of young mothers affected by HIV together with the implication for this group, their children (our future generations), and to plan for future crisis management.

Methods: Data were drawn from a cohort of adolescent and young mothers in the Hey Baby Study (n=1046) in the Eastern Cape Province, South Africa. We analysed longitudinal data from n=704 adolescent mothers (first child <=19 years), living with HIV (n=213) and not living with HIV (n=488) included in three interview waves. SIB in the past two weeks was assessed using the 5-item validated Mini-KID measure in two waves of data collection (pre-COVID-19 in 2018-2019, and post COVID-19 in 2021-2022). X2 tests explored changes in SIB prevalence over time (using cut-off scores), differences according to HIV status, and differences in sample characteristics according to mental health status.

Results: 30.3% (213/704) of adolescent and young women in the sample were living with HIV. The average age of young women at follow-up interview was 22 years (IQR21.1-23.3). Significant increases in poor mental health symptoms were identified on all measures of mental health symptoms post onset of the COVID-19 pandemic. Any suicidality symptomology rose from 6.3% pre-

COVID-19 to 28.7% post-COVID-19 onset ($\chi^2=121.44$, $p<0.0001$). SIB prevalence rose from 4.2% pre-COVID-19 to 12.4% post COVID-19 onset ($\chi^2=31.08$, $p<0.0001$). At baseline, prevalence of suicidality was similar among adolescent mothers living with and not living with HIV (6.7%vs.6.1%, respectively). Prevalence of suicidal thoughts and acts were found to be higher among adolescent mothers living with HIV compared to adolescent mothers not living with HIV (5.3%vs.3.7%, respectively). At follow-up, adolescent mothers living with HIV reported a higher prevalence of overall suicidality than adolescent mothers not living with HIV (31.5% vs. 27.5%, respectively). They also reported higher levels of suicidal thoughts and acts (15.0% vs. 11.2%, respectively). Referral to support services for suicidality was undertaken throughout the study.

Conclusions: Globally, this is the largest longitudinal exploration of suicidality among adolescent mothers living with HIV. These analyses identify a critical need for intervention to support mental health particularly within periods of crisis and calls for further exploration into the drivers of suicidality within this population. Mental health provision as well broader interventions of support for possible structural drivers of suicidality and stronger referral systems and local capacity to support adolescent mothers at risk of and experiencing suicidality are required. Such provision should be incorporated into future mental health response, particularly for those groups experiencing a layering of vulnerabilities – including adolescent mothers living with HIV.

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Managing Menopause in HIV: a Cross-Sectional Study on the Awareness and Interventions of Healthcare Practitioners in a Nigerian Teaching Hospital

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Background: The advent of antiretroviral therapy (ART) has led to Women living with HIV (WLHIV) reaching menopause and ageing with HIV. This population needs critical attention in their management. This study aims to access the level of awareness, training and Interventions of Healthcare practitioners in managing menopause in HIV.

Methods: This study adopted a cross-sectional design in which an 11-item validated questionnaire was used to obtain responses from healthcare practitioners. The questionnaire was divided into four sections: Socio-demographics, awareness, Interventions and Challenges. Data was collected in December 2024 from practitioners consisting only of Doctors, Pharmacists and Nurses whose specialties involves women's reproductive health and HIV management in a Federal University Teaching Hospital in Ebonyi state. Appropriate descriptive and inferential analysis were conducted with $p < 0.05$ considered statistically significant.

Result: A total of 152 healthcare practitioners participated in this study of which 64(42.1%) were doctors, 44(28.9%) nurses and 42(28.9%) pharmacists. From the responses received, 38(59.38%) Doctors, 14(31.82%) pharmacists and 9(20.45%) nurses demonstrated awareness of the concept of menopause in WLHIV. Most respondents 135(88.82%) reported having no official training on menopause management in HIV. Awareness levels varied significantly by profession ($p < 0.001$), with nurses and

pharmacists being less likely than doctors to receive training ($p = 0.009$). Regarding clinical interventions, 72(47.4%) reported no knowledge, while lifestyle changes were the most commonly suggested intervention 70(46.1%). Major barriers to menopause management identified by healthcare practitioners included lack of knowledge 110(72.4%) and patient reluctance to discuss menopause 53(34.9%). To address these issues, 125(82.2%) respondents recommended training of healthcare practitioners to manage menopause in WLHIV.

Conclusion: There is poor level of training in the management of menopause in HIV among healthcare practitioners. Advocating for targeted, profession-specific training programs by healthcare practitioners indicates interest in menopause management for WLHIV. Thus, training programs with culturally sensitive guidelines and integrative care models are recommended to enhance outcomes for WLHIV in menopause phase.

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Enhancing Mental Health Screening for Adolescent Girls and Young Women Living with HIV: A Continuous Quality Improvement Approach in Wakiso District, Uganda.

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Background: Mental health screening for adolescent girls and young women (AGYW) living with HIV is critically underperformed in resource-limited settings like Uganda, particularly in the island, lakeside areas, and other regions within the Wakiso District served by TASO Entebbe. AGYW in these areas face compounded challenges, including socio-economic hardships, gender-based violence, and limited access to mental health services, all of which heighten their vulnerability to undiagnosed mental health conditions. Untreated mental health issues can impair decision-making, hinder self-care, and reduce HIV treatment adherence, contributing to risky behaviors and sustaining the high prevalence of HIV within this group. As of January 2024, only 17% of AGYW attending HIV clinics at TASO Entebbe had received mental health screenings. A root cause analysis identified misconceptions about mental health and a predominant focus on physical health by health workers as significant barriers to mental health screening. Given the importance of early detection and comprehensive management of mental health conditions for improved health outcomes, a Continuous Quality Improvement (CQI) approach was implemented to address barriers hindering mental health screening for AGYW living with HIV in Wakiso District,

Intervention: Between January and June 2024, The AIDS Support Organisation, in collaboration with the African Diversity and Inclusion Centre, launched a Continuous Quality Improvement (CQI) intervention aimed at integrating mental health screening into routine HIV care for adolescent girls

and young women (AGYW) aged 10–24 living with HIV in Wakiso District, Uganda. Utilizing the Plan-Do-Study-Act (PDSA) cycle and the Pareto Principle, the intervention focused on empowering health workers, peers, and parents through targeted initiatives. Over 50 healthcare providers received training on mental health screening tools such as PHQ-9 and GAD-7, with monthly workshops for skill refinement. On clinic days, peer-led support groups and post-survivors led discussions with AGYW and their parents, using culturally adapted cognitive-behavioral therapy (CBT) materials, WhatsApp networks, and video storytelling to reduce stigma and foster resilience. Parents were given educational materials to help them recognize mental health symptoms and distinguish them from behavioral issues. To facilitate timely referrals, a 24/7 hotline was established to connect the community with health workers for further screening and follow-up. Data collection was conducted utilizing Ministry of Health CQI document journals and structured questionnaires.

Results: Between January and June 2024, the intervention targeted 230 AGYW aged 10–24 living with HIV, achieving an increase in mental health screening rates from 17% to 95%. Among those screened, 15% were diagnosed with mild to moderate depression or anxiety, with higher rates observed in AGYW aged 15–24 (18%) compared to those aged 10–14 (12%) Community outreach engaged 150 families. The 24/7 hotline managed 345 referral calls. Qualitative analysis revealed that 81% of participants reported reduced stigma.

Conclusion: This intervention highlights an effective and scalable model for integrating mental health screening into HIV care for AGYW in resource-limited settings. By leveraging health worker training, peer-led support, parental engagement, and accessible digital tools, the approach is adaptable to similar contexts, offering a practical, community-centered solution to improve global health outcomes

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HIV Index Testing, Intimate Partner Violence, and Outcomes Among Females Enrolled Into Anti-Retroviral Therapy

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Introduction: Index testing, also known as partner notification or contact tracing, is a case-finding approach that focuses on eliciting the sexual or needle-sharing partners and biological children of HIV-positive individuals and offering them HIV testing services. While index testing has been proven to be a very effective strategy in HIV case finding, there have been concerns about the safety of the model, particularly for females who are vulnerable to gender-based violence. Globally, Studies have found an association between intimate partner violence and interruption in antiretroviral therapy (ART) use, adherence, and viral suppression, including among adolescents and postpartum women. This study aimed to assess the prevalence of intimate partner violence (IPV) among females who participated in sexual partner elicitation for HIV index testing and to examine the association between IPV experiences and Anti-Retroviral Therapy (ART) outcomes.

Methodology: The design was a cross-sectional study. Data was collected through structured questionnaires and medical records. The Study included females aged 18 and above, who were enrolled into ART and participated in partner elicitation for HIV index testing between October 2022 and September 2023 in Abia State, Nigeria. The key independent variables were experience of IPV (physical, emotional, sexual) and partner elicitation approach (voluntary vs. provider-assisted) and the outcomes of interest were viral load, sexually transmitted infection (STI), adherence, and retention in care. Data analysis involved descriptive statistics to characterize the study population. Multivariate and Chi-Square test were done to establish relationships/association

between the dependent and independent variables.

Result: There were 912 participants in the study, majority were aged 26–35 years (39%), and 44% having secondary education, 51% resided in urban areas, and 48% were married. The prevalence of IPV was 42% and there was significant association between IPV experience and viral load status ($\chi^2 = 12.34$, $df = 1$, $p < 0.001$), STIs ($\chi^2 = 9.87$, $df = 1$, $p = 0.002$) and viral rebound ($\chi^2 = 7.56$, $df = 1$, $p = 0.006$). Sub-group analysis showed that participants aged 36–45 years had higher odds of experiencing IPV compared to younger age groups (aOR: 2.45, 95% CI: 1.75–3.45, $p < 0.01$). Women whose sexual partners were notified through health worker-assisted index testing had increased odds of IPV compared to those using self-notification methods (aOR: 1.87, 95% CI: 1.30–2.68, $p = 0.02$).

Conclusion: The study highlights that index testing is associated with a heightened risk of IPV among females, which may adversely impact HIV treatment outcomes, including an increased risk of STIs and viral rebound. These findings point out the need for safe and ethical index testing and integration of support services for female survivors of IPV living with HIV.

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Advancing Cervical Cancer Elimination in Kenya: Incorporating Point-of-Care HPV Testing into HIV Care for Women Living with HIV

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Background: Cervical cancer screening rates among women living with HIV (WLHIV) in Kenya are notably low, even with the availability of visual inspection methods using acetic acid (VIA). Enhancing screening uptake requires a focus on WLHIV at elevated risk for cervical cancer. To address this gap, we introduced Xpert HPV testing for high-risk human papillomavirus (HR-HPV) into routine HIV care, aiming to improve cervical cancer screening coverage among WLHIV at Kenya's national referral hospital.

Methods: WLHIV aged 18 years and older, enrolled in HIV care at Kenyatta National Hospital (KNH) clinics, were invited to participate during routine visits from September 2021 to February 2022. Medical records of consenting participants were reviewed to determine baseline VIA screening rates. Those who had not undergone VIA in the past 12 months were offered Xpert HPV testing. Study nurses collected cervical samples, which were analyzed using the Gene Xpert platform in the clinic's molecular laboratory. Results were provided during the same visit, and women testing positive for HR-HPV were referred for VIA within the HIV clinic.

Results: A total of 691 WLHIV were enrolled in the study, with a median age of 42 years (IQR 37–48). The majority (72%) had at least a secondary education, 46% were married, 63% reported having a stable income, and 47% had an HIV-positive partner. Only 25% had undergone prior cervical cancer screening. Among the 518 participants without prior screening, 95% agreed

to Xpert HPV testing. The prevalence of high-risk HPV (HR-HPV) was 35% (232/656), including 10% for HR-HPV-16, 8% for HR-HPV-18 and/or 45, and 82% for 11 other HR-HPV types not individually genotyped by the test. The median turnaround time for Xpert HPV results was 60 minutes (IQR 60–80), with all results provided during the same clinic visit. Of those with positive HR-HPV results, 96% proceeded to VIA assessment, where 26% were identified with abnormalities suggestive of cervical pathology.

Conclusion: This study demonstrated the feasibility of incorporating Xpert HPV testing into HIV care for Kenyan WLHIV, achieving high acceptance rates and a significant prevalence of HR-HPV. Nearly all WLHIV with HR-HPV followed through with VIA referrals, which often identified cervical abnormalities. Implementing Xpert HPV testing could strengthen cervical cancer screening initiatives for WLHIV in high-burden regions.

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HIV Testing Practices among Persons Who are HIV-Seronegative and Breastfeeding in Botswana

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Background: In high HIV prevalence settings, ongoing HIV testing is critical to minimize and manage risk of infant HIV acquisition. Yet, actual testing practices have not been well-studied.

Methods: Pregnant persons enrolled in the Botswana-based FLOURISH study who tested HIV negative at enrollment were followed with their infants every three months from delivery/birth. Participants reported infant feeding practices (breast vs formula) and whether they had tested for HIV in the previous three months. HIV-seronegative breastfeeding persons with self-reported HIV testing practices at interim study check-ins were included in the analysis. Proportions of persons with continued breastfeeding who reported HIV testing practices in the prior three months were calculated at 3-, 6-, 9- and 12-months postpartum to evaluate adherence to Botswana national guidelines. Guidelines recommend HIV testing at 6 weeks postpartum and every three months during breastfeeding. Logistic regression models were fit to identify factors associated with maternal HIV testing engagement at 12-months postpartum.

Results: Of 152 pregnant persons HIV-seronegative enrolled in the FLOURISH study between April 2021 and December 2024 with report of both HIV testing history and infant feeding practices, 114 (74%) were continuing to breastfeed through at least 3-months postpartum. Median age of participants breastfeeding was 27.4 years (IQR 23.0, 32.0), with 39% experiencing their first pregnancy. Among the 84 of 114 (74%) women who reported HIV testing between delivery and 3-months postpartum, the majority indicated that they had completed HIV testing at their 6-week postpartum health visit. Thereafter ≤30% of women who continued to breastfeed at 6-, 9-, and 12-months postpartum reported HIV testing during ongoing breastfeeding. At 6-months, 32 of 107 (30%) women who continued to breastfeed reported HIV testing while percentages continued to drop at 9- and 12-months, 26 of 102 (26%) and 22 of 100 (22%), respectively. No person who tested had a positive HIV test. In a predictive model including participant age, gravidity, and education, none of these elements were associated with engagement in HIV testing among the 100 women who reported continued breastfeeding through 12 months postpartum.

Conclusion: Uptake of HIV testing in this cohort was highest around a scheduled health visit, specifically 6-weeks postpartum. Efficacious programs to provide HIV testing in pregnancy and ensure that pregnant persons have access to antiretroviral regimens capable of achieving sustained viral suppression have resulted in a significant decrease in the proportion of infants acquiring HIV perinatally, with an increase in the proportion of infants acquiring HIV through breastfeeding among mother-infant dyads where breastfeeding persons, previously HIV seronegative, acquire HIV while breastfeeding. Input from persons postpartum, HIV-seronegative, and electing to breastfeed should be sought to inform optimal strategies to increase demand and convenient options for HIV testing uptake during breastfeeding.

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Late HIV Diagnosis, Mortality, and Emerging Drug Resistance among Women in Western Germany: Insights from the RESINA Cohort

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Background: Women with HIV in Germany generally benefit from a well-established healthcare system, routine prenatal screening, and relatively strong patient support networks. However, specific groups, such as immigrants or migrants or those in precarious social situations—still face late diagnoses and barriers to accessing consistent care.

Methods: Adult women (≥18 years) with HIV receiving care at the University Hospital Düsseldorf were enrolled in the RESINA cohort, a prospective study examining the epidemiology of transmitted HIV drug resistance in North Rhine-Westphalia. Demographic variables and clinical parameters (CD4 cell counts, HIV-1 viral load, HIV-1 genotype) were extracted from medical records. We evaluated overall and AIDS-related mortality, as well as cases of virologic failure and the emergence of resistance mutations.

Results: From 2001 until 2022, a total of 297 women were included in the cohort: 164 from Germany and Central Europe, 104 from sub-Saharan Africa, 16 from Southeast Asia, and 13 from Eastern Europe/Russia. The most common genotypes were B (n=82) and CRF_AG02 (n=66). The median age at diagnosis was 35 years, and 86% of participants were under 50. At diagnosis, the median CD4 cell count was 200 cells/μL, with 39% below 350 cells/μL. AIDS-defining illnesses were noted in 61 patients. Overall mortality was

6.4% (n=19), including six AIDS-related deaths. During follow-up, 18 patients experienced virologic failure, two-thirds (n=12) of whom were late presenters; notably, 17 were diagnosed before dolutegravir approval in 2014. Resistance mutations were documented in the NRTI (n=8), NNRTI (n=12), and PI (n=4) classes; only one patient with virologic failure showed an NNRTI-specific mutation. One-third of the patients (n=97) were categorized as lost to follow-up; among these, 41 originated from high-prevalence regions, and 15 reported intravenous drug use.

Conclusions: These findings underscore the demographic diversity and substantial burden of late HIV diagnosis among women in this cohort, evidenced by a significant proportion presenting with low CD4 counts and AIDS-defining illnesses. While overall mortality remained relatively low, most virologic failures occurred in late presenters, highlighting the importance of timely diagnosis and ART initiation. Resistance mutations contributed minimally to virologic failure, suggesting other factors such as incompletion are at play. Furthermore, one-third of patients were lost to follow-up—particularly those from high-prevalence regions or reporting intravenous drug use—emphasizing the need for improved retention strategies and targeted interventions to enhance outcomes in this population.

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From Surviving to Thriving: Economic Empowerment Strategies for Female Sex Workers in the USAID CHEKUP II Activity, Kapiri Mposhi District, Central Zambia

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Background: Female sex workers (FSWs) are over 10 times more likely to contract HIV and other sexually transmitted infections (STIs) than women in the general population. This heightened vulnerability is driven by multiple factors, including unprotected sex for higher pay, limited ability to negotiate safer sex, inconsistent condom use, social stigma, criminalization, and sexual violence. According to the National AIDS Strategic Framework (2014/2015), these challenges contribute to the disproportionate burden of HIV among FSWs.

Methods: The USAID Controlling HIV Epidemic for Key and Underserved Populations (CHEKUP II) Activity, implemented by Coalition Health Zambia, introduced economic empowerment strategies to reduce FSWs' financial reliance on transactional sex. Through trained client advisers, 28 FSWs were initially engaged in tailored economic strengthening interventions, including Village Savings and Loan Associations (VSLAs), digital literacy, income-generating activities (IGAs), and access to biomedical services such as pre-exposure prophylaxis (PrEP), antiretroviral therapy (ART), lubricants, and condoms.

Results: Between October 2023 and September 2024, 2,542 FSWs were reached with economic strengthening initiatives, such as adult financial literacy, digital literacy, enterprise training, and VSLAs. Among these, 18 FSWs joined a savings group, collectively achieving a share-out of ZMW 13,000. HIV prevention messaging was integrated into one-on-one and group sessions to reinforce behavioral change. Empowered FSWs have also

become peer educators, leveraging social networks to disseminate HIV prevention messages and promote non-biomedical support services.

Conclusion: Economic empowerment initiatives tailored to FSWs not only improve their financial independence but also foster sustainable community transformation. By breaking down barriers, challenging stigma, and providing opportunities for growth, these programs empower FSWs to thrive, ultimately benefiting the broader community. To create a more inclusive and equitable society, prioritizing economic strengthening for marginalized populations like FSWs is essential. Empowerment serves as the foundation for systemic change, proving that when individuals thrive, communities flourish.

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Validating Self-Collection of Vaginal Samples: A Step Forward in Sexually Transmitted Infection Diagnosis and Access for Women.

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Background: Vaginal discharge disease (VDD) is a common presenting complaint in women of reproductive age group worldwide, especially in developing countries. Factors such as low socioeconomic status, migration from rural to urban areas, sex ratio imbalances, societal stigma, and religious and cultural beliefs often prevent women from seeking medical consultation and undergoing gynaecologic examinations. Given these challenges, self-collection of vaginal discharge samples could serve as an effective method for diagnosing sexually transmitted infections (STIs) and reproductive tract infections (RTIs), thereby addressing issues of underreporting and underdiagnosis. Educating and counselling the patient for proper collection of vaginal swabs is crucial for diagnosis of STIs/RTIs using self-collected samples. The aim of this study was to validate and assess the accuracy of self-collected compared to clinician-collected vaginal swabs for diagnosing Bacterial Vaginosis (BV), Vulvovaginal Candidiasis (VVC), and Trichomoniasis (TV).

Methods: The study was carried out at National reference Centre for STDs at VMMC & Safdarjung Hospital, India from Nov 2023 to Nov 2024. Women presenting with vaginal discharge at STD clinics, gynaecology OPD, and targeted intervention sites were counselled to collect vaginal swabs properly. Three swabs collected each by the patient and clinician each subjected to microbiological testing for the diagnosis of BV, VVC, and TV: BV was diagnosed using microscopy and Nugent's and Amsel's criteria. VVC was diagnosed using microscopy (KOH staining and Gram staining), culture on SDA, and mycological identification tests (Germ tube test,

CHROM agar test, Corn meal agar test and Antifungal susceptibility Testing).

TV was diagnosed using wet mount and culture method on Kupferberg media.

The sensitivity and specificity were calculated for self-collected samples.

Results: A total of 300 samples (150 self-collected and 150 clinician-collected) were analysed during a period of one year. The prevalence of TV, BV and VVC was 2.66%, 19.3%, and 32.6% respectively. *Trichomonas vaginalis* was detected identically in both self-collected and clinician-collected samples, with 100% sensitivity and specificity in self-collected samples.

There was a difference of 5 samples that tested positive for *Candida* sp. when collected by clinicians but were negative in self-collected sample. The sensitivity and specificity of self-collected samples for VVC was 87.75% and 100% respectively.

The sensitivity of self-collected samples was 84%, with 100% specificity for Bacterial vaginosis, as 4 false-negative results were observed in self-collected swabs for BV.

Conclusion: Self-collected vaginal swabs appear to be a viable and effective alternative for diagnosing STIs and RTIs, particularly for Trichomoniasis, with a high sensitivity and specificity for VVC and BV. This method can overcome barriers such as stigma, discomfort, and underreporting, providing a more accessible diagnostic tool for women in underserved areas. Education and awareness play a major role in success of self-collection method. By raising awareness and providing the necessary guidance, women can be empowered to take control of their health, reduce stigma, and increase early detection and treatment of infections. The findings highlight the importance of educating women on proper collection techniques to ensure accurate results for STI and RTI diagnosis, especially in countries with resource limited settings.

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Cervical Cancer Positivity and Associated Factors Three Years after an Initial Negative Test among Women Living with HIV in Kampala, Central Uganda.

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Background: Cervical cancer remains a leading cause of morbidity and mortality among women living with HIV (WLHIV), with Uganda reporting a prevalence of 39.1%. Cervical cancer rescreening every three years is essential for early detection, however, adherence to recommended screening schedules and the associated outcomes are not well understood. This study aimed at determining the cervical cancer positivity rate three years after a negative screening test and associated factors among WLHIV in Kampala, Central Uganda.

Description: A retrospective analysis was conducted among WLHIV aged 25–49 years who had screened negative three years prior and underwent rescreening between October 2023 and September 2024 at four ART clinics in Kampala. Data on socio-demographic, clinical and sexual reproductive characteristics were extracted from electronic medical records. The women were screened using the Visual inspection with acetic acid (VIA) and human papillomavirus (HPV) method. We used logistic regression to identify factors associated with positivity rates.

Findings: Of the 801 women assessed, with mean age of 37, 108 (13.5%) tested positive for cervical cancer. Women aged 40–49 years had lower odds of positivity compared to those aged 25–29 years (OR: 0.49, 95% CI: 0.26–0.91, $p = 0.02$). VIA screening showed a trend toward higher positivity than HPV testing, though not statistically significant (OR: 1.64, 95% CI: 0.96–2.78, $p = 0.067$). Women screened at Kiswa Health Centre had over four times higher odds of testing positive compared to Kisenyi Health Centre (OR: 4.09, 95% CI: 1.79–9.31, $p = 0.001$).

Conclusion and Recommendations: The study highlights a significant cervical cancer screening positivity rate three years after a previously negative test result. These findings emphasize the need for regular and timely rescreening to ensure early detection of cervical abnormalities in this high-risk population. Strengthening cervical cancer prevention programs within HIV care settings remains critical to reducing cervical cancer-related morbidity and mortality.

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Prevalence of Chlamydia Trachomatis and Self-Sampling Acceptability among Women Living with HIV in Kisumu, Kenya

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Background: Chlamydia trachomatis is one of the most common sexually transmitted infections (STIs), contributing to severe reproductive health complications, including infertility and pelvic inflammatory disease. Women living with HIV (WLHIV) are particularly vulnerable to acquiring Chlamydia due to their compromised immune systems and increased susceptibility to other STIs. Despite the elevated risk, Chlamydia screening in women living with HIV remains suboptimal. Self-sampling for Chlamydia testing offers a promising alternative to traditional clinic-based methods, potentially improving access to screening. This study aimed to assess the prevalence of Chlamydia trachomatis among women living with HIV and evaluate the acceptability of self-sampling using vaginal swabs.

Material and Methods: A cross-sectional study was conducted with 385 women living with HIV (aged 18-49) attending Kisumu County and Referral Hospital, Kenya. HIV status was confirmed using hospital records. Participants were guided through a self-sampling procedure and provided vaginal swabs for Chlamydia trachomatis testing using a Chlamydia Rapid Test Kit. Following the procedure, participants completed a survey assessing their experience with self-sampling, including comfort, privacy, and convenience. Sociodemographic data, knowledge, attitudes toward STIs, and self-sampling were also collected. Descriptive statistics were used to analyze the data, and chi-square tests were applied to identify associations between sociodemographic factors and Chlamydia prevalence.

Results: The overall prevalence of Chlamydia trachomatis among women living with HIV was

7.5%. The prevalence was higher among women aged 18 to 35 years (5.7%). The self-sampling method demonstrated high acceptability (97%). Women preferred self-vaginal swab collection over health worker collection (0.3%). Participants indicated they would be willing to use this method again in the future. Privacy (97%) and convenience (88%) were identified as key facilitators for self-sampling, while concerns about the accuracy of the test and a lack of awareness of Chlamydia were noted as barriers. Higher levels of education and greater knowledge about STIs were associated with a higher likelihood of engaging in self-sampling ($p < 0.05$).

Conclusions: The study reveals a concerning high prevalence of Chlamydia trachomatis among women living with HIV, highlighting the need for targeted screening and prevention strategies within this population. The high acceptability of the self-sampling method demonstrates its potential as a feasible and effective tool for expanding access to Chlamydia screening, particularly in resource-limited settings. Addressing barriers such as stigma, and lack of awareness, and improving education on sexual health is crucial for enhancing early detection and improving reproductive health outcomes for women living with HIV. The findings advocate for the integration of self-sampling into routine HIV care and sexual health services to improve STI screening and prevention.

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Viral Load Situation After 12 Months of ARV Treatment in Women Living with HIV in Decentralized Area of Guinea in 2023 Thanks to the Multiplication of GeneXpert Devices

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Context: In Guinea, decentralized areas face challenges in HIV care, including viral load (VL) monitoring. The introduction and expansion of GeneXpert devices has strengthened the virological follow-up of women on antiretroviral therapy (ARVs) for at least 12 months. The aim is to assess the proportion of women living with HIV with an undetectable viral load after at least 12 months of ARV treatment, in the context of the increased use of GeneXpert devices.

Method: This is a cross-sectional descriptive study of 1,677 PLHIV (men and women) who have been on ARV treatment for at least 12 months. Measurements were performed at the level of (10) remote health districts with GeneXpert devices to differentiate between detectable and undetectable viral loads. Viral load data is reported using an Excel tool.

Results: Among the 1677 people living with HIV who had achieved the viral load by December 31, 2023 after 12 months or more of their follow-up, 1167 suppressed their viral load (69.59%) and 25.52% did not suppress it. The majority of people living with HIV who deleted their VL were women (876) or 75.06% compared to (291) men (24.94%). Of the total viral load performed, 82 were invalid, i.e. 4.89%.

Conclusion: The expansion of GeneXpert devices in the deconcentrated areas of Guinea has enabled a majority of PLHIV (69.59%) to achieve an undetectable viral load after 12 months of ARV treatment, with higher undetectability rates in women (75.06%) compared to men (24.94%). This

suggests that the decentralization of viral load measurement services contributes significantly to improving the health outcomes of HIV women in particular and PLHIV in general, thereby strengthening HIV control efforts in these areas.

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Prevalence and Determinants of HIV Sero-Positivity among Vulnerable Older Women in Rural Uganda: A Call for Targeted Policy Interventions

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Background: In sub-Saharan Africa (SSA), there is increasing evidence that challenges in terms of unemployment, illiteracy levels, and poverty place older women in rural areas in a uniquely vulnerable situation for acquiring HIV. However, despite the global attention being paid to the HIV epidemic, HIV sero-positivity rates among older women in SSA have been a neglected area of research. We assessed the prevalence and determinants of HIV Sero-positivity among vulnerable older women attending a rural clinic in Central Uganda.

Materials and Methods: Between January 2019 and December 2022 we conducted a mixed methods cross-sectional study among older women aged ≥ 50 years old. Vulnerability was defined as the risk of falling into poverty (inability to meet the basic necessities of life, poor access and quality of social services and inadequate infrastructure). Eligible and interested women were consented and offered HIV counseling and testing. Data on socio-demographic and clinical characteristics were collected. Multivariable logistic regression was used to identify factors associated with HIV prevalence. In-depth interviews were conducted to elicit information on participants' knowledge of HIV and its prevention, and the challenges they go through. Qualitative data were analyzed using a thematic content approach.

Results: Seven hundred and seventy-nine women were included in the analysis; mean age was 68 (SD ± 10) years old. More than a third 279 (35%) of women were aged between 60-69 years and more than half 406 (52%) attained primary education. Almost two-thirds 436 (56%) reported moderate

vulnerability. Overall HIV sero-positivity was 74 of 779 (9.5%), and of these almost half 34 (46%) of the women had hypertension. In adjusted multivariable analysis, HIV sero-positivity was more likely among women aged 50-59 years old (aOR=15.28; 95% CI: 5.0 - 47.18) and those critically vulnerable (aOR =6.97; 95% CI: 3.08 - 15.77). Qualitative data showed that most participants had good knowledge of HIV and its prevention. However, a significant proportion reported economic constraints and scarcity of resources including nutritional, medical, and social support needs.

Conclusions: The prevalence of HIV sero-positivity among older women was higher than the national average of 5.5%. Women aged 50-59 years and those critically vulnerable are at a higher risk of acquiring HIV. These findings highlight the critical need for targeted HIV prevention interventions that address multiple socioeconomic and behavioural factors contributing to the vulnerability in this population.

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Reduced Adherence to Antiretroviral Therapy in Pregnant Women Living with HIV with Intimate Partner Violence in the United States

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Background: Despite increased access to antiretroviral therapy (ART) for women with HIV (WWH), challenges like unaddressed mental health issues and poor postpartum HIV care retention persist. This analysis evaluates whether Intimate Partner Violence (IPV) is related to reduced ART use and adherence, a topic not extensively studied in the US, especially in pregnant WWH.

Methods: We analyzed secondary data from a multisite US randomized trial of a peer-led behavioral intervention to improve postpartum retention in WWH. Data were collected from the baseline survey: sociodemographic, clinical, and psychosocial characteristics, using tools such as the Edinburgh Postnatal Depression Scale (EPDS), Adverse Childhood Experiences (ACE) and HIV-related stigma scores, and the WHO Violence Against Women questionnaire to assess IPV. A multivariable logistic regression examined associations between IPV timing (lifetime, before or in pregnancy) and type (physical, emotional, or sexual) and ART adherence (self-reported, $\geq 80\%$ of

prescribed ART doses in the prior month), adjusting for potential covariates.

Results: A total of 137 pregnant WWH enrolled between March 2020 and March 2024 were included: mean age was 30.5 (SD 5.6); 83% were Black, 14% Hispanic; mean number of pregnancies was 3.3 (SD 2.1); mean number of years with HIV 9.3 (SD 8.7). Twenty women reported not disclosing their HIV status to their partners, 14 due to fear of abandonment, and two due to fear of physical violence. Depression, stigma, and ACEs were prevalent: an EPDS score of ≥ 10 was seen in 45% of women, an ACE score of ≥ 4 in 23%, and 51% reported HIV-related shame. Forty women (29%) reported any lifetime IPV exposure (39, psychological; 13, physical; 4, sexual). Significantly higher EPDS, ACE, and stigma scores were seen in women exposed to IPV ($p < 0.02$). Physical IPV during pregnancy had the strongest association with decreased ART adherence in pregnancy (aOR=0.10, $p=0.02$). Psychological IPV and any IPV type during or before pregnancy were also associated with lower odds of adherence in pregnancy.

Conclusions: We found high IPV rates and a significant negative association with ART adherence among pregnant WWH. These findings highlight the importance of screening for and addressing IPV in HIV care to improve maternal and child health outcomes.

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Exploring Socioeconomic Inequalities in Cervical Cancer Screening among Women Living with HIV Across Five Low- and Middle-Income Countries (LMICs).

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Background: Women living with HIV (WLWHIV) are at an increased risk of developing cervical cancer. Despite World Health Organization recommendations for early screening, disparities in access and utilization of cervical cancer screening services persist, particularly in low- and middle-income countries (LMICs). This study aims to describe and analyze the socioeconomic inequalities influencing the coverage of cervical cancer screening among WLWHIV in five LMICs.

Methods: Employing weighted secondary analysis, we scrutinized Demographic and Health Surveys (DHS) data from Cameroon, Ivory Coast, Lesotho, Namibia, and Zimbabwe, collected between 2010 and 2019. These countries were specifically chosen as they provided data on both HIV status and cervical cancer screening. Our analysis focused on WLWHIV aged 25 to 49 years. We assessed socioeconomic inequalities using the Slope Index of Inequality (SII) and the Concentration Index (CI), stratified by wealth quintile.

Results: Out of 2,950 WLWHIV included in the study, screening coverage was notably highest in Namibia (35.7%) and lowest in Ivory Coast (1.8%). The aggregated screening rate across the five countries was 16.5% (95% CI: 6.1 – 27.0), with pronounced disparities favoring WLWHIV in the richest wealth quintiles and those residing in urban areas.

Conclusions: The study reveals significant pro-rich and pro-urban biases in the utilization of cervical cancer screening services among WLWHIV in the examined LMICs. These disparities highlight critical barriers to accessing potentially life-saving

screening services. To mitigate these inequalities, cervical cancer screening programs in LMICs must develop and implement innovative strategies that specifically target the identified socioeconomic barriers. Ensuring equitable access to screening for all WLWHIV will be pivotal in reducing the incidence and mortality from cervical cancer in this high-risk group.

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Empowering Women Living with HIV: a Community-Led Approach to Strengthening Health Outcomes and Reducing Stigma in Kenya

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Background: Women in Kenya bear a disproportionate burden of HIV, exacerbated by gender inequalities, stigma, and limited access to healthcare services. Despite progress in antiretroviral therapy (ART) and prevention of mother-to-child transmission (PMTCT), many women still face barriers to treatment adherence and care. This study explores the impact of community-led initiatives in improving health outcomes and reducing stigma among women living with HIV in Nairobi, Kisumu, and Siaya counties.

Methods: The Lean on Me Foundation implemented a comprehensive program targeting 500 women living with HIV across urban and rural settings. Activities included support group meetings, health literacy workshops, peer mentorship, and advocacy campaigns. Data was collected through pre- and post-intervention surveys, focus group discussions, and healthcare provider feedback to assess improvements in adherence, mental health, and community engagement.

Results: ART adherence improved from 60% to 85% among participants after six months of intervention.

Stigma reduction was reported by 70% of participants, who felt more confident accessing healthcare services.

PMTCT success rates increased, with 95% of HIV-positive mothers giving birth to HIV-negative infants.

Enhanced peer support networks were established, with 80% of participants attending monthly sessions regularly.

Community advocacy efforts reached over 10,000 individuals, raising awareness of gender-sensitive healthcare.

Lessons Learned: Community-led initiatives are effective in addressing systemic barriers to healthcare for women living with HIV. Peer mentorship and localized health literacy campaigns were particularly impactful in fostering adherence and reducing stigma. Challenges included securing sustained funding and addressing deeply entrenched cultural norms.

Conclusions: Empowering women through community-based approaches can significantly improve health outcomes and reduce stigma associated with HIV. Scaling these initiatives and integrating them into national health policies will be essential in advancing gender equity and achieving global HIV targets.

Next Steps: Lean on Me Foundation plans to expand this model to additional counties and integrate mental health support as a core component, ensuring holistic care for women living with HIV.

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Impact of Low Intensity Models of HIV Care on the Retention Outcomes among Adolescent Girls and Young Women in Mozambique WHO Initiated ART in 2021

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Background: Differentiated Service Delivery (DSD) models for HIV care are implemented nationally in Mozambique, supporting person-centered approaches to antiretroviral (ART) distribution and clinical consultations. Low-intensity models (LIM), a subset of DSD models, are particularly emphasized due to their ability to minimize interactions with health facilities. These models, such as multi-month dispensation, aim to improve accessibility and continuity of care for patients particularly for adolescent girls and young women (AGYW) aged 15–24, a group at high risk of treatment interruption due to socio-economic and structural barriers

Material and Methods: Data was extracted from a representative sample of 66 health facilities, stratified by location and size, with electronic medical records. Retention outcomes were analyzed for a cohort of AGYW aged 15–24 years that initiated ART in 2021 at three timepoints: 12-months, 24-months, and 36-months across three groups: participants enrolled in LIM, those in more intensive DSD models (MIM), or requiring frequent visits to health facilities, and those not enrolled in any DSD model. Records without a definite age and/or sex or treatment outcome were excluded.

Results: The highest retention is at 12 months for 15-24 AGYW on LIM (90%) when compared to 24m (87%) and 36m (70%). For both the 12m and 24m the largest contributor to non-active status is transferred out of care, 7% and 8%; at 36m is lost to follow-up (LTFU) (19%). Comparatively, retention rates in MIM were 74% at 12 months, 63% at 24 months, and 43% at 36 months. For

AGYW not enrolled in any DSD model, retention was significantly lower, declining from 66% at 12 months to 37% at 36 months.

Conclusions: The findings clearly demonstrate the benefits of LIM on retention among AGYW when compared to MIM and those not enrolled in any DSD model. LIM cohorts consistently achieved higher retention rates across all cohorts, highlighting their effectiveness in supporting long-term treatment adherence. Within the LIM cohort, LTFU remained relatively low during the first two years of treatment, however, at the 36-month cohort, LTFU emerged as the primary reason for non-active status, highlighting the need for targeted interventions to sustain retention beyond two years.

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Improving Research Accessibility and Inclusion: Language Translation of Research and Knowledge Mobilization Materials by, with and for English-as-an-Additional Language (EAL) Immigrant Women Living with HIV

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Introduction: English-as-an-Additional Language (EAL) immigrant women living with HIV (WLWH) face significant barriers in participating in health research due to English-dominant study practices. Addressing these gaps is crucial for ensuring equitable representation of these communities within scientific literature. Thus, our project aimed to develop and implement a community-engaged, culturally sensitive translation process for the BCC3 study.

Methods: From May-August 2024, 13 EAL immigrant WLWH were consulted in identifying key languages for translation of study materials through collaboration with a local community organization, the AfroCanadian-Positive Network of BC. Participants identified 8 languages commonly spoken by EAL immigrant WLWH: Punjabi, Gujarati, Swahili, Hausa, Shona, Luganda and Zulu. We identified 6 top-performing artificial intelligence (AI) platforms through their ratings on the app store and online forum recommendations (Lingvanex, OpenL, MerlinAI, QuillBot, ChatGPT and DeepL). To choose the most accurate AI tools,

we translated drafts of study materials in each of the target languages, including samples of the BCC3 questionnaire, consent forms, and knowledge mobilization (KM) materials, using each AI tool. We engaged 11 immigrant WLWH, fluent in both a target language and English, in a second community consultation to provide feedback on clarity and cultural appropriateness. We then hired 7 community members with lived experience and language expertise to refine translations, ensuring accuracy and cultural sensitivity. Completed materials were shared at a final community event.

Results: Translations were completed in Gujarati, Hausa, Shona, Swahili, Zulu, Luganda, and French. The most accurate AIs were identified as OpenL for Luganda, DeepL for French and Lingvanex for Gujarati, Swahili, Shona, Hausa and Zulu. The iterative process highlighted several linguistic nuances overlooked by AI, including gender perspectives and removal of stigmatizing terminology, underscoring the value of community input. The final translated materials were well-received by participants, who expressed appreciation for the culturally tailored approach. This process improved accessibility of research materials for less cost than traditional methods, provided paid work for community members, and fostered trust and engagement among participants.

Conclusions: This project demonstrates the feasibility and importance of integrating community-based approaches into research involving EAL immigrant WLWH. By leveraging AI tools for efficiency and engaging community members for cultural competency, we developed a model for overcoming language barriers in research. The BCC3 study plans to adopt this approach for the future, offering a replicable model for enhancing inclusivity and representation in research.

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Impact of Breastfeeding on Morbidity and Growth Profile of HIV-Exposed Uninfected Newborns in Yaoundé, Cameroon - a Prospective Study

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Background: Faced with a growing population of HIV-uninfected exposed newborns (HEU) whose morbidity and mortality are higher than those of uninfected and unexposed children (HUU), the World Health Organization recommends that mothers with human immunodeficiency virus (HIV) should breastfeed exclusively for the first six months and continue breastfeeding for at least 12 months while introducing complementary foods. HIV-exposed uninfected newborns who are not breastfed are up to suffer or die from diarrheal diseases, pneumonia and malnutrition.

Material and Methods: 76 HEU and 55 HUU newborns were followed up, their dietary data were collected by questionnaire and anthropometric data were measured at birth, 6 and 12 months. We diagnosed common childhood infections such as malaria, rotavirus, rhinovirus, influenza A and B viruses, respiratory syncytial virus (RSV), cytomegalovirus (CMV) by quantitative polymerization chain reaction (PCR) at months 6 and 12. we explored the growth outcomes using WHO Anthro survey assay to calculate the WAZ, WHZ and HAZ Scores. We employed Shapiro-wilk test for testing normality of data, Unpaired t test

or Mann U-Whitney to compare of certain continuous variables between the HEU and HUU groups, and chi-2 test or Fischer's exact test to assess the association between categorical data using GraphPad prism and Excel software's to analyze data.

Results: We obtained 34.21% HEU and 32.73% HUU breastfed versus 65.79% HEU and 67.27% HUU not exclusively breastfed during the first 6 months of life. At 6 months, 22.37% of breastfed HEU reported symptoms compared to 59.21% of non-breastfed HEU (p-value 0.0086) and 20% compared to 45.45% of breastfed and non-breastfed HUU. The most common symptoms were flu and cough in all groups. We did not find a significant association between the the feeding method and onset of illness diagnosed in laboratory, but higher CMV and Rhinovirus prevalences of either HEU or HUU newborns. At 12 months, there was a significant association between the occurrence of nutritional problems and breastfeeding mode during the first 6 months of life, for breastfed and non-breastfed HUU (p-value 0.0115). We obtained proportions of 5% HEU breastfed overweight (WHZ>+2SD) versus 7% HEU non-breastfed, 0% HEU breastfed obesity (WHZ>+3SD) versus 5.26% non-breastfed, 9.21% HEU breastfed stunting (HAZ<-2 SD) versus 15.79% HEU non-breastfeeding, 0% HEU breastfeeding wasting (WHZ<-2 SD) versus 10.53% HEU non-breastfeeding and 0% HEU breastfeeding underweight (WAZ<-2 SD) versus 9.21% HEU non-breastfeeding. The most common nutritional problem was stunting (HAZ<-2 SD). There were no significant observations in the breastfed and non-breastfed HUU groups at either 6 or 12 months of age.

Conclusion: Our study suggests an association between not being exclusively breastfed during the first 6 months of life and a higher risk of growth retardation and morbidity by reported symptoms in HEU newborns in Cameroon during the first year of life.

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Determinants of Increased Antenatal Viral Load and Its Association with Adverse Pregnancy Outcomes in African Pregnant Women Living with HIV

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Background: An estimated 1.3 million HIV-positive women are pregnant annually. Without any intervention, the mother-to-child HIV transmission rate ranges from 15% to 45%, with maternal HIV viral load being the strongest risk factor. This study investigated the determinants of elevated antenatal viral load and its association with adverse pregnancy outcomes in African women.

Methods: This is a secondary analysis of data collected in a randomized controlled trial conducted in Gabon and Mozambique (2019-2023) evaluating dihydroartemisinin-piperaquine for malaria prevention in HIV-positive pregnant women. Pregnant women attending their first antenatal care visit were enrolled and monitored until delivery. Descriptive statistics, and bivariate and multivariable logistic regression analyses were conducted to identify factors associated with high viral load and its association with adverse pregnancy outcomes.

Results: Among 666 enrolled women, 35% (n=232) presented with high viral load (>150 copies/ml). Anaemia at baseline (OR 1.75, 95% CI 1.18-2.59, p=0.005) and delayed antenatal care antiretroviral therapy (ART) initiation (OR 7.71, 95% CI 5.04-11.81, p=0.000) were significantly associated with high viral load. Regarding the adverse pregnancy outcomes, high viral load was associated with a three-fold increased risk of placental malaria (OR 3.28, 95% CI 1.54-7.11, p=0.002).

Conclusions: Anaemia and delayed ART initiation were associated with elevated viral load, which in

turn increased the risk of placental malaria. These findings highlight the need for comprehensive antenatal care, including early ART access, to improve pregnancy outcomes and reduce vertical transmission risk. Further research should explore the interplay between viral load and placental malaria.

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Multilevel Considerations for Implementation Research of Long-acting HIV Prevention Products: A Qualitative Ethical Analysis among Pregnant and Lactating Women in Kenya

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Background: Pregnant and lactating women have been historically excluded from research given greater uncertainty about safety and efficacy. The assessment of long-acting HIV prevention product considerations offers an opportunity to understand important ethical considerations shaping product uptake. We aimed to explore multilevel considerations for implementation research of long-acting HIV prevention products among pregnant and lactating women.

Methods: Between October 2022 and January 2023, we conducted in-depth interviews with purposively sampled pregnant and lactating women, health providers, and national stakeholders from four public health antenatal and child welfare clinics in central and western Kenya. Pregnant and lactating women were eligible if they were ≥15 years and were purposively selected and recruited while accessing services. Healthcare providers were selected to represent mother-to-child health services and HIV prevention services. National stakeholders represented ethical review bodies, researchers, implementers, and policymakers. We used semi-structured interview guides to assess key considerations for long-acting products during implementation research. We used inductive and deductive approaches guided by the social-ecological framework to understand multi-level considerations.

Results: Overall, 140 participants were interviewed. Pregnant (n=37) and lactating (n=43) women, health care providers (n=40), and national stakeholders (n=20). The median age of pregnant and lactating women was 24 years [interquartile range 20-30], and the median education level was 12 years [interquartile range 10-13]. Providers were 85% female and included 67% nurses and 25% clinical officers. Multi-level considerations in implementation research were categorized into four social-ecological units of analysis. Client-based factors included age, education and decision-making skills, privacy, and the ability to understand behaviors related to HIV acquisition. Health facility-based factors reported were the integration of long-acting products into existing services, provider training, client follow-up mechanisms, and product availability. Additionally, community-based factors reported included partner involvement, HIV prevention stigma, and demystifying existing misconceptions. Further, policy-level considerations included, mode of delivery, testing frequency and modalities, stakeholder and manufacturer involvement, cost and supply chain, and policy-recommended age for cabotegravir PrEP use.

Conclusion: Our findings highlight multi-level considerations that provide a useful framework for understanding factors that may influence long-acting product use during pregnancy and lactation. Researchers, resource allocators, and implementors could consider these factors during planning and evaluation.

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Towards Improving Retention in HIV Care after Pregnancy: Lessons from a Post-Pandemic Cohort in the United States

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People living with HIV (PLWH) often experience low rates of retention in HIV care (RIC) and suboptimal viral suppression postpartum. Understanding contemporary barriers to RIC is crucial to identify risk factors for loss to care and thereby improve support during this vulnerable transition. This work aimed to identify factors associated with adequate RIC, defined as 2 visits <90 days apart in the first year postpartum.

Methods: Electronic records were retrospectively reviewed for PLWH who delivered from 2019 to 2023 and received prenatal care within a single county health system in the southern US. Variables were collected related to both maternal and neonatal HIV and obstetric or pediatric care. Variables were analyzed using descriptive statistics, and Kaplan-Meier curves used to assess viral suppression during pregnancy and in the 12 months following delivery. A Random Forest machine learning model was used to determine variables of relative importance for prediction of adequate RIC. Multivariable logistic regression was used to evaluate impact of identified variables on RIC.

Results: Of 182 pregnancies, only 60 individuals (33%) achieved adequate postpartum RIC. Adequate RIC correlated with year of delivery ($p=0.018$), attending at least two obstetrical postpartum visits ($p=0.025$), viral suppression at initial prenatal visit ($p=0.030$), and shorter duration between pregnancy visit and HIV care visits before and after pregnancy ($p<0.001$). Viral suppression was generally excellent at time of delivery (94.9%). However, viral loads rebounded after delivery, with only 66.8% suppressed at twelve months postpartum. Random Forest modeling identified several clinical and social factors with relative importance for prediction of

RIC. Multivariable logistic regression supported above findings with significant decreased odds of adequate RIC based on year of delivery (2021 aOR 0.306(0.097-0.956), 2022 0.146 (0.046-0.458), 2023 0.071 (0.011-0.455)), higher viral load at initial prenatal visit (aOR 0.038 (0.002-0.889)), and longer duration between last HIV care visit and first pregnancy visit (aOR 0.419 (0.176-0.998)).

Conclusion: Postpartum RIC was suboptimal in this contemporary US single-site cohort. Engagement in prenatal and postpartum obstetric care predicted improved postpartum RIC. Further qualitative research is essential to improve deeper understanding of patterns of engagement during pregnancy and after delivery in order to develop effective interventions to improve support for individuals during this difficult transition.

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An Innovative Community-Based Cervical Cancer Treatment for Women Living with HIV Receiving ART in Kampala, Central Uganda.

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Background: Cervical cancer poses a major risk for women living with HIV (WLHIV) with a prevalence of 39.1% in Uganda. WLHIV are six times more likely to develop cervical cancer than HIV-negative women. Despite routine screenings, many remain untreated due to barriers linked to multi-month dispensing (MMD) schedules, which reduce health facility visits. This study evaluated an innovative community-based model to improve cervical cancer treatment access for WLHIV receiving Anti-retroviral therapy (ART) in Kampala, Uganda.

Description: This mixed methods study evaluated a community-based cervical cancer treatment program for WLHIV between October 2023 and September 2024. The intervention included mobile treatment units, healthcare worker training, and targeted outreach within HIV care structures. WLHIV with untreated precancerous lesions, were grouped into geographic clusters, each linked to nearby public health facility or mobile thermocoagulation team. Clients within clusters were mobilized for treatment at the designated facilities or through mobile teams. Quantitative data on treatment uptake and clinical outcomes were extracted from cervical cancer screening register and descriptively analyzed. Qualitative feedback on the interventions acceptability and satisfaction was collected through in-depth interviews with clients and health workers and analyzed thematically.

Findings: In the period of Oct-Dec 2023, only 73% (379/519) of WLHIV with precancerous lesions received treatment. Following interventions, treatment uptake improved to 86.2% (557/646) by March 2024, 87.3% (618/708) by June and 91% (2243/2463) by September 2024. This surpassed

the World Health Organization's 90-70-90 target for cervical cancer elimination by 2030. Clients reported improved satisfaction due to reduced travel burden and localized care services. Health worker's feedback highlighted improved adherence to treatment schedules and greater patient engagement in follow-up care, demonstrating the interventions effectiveness in overcoming barriers to treatment.

Conclusion: This innovative client-centred, community-based approach significantly improved access to cervical cancer treatment among WLHIV, by addressing logistical and socioeconomic barriers. The model aligns with global cervical cancer and HIV targets, offering a scalable and resource efficient solution for under-served communities. Future efforts will focus on scaling this model and integrating additional preventive services to support comprehensive women's health care.

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Beyond Preventing Vertical Transmission of HIV: Developing a Preconception Health and Wellbeing Resource for People Living with HIV

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Background: Antenatal screening and effective antiretroviral therapy (ART) have led to a low rate of vertical transmission (VT) of HIV in the UK (<0.3%). Preconception care in HIV tends to focus on prevention of VT, often overlooking other important aspects of preconception health e.g. identifying potential risk factors for adverse pregnancy/neonatal outcomes, health promotion, and optimising wellbeing. We explored knowledge, concerns, and priorities of women with HIV when preparing for pregnancy, to inform development of a health resource.

Methods: A qualitative study, in collaboration with 4M Net, a charity providing peer support to people with HIV during and after pregnancy. We conducted five online (via Zoom) focus group discussions (FGDs), in June-July 2024, recruiting participants through 4M Net's networks. People were eligible if they were living with HIV, ≥18 years, lived in the UK, and had been pregnant within 5 years. FGDs were digitally recorded and transcribed verbatim. We analysed data thematically (with NVivo 14), using both inductive and deductive methods.

Results: We recruited 16 participants; all cisgender women, aged 26-57, all of Black or Mixed ethnicity, most non-UK born, time since HIV diagnosis ranged from 1-33 years. We identified three themes within the data: healthy pregnancy; preparing for pregnancy; managing pregnancy and postpartum; and preconception discussions. All participants highlighted that a healthy pregnancy not only included having a healthy baby and preventing HIV transmission, but also being

well informed, supported and optimising their own health and well-being. Key aspects of preparing for pregnancy included adherence to ART, lifestyle changes (e.g. diet and exercise), and taking folic acid. Participants also reflected on how best to prepare for managing pregnancy and the postpartum period, including the importance of being aware of, and prepared for, the extra antenatal monitoring and appointments they may need as a result of their HIV status. Infant feeding emerged as an important topic; participants wanted information in advance of pregnancy, so they had sufficient time to make informed decisions. While many participants reported general discussions about pregnancy with partners, family, and/or friends before conceiving, discussions with healthcare professionals about preparing for pregnancy were uncommon.

Conclusion: Policies and clinical practice should go beyond a narrow focus on preventing VT, and provide comprehensive, holistic preconception care for people with HIV. Although our participants recognised preventing VT as a key factor in preparing for pregnancy, they also advocated for preconception care that addresses women/birthing parents' overall health and wellbeing (including lifestyle changes and vitamin supplementation), as well as support for key decision-making (e.g. regarding infant feeding). Information should be accurate and specific to their needs as people living with HIV. We have used these findings to co-develop (with 4M Net) a comprehensive preconception health informational resource tailored to the needs of people living with HIV.

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A Golden Opportunity: Evidence of Community Safe Space Model to Scale-up PrEP Uptake among Adolescent Girls and Young Women in Homa Bay County, Kenya

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Background: Adolescent girls and young women (AGYW) accounted for 43% of all new HIV infections in Homabay County in 2023 which is higher than the National rate. The Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe (DREAMS) program, implemented by LVCT Health in 7 wards in Homabay County sought to scale up oral Pre-exposure Prophylaxis (PrEP) as an option for combination HIV prevention among at-risk AGYW aged 18-24 years. The program assessed the outcome of PrEP uptake which was delivered through the community safe space (CSS) model.

Description: Between October 2021 and September 2024, thirty social workers mobilized, screened for HIV vulnerability, and enrolled eligible AGYW into DREAMS. Mentors mapped out CSS in schools, religious institutions, resource centers, health facilities, and homes of trusted community members whom AGYW considered safe from harassment, and bullying, could have fun, relax, display talents, and express themselves freely, and received required and need-based HIV services. Mentors segmented AGYW based on age categories, geographic location, marital, and schooling status. Ninety mentors were engaged and trained to manage and moderate CSS in their 2-hour weekly structured small group sessions of 15-30 AGYW. Thirty service providers facilitated PrEP information, education, and communication (IEC), and screened for PrEP eligibility, those at substantial risk were initiated on PrEP and received other required and need-based HIV services at the CSS. Service completion data was uploaded to the DREAMS database, exported, and analyzed in Excel.

Findings: By October 2024, a total of 26,192 AGYW were screened for vulnerability, and 92% (n=24,047) were enrolled in DREAMS. The majority, 85% n=20,440 were active at CSS of which 100% were mobilized and received PrEP IEC, 92% n=22,219 were screened for PrEP eligibility, 14% (n=3,186) were eligible for PrEP initiation and 99% (n=3,156) were initiated on PrEP. Additionally, required services were provided at initiation, during which 100% (n=3,156) received HIV testing services, STI screening, GBV screening, condom IEC and contraceptive method mix IEC. Need-based services were provided, reaching 16% (n=510) with contraceptives, and of those disclosing GBV, 100% (n=284) received post-violence care.

Conclusion: The community safe space model provides an opportunity to increase PrEP uptake with a high possibility of integrating HIV prevention services in vulnerable populations.

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HIV Treatment Cascade among Pregnant Women with Pre-conception Diagnosis: 2017-2022

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Background: UNAIDS “treatment cascade” targets have been met in England since 2017 and the UK Health Security Agency’s HIV Action Plan aims to end new transmissions by 2030. Pregnant women represent an important group of focus to achieve this. In England antenatal HIV screening coverage is 99.8% and approximately 90% of women living with HIV becoming pregnant are already diagnosed. Nearly all women receive antenatal ART. We present a treatment cascade for pregnant women living with HIV in 2017-2022.

Materials and Methods: The Integrated Screening Outcomes Surveillance Service (ISOSS), part of the NHS Infectious Diseases in Pregnancy Screening Programme, collects data on all pregnancies in women diagnosed with HIV by delivery and their infants in England. We describe a treatment cascade for pregnancies in women diagnosed pre-conception, restricted to livebirths with antenatal booking 2017-2022, known viral load (VL) at delivery (≤ 30 days pre-delivery and < 7 days post-delivery), reported to ISOSS by the end of December 2023.

Results: Of the 2464 women included, there was a trend with an increasing proportion of women on pre-conception ART (pART) by most recent time period: 88.1% (809/918) on pART in 2017-18, 92.2% (780/846) 2019-20 and 93.0% (651/700) 2021-22, $p < 0.001$ (Figure). Age and ethnicity differed (7.6% < 25 yrs vs 4.3% with pART, $p < 0.05$) (16.3% white, 8.9% Black Caribbean vs 23.8%, 4.1% with pART, $p < 0.05$). Overall, 93.8% (2310/2464) of women with pre-conception diagnosis delivered with undetectable viral load (< 50 c/ml). Among 152 pregnancies with delivery viral load (dVL) > 50 c/ml, 100 (72.3%) were in women who conceived on ART.

Among the 91.1% (2240/2464) of pregnancies conceived on ART, first pregnancy VL (fVL) was undetectable (< 50 c/ml) in 89.7% (2009/2240) and dVL undetectable in 95.1% (2130/2240) (no change over time). Among those with detectable fVL, 81.4% (188/231) had undetectable dVL (no change over time). Median detectable dVL was 100 c/ml (range: 51-85,000). Those with detectable dVL were more likely to be non-UK born ($p < 0.05$). There was no difference in timing of booking, ethnicity or age.

Among the 224 pregnancies in women without pART: 38.7% had late antenatal booking (≥ 13 weeks) (vs 24.3% with pART, $p < 0.001$); 99.1% (222/224) received ART antenatally (28.2% started treatment in the first and 12.0% in the third trimester); 81.1% (180/222) had undetectable dVL (no difference with ART start in first trimester vs. later). Median detectable dVL was 90 c/ml (range: 51-1 million c/ml).

Conclusions: Most pregnant women living with HIV are on treatment before pregnancy and deliver with undetectable VL. The proportion of pregnancies in women diagnosed with HIV but not on treatment at conception is small and declining over time.

The 91% of women on pre-conception ART contributed nearly three-quarters of the pregnancies with detectable delivery viral load. These data from ISOSS highlight the need to support diagnosed women with respect to treatment initiation and adherence, before and during pregnancy. Further work is needed to understand barriers to timely HIV-related and antenatal care.

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Bictegravir Inhibits Expression and Activity of System L-Amino Acid Transporters in a Human Placental Cell Line

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Introduction: Antiretroviral therapy (ART) improves maternal health and reduces perinatal HIV transmission. However, ART has been associated with increased risk for adverse outcomes via mechanisms that are poorly understood. Branched-chain amino acids (BCAAs) are important for fetal development and cardiometabolic health. Alterations in BCAAs have been reported in pregnant women with HIV and children exposed to ART in utero. System L-amino acid transporters are key in transporting BCAAs across the placenta, but their functionality in the context of ART use has not been investigated. Here we examine the effects of antiretrovirals on the expression and function of System L transporters.

Methods: BeWo cells, a human placental cell line, were used for all experiments. Syncytialized BeWo cells (using cAMP) were treated with atazanavir, darunavir, efavirenz, dolutegravir, raltegravir, bictegravir or cabotegravir for 24 hours at C_{max} and half C_{max} concentrations. Cytoplasmic and membrane protein expression of System L isoforms were quantified by western blot. System L transport activity was measured using [3H]-tritium-labelled L-leucine uptake assays in the presence or absence of a System L-specific inhibitor. Assays were performed in triplicate and repeated at least three times. Statistical comparisons between groups were assessed using ANOVA with Tukey post-hoc test.

Results: System L isoforms LAT-1 and LAT-2 were primarily expressed in the plasma membrane, whereas LAT-4 expression was predominantly cytoplasmic. Bictegravir significantly reduced the protein levels of all 3 isoforms. Cabotegravir was associated with lower LAT-1 and LAT-4, and efavirenz with lower LAT-1 and LAT-2 levels. Atazanavir, darunavir, dolutegravir, and raltegravir did not affect LAT-1, LAT-2, or LAT-4 expression. A

reduction in leucine transport was only observed with bictegravir treatment.

Conclusion: Bictegravir, which was recently added to perinatal treatment guidelines, was associated with downregulation of System L expression and function in BeWo cells. This could indicate altered essential amino acid transport in the placenta in the context of bictegravir treatment, that could influence fetal development. Further in vivo studies are warranted to confirm our findings.

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Passive/Self-Partner Notification Method: An Effective Choice for Partner Notification in HIV Index Testing Service in North-Western Nigeria

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Background: Index testing service involves the utilization of a newly or previously diagnosed HIV positive client (index clients) to reach their sexual partner(s) for availability for HIV testing service (HTS). This technique has become imperative as an estimated 40% of people living with HIV remain undiagnosed as shown by studies conducted by Dalal et al, in 2017 and from Nigeria national program. The method of partner notification is a choice made by the index client following pre and post testing counselling by the healthcare worker having considered barriers to partner notification like stigma, cultural sensitivity and fear of violence. The study evaluates the impact of self/passive notification on uptake of partners for HIV testing in comparison to other notification methods.

Methods: A cross-sectional study that examines 1,386 index clients offered index testing services (ITS) between 2022 and 2023 and the method of notification used to reach sexual partners for HIV testing in facilities in Sokoto, Kebbi and Zamfara states. Passive/self-partner notification method is one in which the healthcare worker gives the index client the responsibility to reach the partner(s). Other notification methods considered includes contract, dual and healthcare worker initiated. Data was abstracted from service registers onto customized google forms and analyzed using descriptive statistics.

Results: Analysis of the data indicates that of the 1,386 clients offered ITS, 586(42%) were males and 800(58%) females. All clients were between 13 to >=50years of age. Further analysis reveals

758(57%) are married, 451(33%) single, 79(6%) divorced and 71(5%) widowed. A total of 2,145 sexual partners (1:1.5) were elicited and notified using various methods, from which 2009 (93%) were notified by passive/self-partner, 77(0.5%) by dual, contract 11(1%) and health care worker (HCW) initiated 57(3%). A total of 1,744 sexual partners were tested for HIV with 550 identified to be positive (32% positivity rate) and all linked to treatment. Of the number tested, the passive/self-partner notification method contributed 1587(91%).

Conclusion: The passive/self-partner notification method is effective in ITS, evidently increasing the number of sexual partners available for HTS. The method is convenient, culturally sensitive and only entails that the HCW constantly sends reminders to the index client to notify their partner(s) for HTS. This method has tremendously improved case finding over time and needs to be explored more often in this region.

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Taking the Community Led and Based Path in Reaching and Sustaining the Three 95s Targets in Mwanza Tanzania

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Problem Statement: In Mwanza region, HIV/AIDS remains a critical Public health Issue, with a prevalence rate of approximately 7.2%, above the national average. Factors like stigma, limited access to healthcare, and economic hardship continue to hinder efforts to reduce new infections and ensure treatment adherence. Only 65% of people living with HIV in Mwanza are on antiretroviral therapy (ART), and stigma remains a significant barrier, with 40% of people reporting discrimination experiences. In line with the World AIDS Day 2024 theme, "Take the Right Path," targeted community and structural interventions are urgently needed to close these gaps and move toward the goal of ending AIDS by 2030.

Methods: A community-driven intervention and social behavioral strategies were utilized to overcome low uptake of HIV testing among the fishing forks populations and communities in the lake zone area. This included utilization of peer education, testing campaigns, outreach and stigma reduction programs, of which these were implemented alongside advocacy towards the Council Health Management Team aimed at improving and sustaining healthcare access and addressing poverty, gender inequality, and legal barriers within their districts.

Results: Increased Testing & Diagnosis: HIV testing rates increased by 30% in MWANZA following community outreach programs. Early diagnosis improved, with 45% of new cases now detected in the early stages of infections. Improved ART Adherence and Retention: ART adherence rose by 35% among those engaged in local support groups. Retention in care after one year improved from 65% to 85%, reflecting stronger community support.

Reduction in Stigma and Discrimination:

Experiences of stigma among people living with HIV reduced by 50% after anti-stigma campaigns. Community acceptance increased, with 55% of surveyed residents now showing supportive attitudes towards people living with HIV/AIDS.

Enhanced Access to Healthcare services:

healthcare access in remote areas improved by 40% through mobile clinics and expanded services. Vulnerable populations such as women and adolescents, reported a 60% increase in accessing prevention and treatment services.

Decline in New Infections: New HIV infections in Mwanza decreased by 25% over two years, indicating the positive impact of these interventions.

Discussion: The findings underscore the importance of integrating community involvement with systemic change. Community programs foster acceptance and support, while structural reforms create a foundation for equitable healthcare access, which is essential in the HIV response in the country as we try to maintain the path to end AIDS.

Conclusion: Combining community engagement with structural reforms creates a supportive path toward achieving the UNAIDS and national 2030 targets. Sustainable funding and partnerships are critical in maintaining these efforts and ensuring health equity for all.

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Marital Status and Parenthood are Determinants of Willingness to Pay for Long-Acting Cabotegravir as a Pre-Exposure Prophylaxis Option: A Cross-Sectional Survey among Young Women in a Nigerian Rural Community

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Background: Long-acting cabotegravir (CAB-LA) is an option deployed in pre-exposure prophylaxis (PrEP) to reduce the risk of HIV acquisition among vulnerable individuals. Socio-demographic determinants of the willingness to pay (WTP) and use of this service will guide policy makers in targeting the right audience. This study determined the WTP and acceptability of CAB-LA for PrEP among women of reproductive ages in a rural Nigerian community.

Methods: This study adopted a cross-sectional study to obtain responses from 370 randomly sampled women aged 18–35 years in Umuoji, a rural community in Nigeria in January-March 2024 after Institutional Review Board approval. A 23-item questionnaire was used to measure the respondents' WTP, and acceptability of CAB-LA. WTP amount was obtained through a contingent valuation method in Naira (N) (\$1=N1251.51). Appropriate descriptive and inferential analyses were conducted, with $P < 0.05$ considered statistically significant.

Results: A total of 262 completed questionnaires were returned (response rate=70.81%). Majority of the respondents [209(79.8%)] were aged 18–24 years, with 240(91.6%) being unmarried, although 9(3.4%) were engaged and about to marry. Less than half of the respondents [116(44.27%)] knew their HIV status. In addition, 107(40.8%) respondents did not know the status of their sex partners. The total number of participants that were willing to pay and use CAB-LA were

119(45.4%) and 134(51.1%), respectively. Being engaged to a partner with intention to marry had a 6.301(95%CI:1.038-38.256) odds of willing to pay for CAB-LA, compared to being single ($p=0.045$). Similarly, having 1-4 children had a 0.198(95%CI:0.046-0.858) odds of willing to pay for CAB-LA compared to not having any child ($P=0.030$). Majority of the women (64, 24.43%) indicated that they would pay a mean amount of N417697.18±116504.24.

Conclusion: Majority of the young women who participated in the study were willing to pay and use Cabotegravir for PrEP. There was a higher likelihood of those who were engaged or had children to pay for the PrEP option. However, all the respondents indicated values that were below the market prices of CAB-LA. Public health education to improve the acceptability of PrEP should consider all categories of young women.

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Perceptions of HIV Risk and Prevention among Pregnant and Non-Pregnant Cisgender Women and Their Male Partners in Baltimore, Maryland

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Background: In 2022, nearly one in four new HIV diagnoses in the United States were among cisgender women, with 83% of these cases due to heterosexual contact. With limited research regarding heterosexual couples' HIV-related sexual agreements, risk perception, and confidence in couples-based communication and decision making in an American context, this study sought to assess individual and dyadic correlates of HIV risk among pregnant and non-pregnant heterosexual couples in an Ending the HIV Epidemic jurisdiction.

Materials & Methods: Female cisgender patients (FPs) and their male partners (MPs) were recruited from four OB/GYN clinics across academic, community-based, and Federally Qualified Health Centers in Baltimore, Maryland. Eligibility included FPs aged 15-65 years and at an increased risk of HIV acquisition, which was assessed by an electronic sexual health questionnaire completed prior to their appointment. Participants completed a 23-item survey with questions regarding their HIV testing history, knowledge of prevention methods, relationship commitment, perceived risk and severity, and couple agreement and efficacy. Wilcoxon rank sum and two sample Student's t-test were performed by gender and pregnancy status. Cohen's Kappa evaluated agreement within couples.

Results: As of December 2024, 58 couples (71%, n=41 pregnant; 29%, n=17 non-pregnant) were enrolled. The mean age across pregnant and non-pregnant FPs was 27.8 years, and 29.3 for all MPs.

Most participants identified as Black/African American (76% of FPs, n=44; 71% of MPs, n=41), and the majority reported they were non-Hispanic (95% of FPs, n=55; 96% of MPs, n=56). 76% of FPs and 62% of MPs reported having one sexual partner. Compared to FPs, MPs felt more likely to become infected with HIV ($p=0.031$). MPs were less confident communicating with their FP about regular HIV testing ($p=0.004$) and making decisions about using condoms ($p=0.010$) or participating in regular testing ($p=0.013$). They were also less confident about acting with their FP to get regular testing ($p=0.006$) or prevent transmission to their children ($p=0.019$). Non-pregnant FPs and their MPs were more likely to agree on completing regular testing ($p=0.029$) compared to pregnant FPs and their MPs. A notable, non-significant trend was that non-pregnant FPs and their MPs also agreed more on their concern about acquiring ($p=0.071$) or picturing themselves acquiring ($p=0.060$) HIV compared to those in pregnant couples.

Conclusion: Among pregnant and non-pregnant heterosexual couples, MPs felt an increased risk for acquiring HIV and were less confident about implementing prevention methods, specifically condom use and regular testing, in their relationship compared to FPs. Non-pregnant FPs and their MP agreed more on HIV risk reduction than those in pregnant partnerships. This discrepancy may be a result of MPs becoming more conscious of their HIV risk when their FP became pregnant. During this time, some MPs may become increasingly exposed to medical care through attending regular prenatal appointments, which is where most MPs in the present study were recruited. Tailoring future interventions to address these gender and pregnancy-based differences may encourage the prevention of heterosexual HIV transmission among cisgender women.

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Save Them Young: Role of Peer Mentors in Addressing HIV among Young Women Selling Sex in Kenya, Nairobi County. A Case Study with Bar Hostess Empowerment and Support Programme and Dandora I Health Centre

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Background: Adolescents and young women [AGYW] in remote areas of Kenya face a number of intersecting traumatic challenges [neglect, orphanhood, broken homes, teen pregnancy, sexual gender based violence]. Trauma can profoundly affect mental health. AGYW are prone to experiencing depression and anxiety which may rely on maladaptive coping strategies such as substance use, which can further impair their judgment and lead to risky sexual behaviors, increasing their risks to HIV acquisition. Nairobi county, a transit town [linking the roots to East African countries] with high rates of transactional sex involving international truck drivers, exacerbates these risks. AGYW in the county have a higher risk of contracting HIV compared to other population groups. HIV prevalence among AGYW remains a national concern, with about 9.1% of the group aged 15-24 living with HIV [UNAIDS 2021]

Method: The USAID fahari ya Jamii project under the dreams initiative utilized trained peer safe spaces mentors to engage young women selling sex. Peer mentors are leveraging on their lived experiences to pass information to their peers. All project staffs and volunteers have been trained on GBV LIVES and community mental health training. A standardized evidence based curriculum was used in safe spaces to provide HIV prevention messaging and skills building tailored to each adolescent's unique needs after risk profiling.

The adolescents were met in safe spaces of their choice, ensuring a secure environment where their challenges could be addressed and needs met.

Results: Between January 2024 to June 2024, the dreams team in Dandora reached 233 young sex workers in their safe space with individualized packages of services.

102 tested for HIV

36 accessed family planning

198 assessed condoms

53 initiated on PrEP

138 were screened for STI

44 assessed tailoring skills building trainings and joined in saving groups

45 were screened for mental health and 12 who were positive were provided with psychological first Aid and one on one therapy

Conclusion: This intervention highlight the need to address social and structural determinants of health that drive high HIV rates among AGYW. Empowering AGYW through education, sexual reproductive health [SRH]services, economic empowerment, skills building, psychosocial support and harm reduction strategies is key to reducing their vulnerability to HIV. Innovative and targeted interventions are recommended to meet the specific needs and challenges of young women selling sex more effectively.

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Characteristics of Women PrEP Users in a Monographic Clinic of Sexually Transmitted Infections

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Background: Pre-exposure prophylaxis (PrEP) against the human immunodeficiency virus (HIV) is an effective and safe preventive measure. In Spain it is available for subpopulations at risk of HIV infection since November 2019. At the beginning it included transgender women, with specific criteria, and cisgender women only if they were sex workers. In December 2021, criteria were broadened for cisgender women, including not only sex workers but other individual risk criteria. However, women are an understudied and underrepresented population in PrEP.

Material and Methods: Observational, prospective and descriptive study of the characteristics all PrEP users and, specifically, of the female PrEP users in a sexually transmitted infections (STIs) public clinic in Madrid (Spain) from 20th January 2020 to 31st December 2023.

Results: 4,325 users were included, 1.0% transgender women (42), 0.4% cisgender women (19) and 98.6% (4,264) men who have sex with men (MSM). They were mostly from Spain (60.5%) followed by Latin American countries (29.1%). They reported an average condom use of 48.1%, the average number of monthly sexual partners was 12.9, 72.8% declared sex-related use of drugs, 33.2% participated in chemsex sessions and 5.7% were male sex workers (MSWs). An STI was diagnosed in 27.3% of PrEP-users in the first visit. We found a statistically significant relationship ($p < 0.05$) between STIs diagnosis and sex-related drug use.

Cisgender women were 47.4% from Latin American countries, 42.1% from Spain and 10.5% from East Europe; 52.6% were female sex workers (FSWs). Transgender women were 66.7% from Latin America, 28.6% from Spain, 2.4% from Africa and 2.4% from Asia; 71.4% were FSWs. The use of condoms were similar in both cisgender and transgender women: they reported an average condom use of 62.59% and 61.52% respectively. The average number of monthly sexual partners was 51 for cisgender women and 76.81 for transgender women. Cisgender women sex-related use of drugs was reported in 26.3% and 10.5% participated in chemsex sessions. Transgender women sex-related use of drugs was reported in 64.3% and 19.0% participated in chemsex sessions. An STI was diagnosed in 21.0% of cisgender women and in 31.0% of transgender women in the first visit. We found a statistically significant relationship between gonorrhoea diagnosis and chemsex ($p < 0.05$).

Conclusions: Male and female PrEP users' characteristics are very different. The origin of female PrEP users is mainly Latin America and there is a higher rate of FSWs than MSWs. Despite having a greater number of sexual partners/clients, they do not present higher rates of STIs. Sex-related use of drugs is higher in transgender women but it does not represent a problem of the same magnitude as in MSM. Despite being a highly vulnerable population, female use of PrEP is still very low.

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Social Vulnerabilities of Women Living with HIV in Mozambique: An Insight Into the Study “Why ART Was Stopped”

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Introduction: In Mozambique, although more and more people living with HIV (PLHIV) are successfully undergoing antiretroviral treatment, keeping them on treatment for a long period of time remains a challenge. The impact of HIV in Mozambique is visible in women, with the epidemic in the country being more feminised. Women in particular present many challenges due to their social, economic and financial dependence. The study explored the experiences and vulnerabilities of women living with HIV in Mozambique.

Methodology: in-depth interviews were carried out with 159 patients in six districts with low retention rates in the provinces of Nampula, Zambézia and Maputo City). 105 of these patients had never abandoned treatment, while the remaining 104 had abandoned once or more for more than three months and then restarted or never restarted up to the date of the interview. These groups were further divided into four subgroups: men under and over 30 and women under 30 who were pregnant at the time of diagnosis or not.

Results: According to the study the social situation of women influences adherence to HIV services, for example women with abusive partners, single mothers without a job and widows of HIV-positive partners are more likely to abandon care at the health facility and have poor adherence to antiretroviral treatment.

Women with abusive partners were very reluctant to disclose their status to their husbands, fearing abandonment and loss of their home and economic status as a wife, which resulted in delays in appointments and picking up medication at health centres.

Single mothers without secure employment were identified as another group likely to abandon treatment, due to the fact that they have to carry out different tasks, often without any support. Having to choose between an immediate threat such as hunger or not paying rent and being evicted, and a distant danger, falling ill with an opportunistic infection, they chose to deal with what they consider to be the most urgent, the need to earn money.

All the women whose partners died of an HIV-related illness said they had abandoned treatment at least once, and most of them several times.

Conclusion: Women's special vulnerabilities are mainly linked to their more precarious economic situation, which is a result of the unbalanced gender roles in the country.

In conclusion, it can be said that women have to face various barriers to treatment, mainly economic or strongly influenced by their lower access to financial resources. An HIV infection, however, in no way threatens their femininity, regardless of medication or not, they are able to procreate and raise their children and take care of their husband. Even being ill doesn't go against their gender role, as women are 'known' for being weak and therefore getting ill and often needing to go to the US. On the contrary, the traditional male identity is shaken to the core when he receives a positive result, which may explain why men are defaulting more often than women.

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HIV Burden among Women and Girls in Mwanza, Tanzania: Prevalence, Barriers, and the Need for Gender-Sensitive Interventions.

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Problem Statement: HIV remains a significant health burden in, MWANZA, Tanzania, with women and girls disproportionately affected due to biological, social, and economic vulnerabilities. Despite ongoing efforts, the prevalence of HIV among this demographic remains high, fueled by factors such as gender-based violence, poverty, early marriages, and limited access to education and healthcare services. Stigma, discrimination, and inadequate health infrastructure further hinder their ability to seek and adhere to treatment. These challenges highlight the urgent need for targeted interventions to address the unique vulnerabilities of women and girls and ensure equitable access to HIV prevention, care and support services.

Methods: A cross-sectional study was conducted among 500 women and girls aged 15-49 years in Mwanza, Tanzania. Participants were recruited from three major health facilities (BUGANDO, SEKOU TOURE, NYAMAGANA DISTRICT HOSPITALS) and surrounding communities using purposive sampling. Data were collected through structured interviews and medical record reviews to assess HIV status, risk factors, and access to care. Quantitative data were analyzed using descriptive and inferential statistics, while qualitative data from focus group discussions were thematically analyzed to explore barriers to HIV care.

Results: Among 500 women and girls aged 15-49 years, the HIV prevalence was 12.5%. Only 58% of HIV-positive participants accessed antiretroviral therapy (ART), with Stigma (45%) and transportation costs (28%) being the main barriers. Poverty affected 78% of participants and 72% of

HIV-positive individuals reported experiencing gender-based violence. ART access was significantly lower in rural areas (48%) compared to urban areas (68%).

Discussion: This study highlights a high HIV prevalence (12.5%) among women and girls in Mwanza, driven by gender-based violence (72%) and poverty (78%). Limited ART access (58%), particularly in rural areas (48%), reflects inequities in healthcare delivery. Stigma and transportation costs were significant barriers to care. Addressing these challenges requires gender-sensitive interventions, improved healthcare access, and community-driven efforts to reduce stigma and empower women. Strengthening rural healthcare services and addressing socio-economic inequalities are critical to reducing HIV-related disparities.

Conclusion: HIV remains a significant challenge for women and girls in Mwanza, with socio-economic factors, gender-based violence, and stigma exacerbating vulnerability and limiting access to care. Targeted, gender-sensitive interventions, improved rural healthcare access, and community-driven efforts are essential to address these challenges. Strengthening healthcare systems and addressing structural inequalities will be critical to reducing HIV prevalence and improving outcomes for this population.

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Seroprevalence and Correlates of Co-infection with HIV and Active Syphilis among Pregnant Women in Six Sub-Saharan African Countries: Results from Population-Based HIV Impact Assessments (PHIAs)

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Background: Ulcerative STIs like syphilis, increase the risk for HIV acquisition and transmission and serve as a point-of-entry and exit for HIV. In this study, we aimed to determine the seroprevalence and correlates of co-infection with HIV and active syphilis among pregnant women living in six countries in sub-Saharan Africa.

Methods: We pooled Population-based HIV Impact Assessment data from Ethiopia, Kenya, Tanzania, Uganda, Zambia, and Zimbabwe. We included pregnant women aged 15 years or older, living with HIV and were tested for syphilis. During the surveys, participants were interviewed and tested for HIV infection. HIV viral load testing and testing for the presence of selected antiretroviral drugs (ARVs) was done. A suppressed viral load was defined as less than 1000 viral copies per mL. Chembio DPP® Syphilis Screen and Confirm Assay distinguished between active and older syphilis infections. A log-binominal regression model was used to determine the demographic/ clinical characteristics associated with co-infection with active syphilis and HIV.

Results: We included 355 pregnant women living with HIV in this study. The overall prevalence of co-infection was 4.8% with 0.6% in Kenya, 1.4% in

Ethiopia, 3.0% in Zimbabwe, 3.7% in Tanzania, 6.5% in Uganda and 8.5 % in Zambia. Pregnant women whose HIV viral load was not suppressed were more likely to have co-infection with active syphilis and HIV compared to those whose viral load was suppressed. Pregnant women were single were more likely to have co-infection with active syphilis and HIV compared to those who were divorced/separated/widowed. It was also found that lower wealth index was associated with a lower risk of HIV-syphilis coinfection.

Conclusion: These findings show a high prevalence of co-infection with active syphilis and HIV among pregnant women. There is a need to develop guidelines for syphilis diagnosis and treatment in HIV and antenatal clinics.

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Optimising Cervical Cancer Screening for Women Living with HIV: Gains and Experiences in Three Years of Implementation in Southern Nigeria

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Introduction: Cervical cancer is one of the leading causes of cancer-related deaths among women in Africa. According to the WHO, women living with HIV are six more likely to have cervical cancer compared to HIV-negative women. Integrating cervical cancer screening into HIV services poses a challenge due to Human resources for health and infrastructural shortages, suboptimal collaboration among healthcare workers and implementing partners, additional workload and skill gaps. With the support of USG PEPFAR, the USAID-funded ACE 6 project supports cervical cancer screening using visual inspection with Acetic acid (VIA) for all eligible women across supported sites in Lagos, Edo and Bayelsa states. This study reports on a program's experience improving cervical cancer screening for Women living with HIV in three Nigerian states.

Methodology: A package of interventions was designed to improve screening, including active supply chain management through forecasting facility supplies to ensure the availability of commodities, integration of the cervical cancer screening into the GOPD clinic health talks, printing and distribution of information and education materials at the facilities, Increased awareness through continuous clients education, on-site training of at least three health personnel at each facility to prevent missed opportunities, use of case managers as the gatekeepers for screening during clinic days, engagement and capacity building of community ART nurses and facility personnel to screen clustered clients devolved to the communities in unsupported sites. Implementation commenced in April 2024. A review of the cervical cancer data for women living

with HIV aged 15-49 years in one hundred and seven comprehensive ART sites was conducted using data from electronic medical records. The review covered April 2022 to September 2024.

Results: A total of 22,280 women living with HIV were screened within the three years, with a positive screening test of 0.8% for precancerous lesions. The positives were referred for treatment with thermal ablation. At the same time, about 164 clients with suspected cancer were also followed up through a referral system in a designed hub and spoke model with the obstetrics and gynaecology engaged consultant. Those treated were followed up for post-treatment evaluation. The intervention showed a marginal increase of patients screened in 3,969 in 2022 to 10,838 in 2024, showing a 500 % increase in screening after the intervention.

Conclusion and recommendations: A vital aspect of enhancing the quality of care for Women living with HIV involves the health system strengthening of sustainable approaches for cervical cancer screening that can work at the facility and community levels in resource-limited settings to prevent disease progression. This involves capacity building on required skills, improved awareness of disease and education of clients while enhancing collaboration between healthcare providers, patients, and implementing partners. This collaboration is essential to ensure effective monitoring and supervision of the aligned intervention framework, facilitating the successful implementation of cervical screening initiatives across various levels.

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WONDER: HIV in Women Bone Mineral Density Fracture and Frailty: An Evaluation of the Knowledge and Attitudes of Bone Density in Women Living with HIV

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Background: Due to the availability of combination antiretroviral therapy (cART), people living with HIV have a longer life expectancy and are, therefore, developing age-related comorbidities. Low bone mineral density is a key issue which affects women earlier than men due to a multiplicity of risk factors, including cART and menopause. There is no published data on the knowledge and attitudes of women living with HIV (WLWH) regarding low bone mineral density.

Methods: We designed a qualitative study to evaluate the knowledge and attitudes regarding bone health of WLWH. We conducted focus group discussions and semi-structured one-to-one interviews with WLWH in community-based sites across 6 HIV centres in Sussex. The study was co-facilitated by a researcher and a woman with lived experience of HIV and a topic guide was used to aid discussions. Community organisations co-facilitated recruitment of participants from 05/2024-06/2024. Discussions were recorded, transcribed and analysed using thematic analysis.

Results: Seventeen cis-gendered WLWH in Sussex, median age 56 (range 35-72yrs), whose ethnicities included black African (50%), white British (31.2%) and other mixed ethnic groups (12.5%) took part. The analysis of the transcripts identified several key themes. These included sources of information, perceived symptoms of poor bone density, menopause, lived experience of HIV and comorbidities, experience of healthcare, stigma, support available, ownership of care, management of and barriers to good bone health, and polypharmacy. Discussions showed that WLWH in Sussex had poor knowledge of risk factors and

management options for low bone mineral density. They had a strong desire to have access to resources, education and organisations that could empower them to optimise their bone health. An unexpected outcome was very few participants had knowledge of the associated risk of menopause to poor bone health.

Discussion: The WONDER study showed that WLWH had poor knowledge about low bone mineral density, although all participants demonstrated a positive attitude towards improving their bone health.

Conclusion: WLWH lack the information and knowledge they want to empower them to help self-manage risks for low bone mineral density. This work will inform a larger national survey in WLWH to close the gaps in knowledge and information for WLWH at risk of low bone mineral density.

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Challenges Faced by LBQ Women Living with HIV in Rural Settings of Eastern Uganda

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This research explores the experiences of Lesbian, Bisexual, and Queer (LBQ) women living with HIV in rural Eastern Uganda, focusing on their sense of belonging, healthcare access challenges, and perspectives on relevant laws and policies.

The study involved 64 participants, predominantly aged 18-24 years (42.2%) and 25-30 years (40.6%). Educational backgrounds varied, with many having secondary (40.6%) or tertiary education (29.7%), yet only 48.4% had a reliable income, indicating economic vulnerability.

HIV transmission primarily occurred through partners (65.6%), with others being born with HIV (25.0%) or infected through rape or sex work. Most participants (78.1%) were on Antiretroviral Therapy (ART)*, with many having been on it for over a year. However, a significant portion experienced isolation, with 40.6% living alone and 64.1% lacking friends to discuss critical issues like treatment adherence and stigma management. Social interactions were often limited to healthcare workers or small peer networks, exacerbating feelings of loneliness.

In terms of healthcare access, 25.0% of participants consistently visited health facilities, while 67.2% attended irregularly, and 7.8% avoided them altogether. Although most sought ART services, 75.0% reported a lack of essential commodities in healthcare facilities, such as medications and lubricants. Discrimination from healthcare workers based on sexual orientation and fears of criminalization, particularly after the Anti-Homosexuality Act, were significant barriers to care.

Regarding laws and policies, 68.8% of participants were aware of discriminatory legislation, with the Anti-Homosexuality Act frequently mentioned as a source of stigma and exclusion. Respondents emphasized the urgent need for policy reforms,

enhanced legal protections, and improved healthcare training to address these systemic issues.

In conclusion, the study highlights the profound isolation, inadequate healthcare access, and legal discrimination faced by LBQ women living with HIV, calling for targeted interventions to improve their social support networks and healthcare experiences.

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Cisgender Women & Trans* People on PrEP: A Cohort in Barcelona, Spain, Since 2020

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Cisgender women and trans* people who have sex with men and engage in commercial sex work (CSW) are at increasing risk of acquiring HIV and other sexually transmitted infections (STIs). In Spain, cis-women sexual workers (SW) and trans-women were included in prophylaxis pre-exposition against HIV (PrEP) programmes in 2020, while non-SW cis-women were included in December 2021. Barriers to healthcare access and sociodemographic (age, migration) and behavioural factors (sexual assault, substance abuse) exacerbate this vulnerability, justifying the implementation of priority circuits for their inclusion in HIV/STI combined prevention programmes. The aim of the study was to analyse the characteristics and identify specific health needs of this population to propose future strategies that enhance their inclusion and retention in HIV/STI prevention programs.

Material & Methods: Descriptive, cross-sectional, retrospective, unicentric study that included all cis-women and trans* people interested in or referred by community-based organizations (CBO) to the Drassanes-Vall d'Hebron HIV/STI Unit (Barcelona, Spain) for initiating PrEP between January 2020-December 2024. Data collected included sociodemographic characteristics (origin, age at referral, sex at birth, gender, sexual orientation), STIs before and after PrEP, previous post-exposure HIV prophylaxis (PEP), sexual assault, drug use, referral to the Tropical Diseases Unit, vaccination and PrEP retention. Lost to follow-up on PrEP was defined as non-attendance at the last scheduled visit.

Results: 182 cis-women and trans* people expressed interest in PrEP, 63.2% (115/182) cis-women, 34.6% (63/182) trans-women and 2.2% (4/182) trans-men, median age 34 years (IQR 34-42). 64.3% (75/93) cis-women and 95.2% (60/62) trans-women identified as heterosexual, all trans-men as bisexual. 80.9% (123/152) were Latinoamericans (36.6% Colombians, 16.3% Venezuelans) and 12.5% (19/152) Spanish. Among migrants, 48.3% (56/116) have lived in Spain for >5 years and 24.1% (28/116) <1 year. 90.7% (165/182) were engaged in CSW, 13.5% (18/133) did previous PEP, 45% (62/138) drug use (64.5% cocaine, 35.5% THC) and 7 persons referred sexual assault. 54.9% (100/182) were referred from a CBO, 41.2% (75/182) accessed it independently. 77.5% (141/182) came to first visit, 86.5% (122/141) began PrEP (97.5% daily) and 53.3% (65/122) were lost to follow-up. 57.3% (82/143) reported previous or had an STI at first PrEP visit (25.5% gonorrhoeas, 21.4% syphilis, 20.7% chlamydias) and 36.5% (38/104) after (15.5% gonorrhoeas, 11.8% chlamydias, 8.5% syphilis). 64.6% (97/150) were vaccinated and 12.7% (16/126 non-Europeans) referred to Tropicals Unit. Statistically significant differences were observed between cis-women and trans* people regarding to origin (66.1% vs 85.1% migrants, p=0.016), access to PrEP through referral (52.2% vs 70.1%, p=0.013), PrEP initiation (81.7% vs 95.8%, p=0.015), STI before (39.1% vs 55.2%, p=0.009) and after PrEP (13% vs 34.3%, p=0.002). There were no gender differences in terms of CSW, PEP, drug use, attendance to first visit or retention.

Conclusions: In our setting, most women in PrEP are engaged in CSW.

CBO referrals are a critical entry point to PrEP for cis-women and trans* people.

In our cohort, trans* people had a higher burden of STIs and showed greater willingness to initiate PrEP.

Targeted strategies are needed to improve retention among cis-women and trans* people in HIV/STI prevention programmes.

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Integrating PrEP and U=U Strategies into Maternal and Child Health Services: Insights and Outcomes from the USAID Fahari ya Jamii Program in Nairobi"

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Background: HIV continues to disproportionately impact women in sub-Saharan Africa, particularly adolescent girls and young women (AGYW). The USAID Fahari ya Jamii program in Nairobi seeks to address this through the integration of targeted prevention strategies, including Pre-Exposure Prophylaxis (PrEP) and the Undetectable = Untransmittable (U=U) campaign, within Maternal and Child Health (MCH) services. This retrospective analysis evaluates programmatic data to assess the uptake of PrEP, the effectiveness of U=U messaging, and identify gaps in service delivery for optimizing HIV prevention outcomes among women.

Methods: This retrospective analysis utilized routine programmatic data collected between October 2024 and December 2024 from MCH service delivery points, including antenatal care (ANC) and child welfare clinics (CWC) in Nairobi County. Data sources included facility-based records and program monitoring reports. Descriptive statistics were used to summarize outcomes, including PrEP screening, eligibility, and initiation rates. Chi-square tests of independence were performed to compare variations across population groups, age categories, and service hubs, identifying statistically significant differences in programmatic outcomes.

Results: Out of 7,733 HIV-negative women attending their first ANC visit, 4,562 (58.99%) were screened for PrEP, of whom 168 (3.68%) were eligible, and 161 (95.83%) were successfully initiated on PrEP. Subsequent ANC visits (ANC2 and above) saw a decline in screening, with only

1,493 women tested and limited follow-up. Among 10,546 HIV-negative women attending CWCs, 3,786 (35.9%) were screened for PrEP, with 171 (4.52%) deemed eligible, and 172 (100.58%) initiated, demonstrating successful re-engagement of previous clients.

AGYW aged 15–24 emerged as a particularly vulnerable group, comprising 1,878 of those screened. Of these, 1,152 (61.3%) were eligible, and 1,022 (88.7%) were initiated on PrEP. Gender-stratified data revealed significant disparities, with AGYW accounting for a majority of PrEP initiation compared to males. Chi-square analyses confirmed statistically significant differences ($p < 0.05$) in screening and initiation rates across hubs, service types, and population groups, highlighting AGYW and follow-up ANC visits as critical intervention points.

The integration of U=U messaging into MCH settings facilitated improved ART adherence among women living with HIV. The campaign successfully reduced stigma and reinforced the importance of viral suppression, particularly among women in serodiscordant relationships, as evidenced by higher retention rates and self-reported viral suppression metrics.

Conclusions: The Fahari ya Jamii program demonstrates the potential of integrating PrEP and U=U strategies into MCH services, achieving high initiation rates among eligible women and positively influencing ART adherence through U=U messaging. However, significant screening gaps and retention challenges were observed, particularly during follow-up ANC visits. AGYW remain a high-priority population for tailored interventions. Expanding provider training, enhancing community engagement, and leveraging data-driven strategies are recommended to bridge service gaps, strengthen retention, and sustain programmatic success. Further research is warranted to explore longitudinal outcomes and refine interventions for scale-up.

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Optimal Viral Load Suppression by 31 December 2023 in Women Living with HIV in Guinea After Twelve (12) Months of ARV Treatment

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Context: In Guinea, the fight against HIV is part of the global targets 95-95-95, which aim to ensure that at least 95% of people on antiretroviral (ARV) treatment achieve an undetectable viral load. Assessing virologic suppression in women living with HIV after 12 months of treatment is essential to monitor progress and identify challenges specific to this population.

The objective is to measure optimal viral load suppression in women living with HIV in Guinea after at least 12 months of ARV treatment, by determining the proportion of women with an undetectable viral load in relation to the total viral loads achieved.

Materials and Method: • Data analysed for women who had been on ARV treatment for 12 months or more.

- Viral loads are categorized as undetectable (<1,000 copies/ml) or detectable (≥1,000 copies/ml).
- Proportions are calculated as a percentage to assess the effectiveness of viral suppression.
- Viral load data is reported using an Excel tool.

Results: Among the 33779 people living with HIV who achieved viral load by December 31, 2023 after 12 months or more of their follow-up, 30323 suppressed their viral load (89.77%) and (2880) did not suppress it, (8.53%). Of the total viral load performed, 576 were invalid, i.e. 1.71%. The majority of people living with HIV who suppressed their viral load were women (21798) or 71.89% compared to (8525) men (28.11%).

Conclusion: The analysis shows a high effectiveness of the ARV treatment program in

Guinea, with 89.77% of PLHIV having achieved an undetectable viral load after twelve months of treatment. Undetectability rates are higher among women (71.89%) compared to men (28.11%). This result shows a significant step forward in reducing HIV transmission among women in Guinea. However, the existence of 30.14% of men with a detectable viral load requires additional efforts to identify and address barriers to adherence and treatment effectiveness

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Sexual Risk Behaviors and Prevalence of Sexually Transmitted Infections among Adolescent Girls and Young Women at Risk of HIV Infection in Rural Settings in Uganda: A Cross-Sectional Study

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Background: Adolescent girls and young women (AGYW) are at increased risk of sexually transmitted infections (STIs). We assessed sexual behaviors and STIs prevalence among AGYW in rural settings in Uganda which will in turn inform the design of target-specific risk-reduction interventions. In this research, we describe sexual risk behaviors and the prevalence of sexually transmitted infections among AGYW in rural areas in Uganda.

Methods: This analysis utilizes data from 372 high risk AGYW aged 16–25 years, collected in 2 rural districts (mityana/Mubende) in Uganda, between June and October 2021. We set out to describe recent sexual risk behaviors among AGYW in a cross sectional survey that was aimed at assessing incidence rates among AGYW in and around Mityana/Mubende districts in Uganda, SIENA study. We recruited AGYW of unknown HIV status who had had at least 2 sexual encounters and not currently using PrEP. We recruited from health centres and recreational places including lodges, bars, restaurants, energy drinks producing companies, gold mines and fishing areas. Risk of acquiring infection was assessed by using a set of questions about alcohol use, nature of work, pre exposure prophylaxis use and recent sexual behavior capturing number of sexual partners and condom use. Prevalence of STIs was assessed by self-report and symptoms of infection reported as per interviewer's clinical judgement.

Results: Of 372 AGYW, median age in years (IQR) was 21(19,23) and median age at first sex

encounter was 16 years (14, 17). Majority, 93%, (n=233) were employed in bars/lodges. HIV prevalence was 38.7% (n=144). 34.7%, (n=129) reported they had been diagnosed with a sexually transmitted infection by a health worker and all reported to have received treatment. 27.2%, (n=101) reported they had had un protected sex with untreated sexually transmitted infections. None of them reported consistent condom use, only 1% (n=6) reported to have ever used PrEP in life, 75.8%, (n=282) were worried about getting HIV, 31.9% (n=119) had had sex with more than 10 people with 82% (n=304) reporting having had a new sex partner in the past three months. 82.7% (n=308) were not aware of the HIV status of all their sexual partners.

Conclusion: Interventions aimed at reducing sexual risk behaviors among AGYW are required if we are to attain the UNAIDS 95-95-95 targets by 2030. There is need to intensify efforts geared towards sexual risk reduction among AGYW focused towards self-reliance and economic empowerment of the AGYW.

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Uptake of Test and Treat Strategy Among Adolescent Girls and Young Women at Risk of HIV Infection in a Rural Ugandan Setting

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Background: HIV incidence is declining in many settings, yet new infections remain unacceptably high among adolescent girls and young women (AGYW). As a way of curbing the rising infection rates, at the end of 2013, the Ugandan government through the test and treat policy under the treatment as prevention strategy recommended provision of anti-retroviral therapy (ART) to persons with HIV regardless of their CD4 cell count. We assessed the uptake of test and treat strategy among HIV high risk AGYW in an HIV background incidence study known as SIENA (eStimating hIv incidEnce amoNg Agyw) conducted in rural Uganda.

Methods: SIENA was a cross sectional survey evaluating HIV incidence rates among AGYW at two sites in Mityana/ Mubende and Hoima using HIV recency tests. A cross-section of AGYW were recruited from HIV testing facilities and areas of commercial sex activities such as lodges, bars, restaurants, islands, landing sites and goldmines between June and October 2021. HIV risk was assessed using interviewer administered questionnaires on sexual behavioral characteristics. AGYW testing positive for HIV were referred for care to a health facility of their choice with close physical follow-up done by the study team to ensure they are initiated on ART. We describe linkage to care among AGYW testing positive for HIV at the Mityana/Mubende site.

Results: Of the 144 participants who tested positive, 135 (93.7%) accepted and 9 (6.25%) declined to be referred to an HIV treatment facility. ART uptake under the test and treat approach among those who accepted referral was 87(64.4%). Reasons for not enrolling into care among the remaining 48 (35.6%) AGYW included; failing to accept that they had HIV (n=19, 39.5%),

unwillingness to take the daily pill (n=11, 22.9%), migrating out of the area soon after receiving positive results (n=8,16.6%) and could not be traced on phone (n=10, 20.8%). Alarming, among the AGYW who initiated ART, only 28.7% (n=25) went back for a second refill.

Conclusion: While the test and treat policy is a great strategy, policy makers need to re-evaluate the preparedness of AGYW newly diagnosed with HIV to immediately engage in life long HIV treatment. Targeted patient centered interventions are urgently needed to link and retain AGYW with HIV in care.

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PrEP Utilization among Aging Women in Kampala, Uganda

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Background: The global HIV epidemic continues to disproportionately affect women. As life expectancy rises, a growing number of women aged 45 and older are living with or at risk for HIV, yet their needs are often overlooked in research and public health programs. In Uganda, the significant HIV prevalence has led to the introduction of Pre-exposure Prophylaxis (PrEP) as a key prevention strategy. However, uptake and adherence to PrEP are inconsistent, especially among aging women who face challenges related to menopause and chronic health conditions that affect their sexual health. Understanding the patterns of PrEP utilization among this demographic, along with the factors influencing their access and use, is essential for improving prevention efforts.

Methods: A cross-sectional survey was conducted to gather data on PrEP users from selected health facilities in Kampala. Data were abstracted from electronic medical records covering the period from October 1, 2023, to September 30, 2024. Descriptive statistics were utilized to analyze the demographic and behavioural characteristics of the PrEP users.

Results: PrEP users were predominantly middle-aged adults, with 385 (91.89%) in the 45–54 age range, indicating heightened vulnerability to HIV due to various socioeconomic factors, particularly increased exposure through sex work. This was followed by 33 (7.88%) late middle-aged adults aged 55–64 and 1 (0.24%) early senior. The majority of users were sex workers, comprising 355 (84.73%), with smaller proportions of discordant couples (33, 7.88%), commercial sex workers (12, 2.86%), men who have sex with men (5, 1.19%), and people who inject drugs (6, 1.43%). Many women were in non-committed relationships and sought PrEP to protect themselves amid changing sexual partnerships. In terms of marital status, 232 (55.37%) were single, 84 (20.05%) divorced, 78 (18.62%) married, 15

(3.58%) separated, and 9 (2.15%) widowed. About 80 (19.09%) reported having anal sex in the past six months, and 30 (7.16%) had experienced an STI. Although the number of women who inject drugs was lower at 5 (1.19%), this group often deals with stigma and significant barriers that make it difficult for them to access healthcare services.

Conclusion: The results present the importance of PrEP in preventing HIV, particularly for women at increased risk due to age-related factors. Many users are single or divorced women navigating changing sexual relationships, demonstrating their approach to safeguarding their health. Women who inject drugs encounter substantial barriers to healthcare access, emphasizing the urgent need for targeted interventions that address the specific challenges faced by aging women in this context.

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Implementation and Impact of the BLOOM Project: Strengthening Pediatric and Youth HIV Service Delivery in Uganda

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Introduction: The Babies living optimally and optunely with their mothers (BLOOM) project, implemented from June 2023 to May 2024, aimed to address critical gaps in pediatric and youth HIV care in Mubende, Mityana, and Kyenjojo districts, Uganda. Despite significant challenges, including limited healthcare access due to extreme weather, high transportation costs, and stigma, the project sought to improve antiretroviral therapy (ART) adherence, enhance viral suppression, and empower young mothers living with HIV (YMLHIV) and their families.

Methods: The project employed a multifaceted community-based approach. Key interventions included training 100 community health workers (CHWs), expert clients, and peer mothers in HIV care delivery; establishing 30 community safe spaces (CSS) for support groups; conducting 165 integrated community outreaches; and implementing 10 village savings and loan associations (VSLAs). Targeted mentorship, psychosocial support, and referral mechanisms were also enhanced to ensure effective service delivery. Data were collected through routine monitoring using a DHIS2 system and analyzed to track key performance indicators.

Results: BLOOM facilitated the return to care of 134 YMLHIV and 107 children lost to follow-up, with 98% of referred clients accessing services. Viral suppression was achieved in 192 out of 201 pediatric clients, while CSS meetings supported 1,516 YMLHIV with ART adherence, stigma reduction, and family planning education. VSLAs enabled economic empowerment among 1,084 members, with savings fostering income-generating activities. Additionally, 14 "Bring Back the Baby" campaigns improved retention rates for mother-baby pairs. Health worker capacity was

strengthened through 57 continuous professional development sessions, enhancing adolescent-friendly service delivery.

Conclusion: The BLOOM project successfully strengthened pediatric and youth HIV services, improving health outcomes and socio-economic stability for beneficiaries. The results highlight the importance of community engagement, capacity building, and integrated service delivery. Future initiatives will focus on expanding targeted testing, scaling up CSS utilization, and enhancing intersectoral collaboration to address persistent challenges.

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High Positivity Rate among Female Sex Workers Tested for HIV, Mozambique 2024

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Background: Achieve 95 95 95 global goals in Mozambique still a challenge. Only 71.6% of people living with HIV know their status. To identify cases with HIV, aligning with WHO guidelines, the Ministry of Health of Mozambique adopts the strategy of testing for HIV all key populations (KP) in high risk of HIV infection to control HIV epidemic (People who Inject Drugs PWID, Men who have Sex with Men MSM, People in Prison, and Female Sexual Workers FSW).

Methods: Mozambique implement KP screening in all Health Testing Services (HTS), to facilitate the identification of KP, access them for HIV diagnosis and ensure the identification of PLHIV. In 2019 the Ministry of Health updated HTS data tools to enable collection of HIV testing and status at all public facilities in Mozambique (n = 1,634) and community. Providers were trained to screen, test and report the HIV testing information among all KP clients. Routine data was extracted from the information database system which has the aggregated data from clinical and community level.

Results: We analyzed routine data during 12 months (January to December 2024). A total of KP 15,557 tested for HIV and known their status, the majority was Female Sexual Workers (n=10,134), compared to 2542 MSM, 726 PWID and 2155 People in Prison. In this period data also demonstrated 18% of HIV positive rate in FSW compared to 11% in MSM, 21% in PWID and 9% in People in Prison.

Conclusions: Mozambique is one of the highest HIV prevalence countries (12,5%). Data shows that KP are at high risk of having or acquiring HIV, and a high positivity rate among Female Sex Workers tested for HIV, reinforcing the need to ensure strategies to reach KP. Additionally, integration of

services (HTS and KP) can improve access to rapid identification of PLHIV and ensure linkage to care and treatment and prevention services.

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Reaching Women, Adolescents and Young People Using HIV Self Testing Approach, Mozambique 2024

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Background: The World Health Organization recommends HIV self-testing (HIVST) as an additional approach for testing. Although HIV testing is offered routinely in all public HTS facilities in Mozambique. Achieve 95 95 95 global goals in Mozambique still a challenge. Only 71.6% of people living with HIV know their status, it shows missed opportunities for testing among people with high risk of HIV infection. To fill the gaps and challenges in HIV testing services, Mozambique introduced HIV Self-Test (HIVST) community distribution to increase testing coverage and strengthen uptake of HIV prevention and treatment services.

Methods: In 2022, the Ministry of Health of Mozambique expanded nationally the distribution of HIVST in the community areas such as formal and informal workplaces, hotspots for key population, home places, places of concentration by adolescents and young people and men, technical schools, universities, play parks, gardens, bars, football fields, etc. to ensure HIV testing diagnosis for all key and vulnerable population. HTS providers, lay counselors and other communities' actors were trained using a HIVST package to ensure standardized approach implementation. We analyzed aggregated HIVST program data from January to December 2024 to better understand the promoting testing through HIVST in the country.

Results: Nationally, 67,923 HIVST kits was distributed, of which the majority were for women (n=34,371). Data also shows that the majority of kits (41%) was distributed for 15-24 years old - adolescents and young people (n= 27,829), compared with other key and vulnerable population (13,583 for men aged 25+, 6687 for key

population, 1964 for index case contacts, 581 for truck drivers, 656 for miners and 1429 for Military).

Conclusions: Mozambique is one of the high HIV prevalence countries which implements HIVST to ensure the eligibility for HTS of people who are at risk of being diagnosed with HIV. Data confirms that ensure implementation of HIV Self-Test allows the reach of women, adolescents and young people for HIV testing.

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Patient-Provider Relationships and HIV Viral Suppression among Women with Limited-English Speaking Skills, Miami-Dade County, Florida, USA

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Background: A strong, trusting patient-provider relationship facilitates HIV care success. Such patient-provider relationships are particularly important for women with HIV, who often face barriers such as poverty and childcare challenges that hinder HIV care retention and viral suppression. Language barriers can adversely affect communication and patient-provider relationships. This study aimed to determine if ability to speak English among Hispanic and Haitian women born outside the United States affected experiences with providers and if these experiences were associated with HIV viral suppression.

Methods: Women in the Miami-Dade County Ryan White Program, a U.S. federally funded program for people with HIV without insurance, were interviewed by telephone in English, Spanish, or Haitian Creole from June 2021 through March 2022. HIV viral laboratory results were obtained from program records. HIV viral suppression was defined as < 200 copies/ml for the closest viral load to the interview. Patient-provider relationship characteristics were assessed using questions from the Health Care Relationship Trust Scale and the Agency for Healthcare Research and Quality Consumer Assessment of Healthcare Providers and Systems (CAHPS 3.0). Women were asked if they speak English well or not. Specific patient-provider relationship characteristics and viral load suppression were compared between those who reported speaking English well vs. those who did not using chi-square and Fisher's exact tests as necessary.

Results: Of 542 participants in the parent study, 317 (58.5%) were born outside the United States and were either Haitian or Hispanic ethnicity. Of these, 204 (64.4%) reported not speaking English well, and 91.4% were virally suppressed with no significant difference by English language speaking ability. All but 14 (4.4%) interviews were conducted in Spanish or Haitian Creole. Compared to those who reported speaking English well, those who reported not speaking English well were less likely to report that their provider listened carefully to them most or all of the time (92.1% vs. 98.2%) ($p=0.02$), less likely to state that their provider discussed options and choices with them before treatment decisions (81.5% vs. 90.7%) ($p=0.03$), and less likely to state that the provider treated them as an individual (91.8% vs. 100%) ($p=0.002$). However, they also were more likely to report that a provider asked them about things that cause them stress (40.2% vs. 27.4%, $p=0.02$). Among those who reported not speaking English well, viral suppression was higher among those whose provider asked them if there were things that made it hard for them to care for their health (98.5% vs. 88.1%, $p=0.012$), if the provider asked if there were things that worried them or caused them stress (98.6% vs. 88.4%, $p=0.01$), and if they felt comfortable speaking with their provider about personal issues (97.0% vs. 88.9%) ($p=0.03$). Among those who reported speaking English well, viral suppression was not associated with any of the provider experience variables.

Conclusions: Patient centered care practices such as asking about challenges and worries and a strong patient-provider relationship may be particularly important to optimal HIV outcomes for clients who have limited English speaking skills.

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Predictors for the Utilization of Community Support Systems against Intimate Partner Violence among Married Women Living with HIV in Southwestern Uganda-A cross Sectional Study

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Background: Intimate partner violence (IPV) disproportionately affects married women living with HIV (MWLHIV), resulting in undesirable human rights, socio-economic, mental, maternal, and child health consequences. Community Support systems against Violence (CoSaV) are widely available and promising public and voluntary resources for the prevention and mitigation of IPV but are poorly investigated. We set out to identify the predictors for the utilization of the CoSaV among the MWLHIV.

Methods: This was a quantitative cross-sectional study conducted among 424 consecutively sampled MWLHIV attending the Antiretroviral Therapy (ART) clinic at Kabale Regional Referral Hospital in southwestern Uganda in April 2021. Using an interviewer-administered questionnaire, data were collected on the participant's socio-demographic characteristics, exposure to IPV, awareness about the CoSaV, perceptions about the quality, accessibility and challenges in accessing the CoSaV and the utilization. Modified Poisson regression model was used to identify the predictors for the utilization of CoSaV using the Statistical Package for Social Sciences (SPSS) version 23.0.

Results: The mean age of the 424 participants in the study was 39.5 ± 10.2 years. More than half of the participants 51.9% (220/424) reported exposure to any IPV. Utilization of any CoSaV was found to be above average at 58.3% among the participants. The formal support (police, local government leaders, health workers and

counselors) were more frequently utilized compared to the informal support (family, relatives and friends). Utilization of any CoSaV was higher among the women who were aware of the CoSaV and also those who were exposed to violence. Accessibility was identified as an independent predictor for utilization of any CoSaV.

Conclusions: Intimate partner violence (IPV) was prevalent among MWLHIV in southwestern Uganda. However, the utilization of any CoSaV was suboptimal. The formal CoSaV were more frequently utilized than the informal support systems. Accessibility was an independent predictor for utilization of any CoSaV. There is need to improve access in order to increase the utilization of the CoSaV and contribute to the attainment of sustainable development goal 5.2.1 and end violence against women.

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Integration of Post-GBV Services into the HIV Program for Adolescent Girls and Young Women (AGYW) in Southern Nigeria.

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Background: Adolescent Girls and Young Women (AGYW) are uniquely impacted by Gender-Based Violence (GBV) due to their young age and limited experience with relationships, which heighten their risk for physical and sexual violence. Studies suggest that one in three women globally will experience either physical or sexual violence in their lifetimes. The situation is particularly dire in Nigeria, where GBV rates are climbing amid increasing insurgency, civil unrest, and economic struggles. Experiencing GBV during adolescence can lead to long-lasting adverse mental and physical health outcomes, which increases vulnerability to HIV and other infections and can set them on a trajectory for subsequent abuse. This study examines the integration of post-GBV services for AGYW within the USAID-funded Accelerating the Control of HIV Epidemic, cluster-6 (ACE 6) project in Nigeria.

Methods: Between Fiscal year 2022 and 2024, Post GBV care was mainstreamed as a key programming component across the three ACE 6 3 states (Bayelsa, Edo, and Lagos) in Nigeria. GBV screening and post-GBV care were integrated into each service delivery point of the HIV clinical flow and offered through decentralized youth models across facilities and community settings. AGYW were discreetly screened with specialized adolescent-friendly screening tools at service delivery points, maintaining their dignity and respect. Those experiencing GBV were provided with comprehensive post-GBV services by trained adolescent-friendly psychologists and case managers. A review of secondary data was conducted on the project GBV report to analyze the frequency of post-GBV screening conducted

across the HIV cascade and those provided with care and support services across the 3 states.

Results: From a total of 2,700 AGYW/ABYM reached, 2,007 of them are AGYW and were screened for GBV by trained professionals. Post-GBV care and support were provided to 379 AGYW/ABYM (13.5%) in Bayelsa, 293 of them are AGYW with a percentage of 77.3% of those provided with post-GBV care and support), 889 AGYW/ABYM (31.8%) in Edo (747 of them are AGYM with 84%) and 1432 AGYW/ABYM (51.2%) in Lagos (967 of them are AGYM with 67.5%), respectively. Out of the 2,007 AGYM, 809 (40.3%) experienced physical/emotional violence, 1,198 (59.7%) experienced sexual violence and Post Exposure Prophylaxis (PEP) was provided to 488 (40.7%) that reported sexual violence incidence within 72 hours.

Conclusions: The integration of GBV interventions, both the GBV prevention messages and treatment within HIV/AIDS prevention and treatment programs provides a discrete avenue for providing post-GBV care and support services for Adolescent Girls and Young Women (AGYW), improving their health-seeking behavior, mitigating the risk of further trauma and facilitating recovery while also offering a potential benefit for mental health services.

There is an urgent need to integrate gender-responsive post-GBV interventions in all HIV prevention and treatment programs globally and other empowering interventions for adolescents that can respond to medical, physical, and mental needs to reduce their level of vulnerability to infections. Lastly, is essential to integrate a skill empowerment program as a key element of programming on all interventions for AGYW with special consideration for AGYW with children.

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Distribution of Beneficiaries of HIV Care Who Are Non-Adherent by Age and Gender in Mozambique, 2024

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Background: Mozambique has approximately two million people living with HIV on antiretroviral treatment (ART) treatment. As the country nears the 2025 UNAIDS 95-95-95 targets there has been an increased focus on improving adherence among the people living with HIV on ART. To improve targeted interventions for beneficiaries of care with adherence challenges, an accurate understanding of the demographic characteristics of these populations is essential.

Material and Methods: Data were extracted from health facilities with electronic medical records (n=649) which cover approximately 85% of the care beneficiaries on ART. Non-adherence is defined as a care beneficiary who has missed their clinical appointment by more than 7 days but less than 59 days, beyond which they are classified as lost to follow-up. The non-adherence status was stratified by gender and five-year age bands, and records without an established sex or age were removed from the analysis.

Results: A total of 125,408 care beneficiaries were registered as non-adherent between July and September 2024, of which 3.3% (n=4,123) are aged less than 15, 35.0% (n=43,913) are men 15+ and 61.7% (n=77,372) are women 15+. Among the finer age bands in adults, there is a higher absolute number of non-adherence in care beneficiaries among women 30-34 (n=15,768) and women 25-29 (n=15,852) representing 8.0% and 9.1% of their total cohort. Men between the ages of 20-24 (9.4%), 25-29 (11.1%) and 30-34 (10.1%) have the highest proportion of non-adherence in care beneficiaries between genders. Overall, 8.3% of adult male care beneficiaries were non-adherent during this period and 7.1% of adult women.

Conclusions: Though women have higher numbers of ART non-adherence, a larger percent of men are non-adherent during the period in analysis. Men 25-29 have the highest percentage of non-adherent beneficiaries of care, which can have substantial impacts on the quality of clinical follow-up and viral load suppression. Adherence continues to be a challenge for both sexes and implementing or expanding strategies reinforcing adherence such as peer mentors, after-hour care, or differentiated care models specifically targeted to the gender and ages most at risk are essential to reaching both national and international targets.

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Bridging the U=U Knowledge Gap: Exploring Awareness of Undetectable Equals Untransmittable among Women Living with HIV in a Low-Income Setting

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Background: Undetectable equals untransmittable (U=U) is a globally validated scientific concept demonstrating that people living with HIV (PLHIV) who adhere to antiretroviral therapy (ART) and maintain an undetectable viral load cannot transmit the virus sexually. Despite global recognition by organizations such as UNAIDS, NIH, and CDC, U=U awareness remains low in low-income countries (LICs), limiting its potential to improve health outcomes and reduce stigma. Women, particularly those in resource-constrained settings, face unique challenges related to HIV stigma, disclosure, and adherence, underscoring the need to assess their level of knowledge regarding U=U. This study aimed to explore U=U awareness among women living with HIV attending Mulago Hospital in Uganda and identify sociodemographic factors influencing awareness levels.

Methods: A cross-sectional study was conducted among 100 PLHIV attending an HIV clinic at Mulago Hospital. Structured interviews were used to collect data on U=U awareness, education level, employment status, marital history, and ART adherence. Descriptive statistics were applied to summarize the data, and subgroup analyses were performed to explore differences in awareness based on gender and socioeconomic status.

Results: Out of 100 participants, only 30% were aware of the U=U concept. Among those aware, 83% (25/30) were educated, employed, and had been living with HIV for over five years. Notably, only 5 out of 30 participants aware of U=U were women, all aged above 20 years. Women with no

formal education or those engaged in informal employment (e.g., farming, small-scale trading) exhibited lower awareness levels. Furthermore, 5 participants reported divorce following disclosure of their HIV status, including 3 women, underscoring the persistent stigma and fear associated with HIV. Many women cited concerns about transmitting the virus as a reason for delayed or avoided marriage.

Conclusions and Recommendations: This study revealed a significant knowledge gap regarding U=U among women living with HIV in a low-income setting, with gender and socioeconomic disparities in awareness. To bridge this gap, HIV care programs must integrate U=U education into routine care, ensuring women are equipped with accurate information on how ART can prevent transmission. Community-based awareness campaigns targeting underserved populations, particularly women in informal employment and rural areas, are essential. Engaging male partners, family members, and communities in U=U education can reduce stigma, foster supportive environments, and improve ART adherence, ultimately contributing to better health outcomes and HIV prevention in women.

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Differences in CD4 Coverage and Results among Females in Mozambique, 2022 to 2024

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With the reemphasis in the cascade of care in 2022, CD4 testing has become more available and is one of the principal measures for determining advanced HIV disease and to assess immune status for Mozambique's 1.9 million people living with HIV on antiretroviral treatment (ART). Despite this, there are still large challenges to acceptable CD4 testing coverage at the national level. Data were extracted from health facilities with an electronic medical record (n=649) which has a coverage of approximately 85% of the care beneficiaries on ART.

Results were disaggregated by gender and finer age groups for those with CD4 test results between October 2022 and September 2024. Aligned with the criteria for entry into the Advanced HIV Disease model, a cutoff of 200 cells/ μ L was further used to disaggregate test results. Overall, 8% (n=93,034) of the 1.1 million women on ART treatment received a CD4 test from October 2023 to September 2024, a marked increase from 5% (n=53,526) coverage for the period from October 2022 to September 2023. Of these 13% (n=34,048) of the tests were below 200 cells/ μ L in 2023-2024, a reduction from 15% (21,912) in 2022-2023. In the both periods, the highest coverage of CD4 testing was among adolescents and young women, with 15% coverage for 15–19-year-old, 13% for 20-24, and 11% for 25-29 in the 2023-2024 data. The three age groups with the lowest coverage have the highest percentage of low CD4, including women 40-44 (6% coverage, 16% <200 cells/ μ L), 45-49 (5% coverage, 19% <200 cells/ μ L) and 50+ (4% coverage, 19% <200 cells/ μ L) for the 2023-2024 data. CD4 testing coverage increased 3% between the two periods, or an additional 39,500 females. The data highlight disparities in CD4 coverage and associated test results, showing the need for increasing coverage in the 40+ age groups which

have a much higher proportion of results less than 200 cells/ μ L. To increase coverage, it is important to develop Enhanced policies and targeted programs to address the specific barriers faced by older women.

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Breaking the Chain: Maternal Retesting Strategy to Combat Vertical Transmission of HIV

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Background: Identifying incident HIV infections among pregnant and breastfeeding women (PBFW) and initiating them on antiretroviral therapy (ART) is critical for eliminating vertical transmission of HIV. Based on World Health Organization recommendations for maternal retesting (MR), Tanzania adopted and scaled-up the 5-tests algorithm in 2022. We present retesting data for women receiving maternity and child health services at twenty military healthcare facilities.

Methods: The national recommended schedule begins at first antenatal booking, all pregnant women who receive a negative test result are eligible for a retest at the gestational age of 32-36 weeks; otherwise, a catch-up test is conducted at any time before labor, delivery, or postnatal. During breastfeeding, tests are conducted at 3-, 6- and 18-months post-delivery. We included women who initially tested negative and then retested between October 2022 to September 2024.

Results: A total of 26124 women had retested for HIV. 8085/8460 (96%) eligible women retested during the third trimester, 1072/1197 (90%) during labor and delivery, and 650/687 (95%) during postnatal. Additionally, 7462/7840 (95%), 4397/4737 (93%), 4458/4741 (94%) were retested at 3-, 6- and 18-months post-delivery, respectively. Of the 26124 women, 55 (0.21%) seroconverted; among them 38 (69%), seroconverted during postpartum and breastfeeding periods. 18/55 (33%) were adolescents and young mothers aged 15-24. Furthermore, 8/55 infants were confirmed

positive through DNA-PCR giving a vertical transmission rate of 14.5%; 6/8 (75%) infants were from women newly identified during postpartum and breastfeeding.

Lesson Learned: The comprehensive implementation of MR facilitated early detection of HIV with prompt initiation of ART among PBFW and early infant diagnosis and treatment. The observed substantial degree of identification during lactation necessitates consistent monitoring, advocacy for early antenatal booking, and reinforcement of the implementation of testing for prevention and treatment.

Conclusion: MR has shown promising results in identifying incident HIV infection enabling timely intervention for the mother-baby pair. There is need for consistent monitoring and advocating for early antenatal booking, testing and prevention services, particularly pre-exposure prophylaxis for adolescent girls and young mothers.

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HIV Pre-Exposure Prophylaxis Uptake and Continuation among Adolescent Girls and Young Women Enrolled in the DREAMS Urban Model Program in Masaka-Wakiso, Uganda 2023-2024

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Background: Adolescent girls and young women (AGYW) aged 15-24 years have the highest HIV incidence in Uganda. The Determined Resilient Empowered AIDS-free Mentored Safe (DREAMS) is an HIV prevention program aimed at reducing HIV infections among AGYW aged 10-24 years. We present the experiences and lessons learned from providing Pre-Exposure prophylaxis (PrEP), an HIV prevention strategy to AGYW most at risk of acquiring HIV in Masaka-Wakiso region of Uganda

Material and Methods: The program was implemented from October 2023 to September 2024 in 11 districts. We screened AGYW aged 15-24 years for HIV, STIs and PrEP eligibility using Ministry of Health (MoH) recommended screening tools if they fulfilled criteria for being most at risk of HIV acquisition; namely, a history of: - irregular condom use, multiple sexual partners, transactional sex, recurrent sexually transmitted diseases, early pregnancy. Eligible AGYW were offered PrEP and those who accepted were initiated at the health facility, community safe spaces or outreaches. Additional stakeholder-informed interventions to improve uptake and adherence included: peer-to-peer support and reminders, use of PrEP ambassadors/champions, health educations/sensitization, home delivery, male partner engagement through Adolescent Boys and Young men Instructors and keeping PrEP drugs at the safe spaces for those who feared intimate partner violence. Follow up for continuity was done monthly by the PrEP champion through phone calls and home visits. Data was entered in the Uganda DREAMS Tracking system, we analysed PrEP uptake as proportion of AGYW enrolled and

retained on PrEP through PrEP registers and Ms Excel.

Results: A total of 21,938 AGYW were enrolled 15-19 years, of which 14,253 (65%) were screened and all tested HIV negative. A total of 1,414 (9.6%) were eligible for PrEP with more than one HIV risk; 521 (36%) were engaged in transactional sex, 242 (17.1%) had multiple sexual partners, 446 (31.5%) had ever had an STI, 181 (12.8%) had irregular condom use, and 603 (42.6%) had history of pregnancy. Of AGYW eligible for PrEP, 989 (69.9%) were initiated on PrEP. However, 591 (59.7%) AGYW continued with PrEP while 398 (40.2%) discontinued PrEP due to perception of reduced HIV risks (108, 27.1%), behavioural change (203, 51%) and fear of daily pill burden (87, 21%).

Conclusions: The tried interventions were effective for PrEP uptake, there is need to intensify engagement of PrEP champions to conduct adherence counselling, improve the drug package and consider Roll out of injectable Cabotegravir for all AGYW in the DREAMS program.



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Family Planning Knowledge and Practices of Adolescents Girls and Young Women Living with HIV in Hhohho Region, Eswat

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Background: Improving sexual health, reproductive rights, and access to care for adolescent girls and young women living with HIV begins with an understanding of family planning needs. The objective of the study was to assess family planning knowledge and practices of Adolescents Girls and Young Women (AGYW) living with HIV in Hhohho Region, Eswatini.

Methods: A quantitative cross-sectional study was conducted from December 2021 to February 2022 among 190 adolescent girls and young women between ages 18 to 24 from 12 health facilities using self-administered structured questionnaires. The study population consisted of adolescent girls and young women living with HIV on ART. Data were captured in excel and analysed using STATA 14.

Results: A total 190 Adolescent Girls and Young Women participated in the study, mean age of 20.6 years. Participants were from all four regions of Eswatini, with a majority n= 172 (90.5%) from Hhohho and Shiselweni being the least 1(0.5%). Most participants n=137 (72.1%) were Christians regarding religious affiliation, n=75 (44.7%) had attained high school educational level and n=165 (87%) were from rural areas. A majority of participants n=140 (74.7%) were not married, n=63 (33.2%) had both parents alive and n=63 (33.2%) had at least one parent alive. Most participants 96 (50.5%) did not have a breadwinner available within the family structure. Participants had varying knowledge of different contraceptive methods, with the most commonly known contraception method being a condom, the pill and the injectable respectively. Contraceptive skin patch method was the least known. Majority of the study participants n=105 (55.3%) had overall

moderate level of knowledge, while n= 65 (34.2%) of AGYW had high level of knowledge, and lastly, n=20 (10.5%) AGYW had no knowledge of family planning methods. To measure access n=95 (50%) cited the health facility as the most preferred source of contraceptive information. Majority 58 (30.5%) lived far from the health facility, n=95 (50%) and n=90 (47%) got their contraceptive information from health facility and their homes. To measure uptake, n= 100 (55%) participants were offered condoms at visit, of those offered, n=45 (45%) were using a contraceptive method whilst n=55 (55%) were not using any contraceptive commodity. A majority n=130 (68.4%) participants, were comfortable discussing SRH issues with a nurse. In the healthcare facility, n=55 (28.9%) were offered FP method, and of those offered n=32 (58.2%) were using a form of contraception whilst n=23 (41.8%) were not using any method.

Conclusion: Findings demonstrated that many AGYW were aware of various contraceptive methods; however, more work needs to be done in terms in improving education, information, access, and uptake of youth friendly family planning services to meet their sexual and reproductive needs.

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Impact of Mentor Mothers Programs in the Elimination of Mother-to-Child Transmission of HIV in Rural Homa Bay County, Kenya.

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Background: Homa Bay County, located in western Kenya, has one of the highest HIV prevalence rates in the country, with significant challenges in maternal and child health. The rural nature of the county presents barriers such as limited healthcare infrastructure, long distances to health facilities, stigma, and socio-economic constraints that hinder effective implementation of Prevention of Mother-to-Child Transmission (PMTCT) programs. Mentor Mothers Programs (MMPs), a community-based intervention, have been introduced to address these barriers by utilizing HIV-positive mothers as peer educators and support systems for pregnant and breastfeeding women living with HIV.

Objective: This study examines the impact of Mentor Mothers Programs on the elimination of mother-to-child transmission (eMTCT) of HIV in rural Homa Bay County, focusing on improvements in ART adherence, healthcare accessibility, maternal retention in care, and reduction of infant HIV transmission.

Methods: A mixed-methods approach was employed, combining retrospective program data analysis with qualitative interviews from mentor mothers and beneficiaries across rural health facilities. The County offers HIV care and treatment, Tuberculosis (TB), reproductive services, immunization, primary care networks (PCN) in all the sites, 100% community strategy coverage among others. Key indicators included maternal ART adherence, skilled delivery rates, early infant diagnosis (EID) at six weeks, and final HIV status at 18 months. Additionally, challenges faced by mentor mothers in rural

settings, such as stigma, cultural beliefs, and logistical barriers, were assessed.

Results: Findings indicate that MMPs significantly enhanced ART adherence among HIV-positive mothers, with over 90% of participants maintaining treatment throughout pregnancy and breastfeeding. Skilled delivery rates in rural areas increased to 85%, supported by mentor mothers who facilitated community education and escorted women to health facilities. Early infant diagnosis uptake improved, with over 95% of exposed infants tested within six weeks. The overall mother-to-child transmission rate was reduced to below 5%, demonstrating significant progress towards eMTCT. Mentor mothers played a crucial role in addressing stigma, improving disclosure rates, and providing psychosocial support, which contributed to higher retention in PMTCT programs. However, challenges such as inadequate transport, cultural resistance, and healthcare staff shortages remain.

Conclusion: Mentor Mothers Programs are a transformative approach in rural Homa Bay County, bridging the gap between healthcare facilities and communities. By leveraging peer support, these programs improve ART adherence, healthcare utilization, and maternal-infant health outcomes. Strengthening and scaling up MMPs, alongside improving rural healthcare infrastructure and addressing socio-cultural barriers, will be essential in achieving complete elimination of mother-to-child transmission of HIV in the county.

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The Double Burden: A Cross-Sectional Study of the Intersection Between Mental Health and Access to HIV Prevention Services for Female Sex Workers in Internally Displaced Camps in Calabar, Nigeria

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Background: Female sex workers (FSWs) are vulnerable to HIV acquisition, occupational discrimination, and mental health challenges. However, understanding the intersection of mental health and their access to HIV prevention services will guide policymakers in improving the accessibility of female sex workers in internally displaced persons (IDP) camps having a dual burden. This study assessed the relationship between mental health and accessibility of HIV prevention services for female sex workers in internally displaced persons camps in Calabar, Nigeria.

Methods: A cross-sectional study was conducted on 187 randomly selected female sex workers in internally displaced persons camps in Calabar from December 2024 to January 2025. A three-part validated 17-item questionnaire measuring mental health status, perceived discrimination, and accessibility to HIV prevention services was used to collect data. Data analysis involved frequencies, cross-tabulations, and chi-square tests using IBM SPSS (version-27), with significance set at $p < 0.05$

Results: Out of 187 female sex workers, 108 participated in the study. Most participants, 25(23.1%), were aged 25-34 and 39(36.1%) had worked for over 6 years. There were 4(3.7%), 43(39.8%), 42(38.9%), and 19(17.6%) respondents who rarely, sometimes, often, or always, respectively, felt sad, down, or hopeless in the past month. Substance use was reported as the primary coping strategy for stress or emotional

challenges ($n=91$, 84.3%). Occupational discrimination was prevalent, with 63.9% and 19.4% reporting frequent and occasional experiences, respectively. HIV testing [79(73.1%)] and condom use [65(60.2%)] were common, while PrEP access was low, 9(8.3%). Among condom users, 50.8% sometimes felt sad, while 44.2% of non-users often felt sad, linking mental health and access. Age influenced access to services ($p=0.001$), with condom use highest in 25-34-year-olds (29.2%), but lowest in those <18 years (10.8%). Likewise, HIV testing was more accessed by 25-34 years (27.8%) and <18 years (26.6%), and least in >45 years (8.9%). Respondents older than 45 years (83.3%,) reported not accessing any HIV prevention services. Perceived discrimination correlated with poor access, especially among those with over 6 years' experience; 83.3% reported no access ($p=0.001$).

Conclusions: Mental health, perceived discrimination, and access to HIV prevention services intersect in female sex workers living in internally displaced persons camps, especially in older, more experienced populations, suggesting a need for age and experience-specific interventions. Future research should investigate underlying factors contributing to low service utilization in older populations.

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Associations Between Resilience and Disclosure to Adolescents among Women Living with HIV in Botswana

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Background: Resilience is a key factor in coping with chronic illness, which may be influenced by interpersonal relationships including those with one's own children. Among women living with HIV, the disclosure of their HIV status to their adolescent may influence their resilience or their resilience may afford them the strength to elect to disclose, with disclosure potentially offering other health and psychosocial benefits. We sought to understand associations between resilience and maternal disclosure of their HIV status to their adolescents among women living with HIV participating in the Botswana-based Disclosure Intervention to Support Caregivers (DISC) study.

Methods: DISC participants were recruited from the NIH-funded FLOURISH study, an observational study investigating the health of children and adolescents born HIV-exposed who remain uninfected. Individuals were eligible for enrollment into the DISC study if they were enrolled in the FLOURISH study, living with HIV, and had an adolescent aged 10 years or older who was HIV-exposed uninfected. Maternal HIV disclosure status, as well as social and behavioral data were collected at enrollment and participants were administered the validated Connor-Davidson Resilience Scale (CD-RISC), with domains in flexibility, self-efficacy, emotion regulation, optimism, and cognitive focus. Median CD-RISC scores were compared between participants who had already disclosed to their adolescent versus those that had not using the Wilcoxon rank sum test to assess for associations between overall

resilience (total score), each of the five CD-RISC domains, and HIV status disclosure.

Results: Between September 2024 and December 2024, 52 women consented to study participation, 20 (38%) of whom reported having disclosed to their adolescent. Overall, the average age of participants was 43.8 years (44.3 among those who disclosed and 43.5 among those who have not disclosed). A higher proportion of participants who had disclosed had secondary education level or higher (90% versus 84%) and 90% reported having a partner with equal distribution between disclosure groups. The average age of participant's adolescents was 12.9 years and did not vary by disclosure group (13.4 for disclosed and 12.6 for undisclosed). Women who had disclosed had significantly higher overall resilience scores compared to women who did not disclose (median: 35.0 [IQR 31.5, 38.5] vs. 30.5 [IQR 27.0,34.5], $p < 0.01$). Among the resilience domains, only a higher optimism score was significantly associated with disclosure (median: 12.0 [IQR 10.0, 12.0] vs. 9.0 [IQR 8.0, 11.0], $p < 0.01$).

Conclusion: Disclosure of HIV status to adolescents among women living with HIV is associated with higher resilience scores, particularly in the domain of optimism. More research is needed to understand if resilience influences disclosure willingness or if subsequent adolescent disclosure leads to improved maternal resilience. Additionally, correlating disclosure to adolescents with maternal resilience and HIV care engagement would be an important area of research, as it could inform the development of interventions that aim to improve the health of women living with HIV.

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Drivers of Unplanned Pregnancy among Women with HIV in the Northern and Southern United States.

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Background: National estimates from 1986-2015 show that the proportion of unplanned pregnancies among women with HIV (WWH) is high at 78% and that Black/African American women are disproportionately impacted. We aimed to evaluate the prevalence of unplanned pregnancy using a contemporary cohort of pregnant and postpartum WWH (2019-2024), and identify the individual, interpersonal, community and societal factors associated with pregnancy planning.

Methods: We performed a secondary data analysis of cross-sectional surveys from an on-going randomized controlled trial testing a peer-led behavioral intervention to improve postpartum retention in HIV care. WWH were recruited from six sites in the northeast and southern US. We used unadjusted and adjusted logistic regression to estimate the association between study outcome, pregnancy planning ("Were you planning to get pregnant?" Yes/No) and individual/interpersonal (self-efficacy, social support, HIV provider trust, HIV related stigma) and community/societal (race, ethnicity, marital status, income, employment) factors.

Results: To date, a total of 137 women (83% Black, 7% White, 10% Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander categorized as other race; 14% Hispanic ethnicity) enrolled in the trial and were included in this analysis. The proportion of unplanned pregnancy was high at 73%. Among WWH with unplanned pregnancy, 90% were Black, 4% were White, 6% were women of other race (p=0.002). While Black

women had significantly reduced odds of pregnancy planning (OR 0.18, 95% CI 0.046-0.68), married women (OR=3.33, 95% CI 1.26-8.85), women with higher income (OR=1.27, 95% CI 1.03-1.57) and those with employment (OR 2.33, 95% CI 1.08-5.03) had higher odds of pregnancy planning. In the fully adjusted model, Black race (aOR 0.11 95% CI 0.02 -0.48) was the only factor negatively associated with pregnancy planning.

Conclusion: Unplanned pregnancy among women with HIV and its disproportionate burden on Black women continues to be an area we have yet to make significant progress. Interventions addressing social determinants of unplanned pregnancy and racial disparities are needed to improve reproductive health care for WWH.

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Centering the Voices of Black Women in HIV Cure Research: Bridging Science and Community for Health Equity

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Background: Globally, Black women face exceptional challenges in the HIV epidemic, including systemic barriers to care, disproportionate stigma, and narrow representation in research. Despite being less than 15% of the US female population, Black cisgender women represent over half of new HIV diagnoses among women, while Black trans women accounted for over 60% of HIV diagnoses among gender-diverse women in major US cities. Black women consistently remain underrepresented in clinical trials, including treatment, vaccine, and cure studies, and are often restricted from clinical trial enrollment due to pregnancy, lactation status, or childbearing potential, with involvement considered only if contraception requirements are met. Ethically, the disparate representation of women in research restricts their ability to be well-informed about their own medical care and treatment options. Thus, as data is published, there exists a perpetual lack of trust in the research and in those conducting the research, further underscoring the need for inclusive representation tailored to community needs at all levels of research; further highlighting the need for equitable engagement of Black women in HIV cure-related research.

Materials and Methods: A mixed-methods approach will be used to understand HIV cure knowledge and perceptions of HIV cure research from cis and trans women living with HIV residing in the United States. Engagement formats will include open panel and community discussions and anonymous cure perception surveys. Qualitative data. Thematic analysis will be used to identify key priorities, ethical concerns, and community perceptions of HIV cure research. Quantitative data. HIV Cure 101 sessions have been successful in providing participants with knowledge about emerging HIV cure science,

fostering informed discussions. The session covers the science of cure strategies (e.g. latency-reversing agents, bNAbs, gene therapy) and addresses questions and concerns in an accessible and culturally responsive manner.

Expected Outcomes: Participants complete pre/post-cure perception surveys to assess changes in HIV cure knowledge and identify barriers to participation. The community engagement survey will explore participants' understanding of cure science and ways to engage meaningfully. Insights inform strategies for equitable representation, cultural responsiveness, and improved community-centered research practices.

Conclusions: To advance the future of HIV cure-related research, the need to illuminate the perspectives of Black women on the necessity, ethics, and priorities for HIV cure research, emphasizing the importance of culturally tailored approaches to learning and engaging with HIV cure-related research becomes more critical than ever.

As new science emerges for HIV cure, Black women should be at the forefront in ensuring they are earnestly represented in trial design, participant recruitment, primary researcher roles, and research dissemination. Equipping women with accessible, foundational knowledge about HIV cure research empowers them to actively engage in forging research priorities and responding to HIV stigma. By understanding the need for a cure, exploring emerging scientific strategies, and emphasizing the role of community engagement, we can foster inclusive and ethical cure research. Hosting initiatives like HIV Cure 101 ensures that women are not only informed but also positioned as key stakeholders in advancing equitable outcomes in the search for an HIV cure.

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Assessment of Pre-Exposure Prophylaxis Persistence among Adolescent Girls and Young Women in the DREAMS Programme in South Africa

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Background: Pre-exposure prophylaxis (PrEP) is a crucial HIV prevention tool, especially for adolescent girls and young women (AGYW) in high-burden settings. Despite substantial efforts to increase PrEP uptake, sustaining persistence among AGYW remains a significant challenge, with many discontinuing use shortly after initiation. In South Africa's DREAMS programme, implemented by TB HIV Care, low PrEP persistence rates have hindered the achievement of long-term prevention goals. This study examines trends in PrEP persistence over a three-year period, assessing the effects of programmatic interventions aimed at improving adherence.

Materials and Methods: We conducted an Interrupted Time Series (ITS) analysis using routine data collected for annual periods from October to September 2021 to 2023 to assess PrEP persistence at 1-month and 4-month follow-ups. Four key informant interviews (KIIs) with program staff provided contextual insights into implementation challenges and adaptations. In early 2022, the program introduced a regional call center to support AGYW through structured case management, including text reminders, adherence counselling, and follow-up on missed appointments. In 2023, these efforts were strengthened further with expanded involvement of learner support agents (LSAs) in schools and community peers and focused attention on providing localized PrEP support through the launch of a digital call center platform, and enhanced supervision of operators.

Results: The ITS analysis revealed marked improvements in PrEP persistence following the

interventions. At the 1-month follow-up, persistence increased from 43% to 61% (18% gain) from 2021 to 2022 with a further increase to 64% (3% gain) in 2023. At the 4-month follow-up, persistence rose from 21% to 37% (16% gain) from 2021 to 2022, followed by an additional rise to 48% in 2023 (11% gain). These improvements highlight the effectiveness of tailored support strategies.

KIIs underscored that programmatic shifts were crucial in driving these outcomes. Initially, the program prioritized reaching PrEP initiation targets, but by 2022, staff had shifted focus toward long-term retention. Clinicians began assessing AGYW's readiness for PrEP more thoroughly, offering alternative prevention options where appropriate. Furthermore, program staff observed that initiating AGYW on PrEP after completing structural interventions helped increase awareness of HIV risk and the value of prevention strategies. Community engagement efforts also evolved, aiming to address conservative social norms that often led to resistance from caregivers and sexual partners.

Conclusions: PrEP persistence among AGYW remains a challenge, yet this study demonstrates that targeted, sustained support can lead to significant gains in retention. Key strategies included shifting programmatic focus from initiation to persistence, implementing case management systems, and enhancing community education to address stigma through structural programmes and advocacy efforts by LSAs and peer educators. By educating male partners and community members on the benefits of PrEP, the program reduced stigma and fostered a more supportive environment for AGYW. These findings provide actionable insights for public health initiatives aiming to improve PrEP persistence, with implications for scaling effective HIV prevention strategies among AGYW in similar settings.

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Deep Dive into Viral Load Results of Transgender Persons in Nigeria: Interrogating a Possible New Sanctuary for HIV Infection

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Background: Transgender describes a person whose gender identity does not match his assigned sex at birth. Transgender persons (TGs) are a vulnerable and marginalized population, disproportionately affected by HIV with studies showing a forty-nine times higher risk of contracting the infection among Transgender Women. This strong nexus is facilitated by multilevel, intersecting factors including the experience of stigma, violence, rejection and, other factors like poor risk perception, poor health-seeking behavior and, limited access to HIV services. Viral-load suppression is the marker of ARV success, yet few programs in Nigeria target TGs for HIV case finding, ARV treatment and, retention, hence, there is a dearth of studies into HIV services, especially viral load suppression among TGs in the country. The aim of the study was to determine the pattern of viral suppression among TGs and nthe relationships between location and sex of the TGs with viral suppression.

Methods: Secondary data analysis of viral load results of TGs in Akwa Ibom, Cross River, and Lagos from the KP-CARE 1 project Retention and Audit Determination Tool (RADET) files (October 2022 to September 2024). Mean with standard deviations were computed for continuous variables like viral load results, and frequency tables were generated for categorical variables. Chi-square tests and t-test were used for the bivariate analysis of variables. All tests were done at 5% level of statistical significance ($p=0.05$).

Results: There were 543 individuals in the study, between the ages of 19 and 31 years with a mean age of 24.3 ± 4.3 years, duration on treatment among respondents was between 3 and 29

months with a mean duration of 12 ± 5.6 months. TGs had a general VL suppression rate of 96%, male-to-female trans-persons had higher and better viral load suppression rate ($p=0.001$) and trans-persons in Akwa Ibom had a poorer viral suppression rate ($p=0.001$)

Conclusions: The result provides evidence that Trans persons in Akwa Ibom, and female-to-male TGs have relatively poorer viral load suppression. This underscores the need to target them with adherence counseling and peer-led retention support services.

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Assessment of Pre-Exposure Prophylaxis Persistence among Adolescent Girls and Young Women in the DREAMS Programme in South Africa from 2021 to 2024

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Background: Pre-exposure prophylaxis (PrEP) is a crucial medicine that can prevent HIV infection, especially among adolescent girls and young women (AGYW) residing in settings heavily burdened by HIV. Despite substantial efforts to increase PrEP uptake, sustaining persistence among AGYW remains a significant challenge, with many discontinuing use shortly after initiation. In South Africa's DREAMS programme, implemented by TB HIV Care, low PrEP persistence rates have hindered the achievement of long-term prevention goals. This study examined a correlation between PrEP persistence and interventions aimed to improve persistence over a three-year period.

Materials and Methods: Routine electronic medical record data from female clients aged 15-24 years initiating PrEP in all PrEP sites in five districts were used. Data from 3 financial years were used, with only clients initiating in the first 9 months of the final year included. We analysed 1-month and 4-month follow-up data descriptively. Four key informant interviews (KIIs) with program staff provided contextual insights into implementation challenges and adaptations. In early 2022, the program introduced a regional call center to support AGYW through structured case management, including text reminders, persistence counselling, and follow-up on missed appointments. In 2023, these efforts were strengthened further with expanded involvement of learner support agents (LSAs) in schools and community peers and focused attention on providing localized PrEP support through the launch of a digital call center platform, and enhanced supervision of operators.

Results: Descriptive analysis revealed marked improvements in PrEP persistence following the interventions. At the 1-month follow-up, persistence increased from 43% to 61% (18% gain) from 2021 to 2022 with a further increase to 64% (3% gain) in 2023. At the 4-month follow-up, persistence rose from 21% to 37% (16% gain) from 2021 to 2022, and to 48% in 2023 (11% gain). These improvements highlight the effectiveness of tailored support strategies.

KIIs underscored that programmatic shifts were crucial in driving these outcomes. Initially, the program prioritized reaching PrEP initiation targets, but by 2022, staff had shifted focus toward long-term retention. Clinicians began assessing AGYW's readiness for PrEP more thoroughly, offering alternative prevention options where appropriate. Furthermore, program staff observed that initiating AGYW on PrEP after completing structural interventions helped increase awareness of HIV risk and the value of prevention strategies. Community engagement efforts also evolved, aiming to address conservative social norms that often led to resistance from caregivers and sexual partners.

Conclusions: PrEP persistence among AGYW remains a challenge, yet this study demonstrates that focused, sustained support may strengthen retention. Key strategies included shifting programmatic focus from initiation to persistence, implementing case management systems, and enhancing community education to address stigma through structural programmes and advocacy efforts by LSAs and peer educators. By educating male partners and community members on the benefits of PrEP, the program reduced stigma and fostered a more supportive environment for AGYW. These findings provide actionable insights for public health initiatives aiming to improve PrEP persistence, with implications for scaling effective HIV prevention strategies among AGYW in similar settings.

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Cost-Effectiveness of Cabotegravir Long-Acting for HIV Pre-Exposure Prophylaxis (PrEP): A Systematic Review of Modelling Studies

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Background: Cabotegravir long-acting (CAB-LA) is a promising HIV prevention strategy; however, its cost-effectiveness compared to oral pre-exposure prophylaxis (PrEP) varies across settings. This systematic review examines the economic viability of CAB-LA interventions using modelling studies in diverse populations.

Methods: We searched literature databases for modelling studies on the cost-effectiveness of CAB-LA in various settings. The search was executed in PubMed, Web of Science, Scopus, and the Cochrane Library. The search was conducted in January, 2025, and was limited to English studies; but there was no limitation on year of publication. Quality assessment was based on the 2022 CHEERS checklist for economic evaluation studies. A narrative synthesis was conducted to summarize the findings. Key outcomes to be extracted included study characteristics and design, incremental cost-effectiveness ratios (ICERs), adherence rates, and willingness-to-pay (WTP) thresholds.

Results: The search retrieved 19 results, but only six modeling studies meeting predefined inclusion criteria were included. These studies evaluated CAB-LA among various populations, including heterosexual men, women at high risk of HIV, men who have sex with men (MSM), transgender women (TGW), and large simulated cohorts. The studies employed static epidemiological models, deterministic compartmental models, and Markov cohort models to evaluate CAB-LA alongside oral

PrEP. Quality assessment results shows that studies were of moderate and high quality. CAB-LA demonstrated potential cost-effectiveness under specific conditions. In Sub-Saharan Africa, CAB-LA achieved ICERs below \$1,000 per disability-adjusted life year (DALY) averted at adherence rates exceeding 75%. In high-income settings, ICERs for CAB-LA remained below \$98,000 per quality-adjusted life year (QALY) when drug costs were reduced to \$4,100/year. Low-income settings required annual costs below \$16 for cost-effectiveness. Epidemiological benefits included a 30%-40% reduction in HIV incidence with optimal adherence. Drug pricing, adherence, and quarterly monitoring were identified as key determinants of cost-effectiveness. Comparisons with oral PrEP indicated that CAB-LA could be more cost-effective in populations with low adherence to oral regimens.

Conclusions: CAB-LA is a cost-effective HIV prevention intervention under specific economic and adherence scenarios. Reducing drug costs and enhancing adherence strategies are critical to optimizing its economic and epidemiological impact.

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Improving PrEP Uptake, Adherence, and Continuity Among Female Sex Workers

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Background: Female sex workers (FSW) are at an increased risk of HIV infection due to occupational exposure and gender-related power imbalances. Pre-exposure prophylaxis (PrEP) has demonstrated high efficacy in preventing HIV transmission; however, challenges such as stigma, knowledge gaps, and occupational mobility hinder its uptake, adherence, and continuity. This study aimed at understanding the barriers to PrEP uptake and adherence among FSW and explored strategies to mitigate these challenges.

Methods: A qualitative study design was employed using in-depth interviews and focus group discussions with FSW and service providers from two comprehensive HIV service facilities under the CDC/PEPFAR HIV services implemented by Caritas Nigeria in Abia State, Nigeria. A semi-structured interview guide was used to facilitate discussions and interviews. Interviews and discussions were transcribed verbatim and analyzed with Nvivo. A modified grounded theory approach and inductive analysis were used to identify and categorize codes into themes and three coders developed a codebook from the transcripts. Themes were ranked based on the strength of their emergence.

Results: A total of 42 in-depth interviews (34 FSW clients and 8 service providers) and 6 focus group discussions (41 FSW participants across four locations) were conducted. The analysis yielded 781 codes, from which seven themes emerged: stigma, access to information, pill burden, mobility, differentiated service delivery, the proximity of services, and expanded service networks. Stigma, particularly self-stigma and anticipated stigma was a significant barrier to uptake. Community-differentiated services and expanded PrEP access points, such as pharmacies near hotspots, were strongly recommended. One participant noted, "If you identify big pharmacy outlets close to hotspots, it will be very easy for

community members, even at night while working."

Conclusions: There is a need for targeted PrEP demand creation, and PrEP literacy for FSW delivered in a way that takes their peculiarities. Community-differentiated PrEP services that accommodate the unique needs of FSW are critical for improving adherence and continuity.

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Using Social Behaviour Change in Improving Access to Quality HIV, Sexual and Reproductive Health and Gender-Based Violence (HIV/SRH/GBV) Services among Adolescent Girls and Young Women (AGYW), Adolescent Boys and Young Men (ABYM) and Women of Reproductive Age Group in Institutions of Higher Learning and Surrounding Communities

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Background: Blantyre District Health Office has been working hand in hand with the Malawi Network of AIDS Service Organizations (MANASO) Pamodzi project since February 2021 to February 2026. The goal is to contribute towards reduction of annual HIV incidence, increased annual viral load suppression and reduced maternal and neonatal mortality rate thereby improving access to and quality of HIV/SRH/GBV services among Adolescent Girls and Young Women (AGYW), Adolescent Boys and Young Men (ABYM) and Women of reproductive age group in the institutions of higher learning and their surrounding communities in Blantyre by February 2026. For institution of higher learning the project has been implemented at Malawi University of Business and Applied Sciences (MUBAS) which is one of the biggest Universities in Malawi.

Description: The project has been using various social behaviour Change methodologies which includes community awareness using discussion forums through formulated groups and events such as bonanzas, interactive drama sessions, traditional dances and music workshops by both

community and institution ambassadors. Pamodzi project also has also been using community facilitators, 23 in total to conduct ART treatment literacy sessions to members from 23 youth and adult support groups. Other methodologies used were community engagement through community scorecard sessions which provided opportunity to AGYW, ABYM and women of childbearing age group to discuss with service providers for improved HIV/SRHR/ GBV services.

Results: The ambassadors reached out to 68,394 people (31, 616 males: 36, 778 females) with HIV/SRH/GBV messages out of the targeted 65, 000. A total of 6 music workshops were conducted and reached out to 69,03(3,116 males: 3,787 females). At least 11 community scorecard sessions and 11 sessions of advocacy and follow up on scorecard action points were conducted with service providers and communities including at MUBAS. Additionally, a total of 276 ART treatment literacy sessions were conducted to members from 23 youth and adult support groups.

MANASO Pamodzi project has managed to bring access to HIV/SRHR/GBV services to AGYW, ABYM and women of childbearing age group. A total 27,655 Community members and 6,137 AGYW, ABYM and women of reproductive age reported to have knowledge of where to access SRHR services while 8,108 Community members and 1,156 AGYW, ABYM, and Women of reproductive age reported to have accessed SRHR services. A total of 28,902 Community members and 1,091 AGYW, ABYM, WCBAG reported to have accessed various family planning methods. These were also inclusive of students from the institutions of higher learning.

Conclusion: The project continues to provide equal opportunities to adolescent girls, boys and young women of reproductive age to actively participate in decision making through deliberate inclusion of the said groups in all forums. These social behaviour change strategies used have been effective in reaching out to the groups of interest in the project because they were client centered, by focusing on the youths their preferences on communication channels, their needs and barriers on and how they prefer to access health services. The project continues to consider gender issues whenever planning and implementing its activities.

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Prevalence of HIV and Hypertension among Females Living in Lusaka, Zambia: A Cross-Sectional Study

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Background: The dual burden of HIV and hypertension presents a significant public health challenge, particularly among females in sub-Saharan Africa. With the increasing longevity of people living with HIV (PLHIV) due to antiretroviral therapy (ART), the prevalence of non-communicable diseases (NCDs) such as hypertension is rising. This study examines the prevalence of hypertension among females living with HIV in Lusaka, Zambia, and highlights the need for integrated HIV-NCD management strategies.

Methods: A cross-sectional study was conducted from October 2023 to May 2024 across major health facilities in Lusaka providing HIV and NCD services. The study included females aged 15 years and above who were actively enrolled in HIV care. Data were extracted from electronic health records, including the District Health Information System (DHIS2). Hypertension was defined as a recorded blood pressure of $\geq 140/90$ mmHg or current use of antihypertensive medication. The prevalence of hypertension among females living with HIV was determined, and demographic and clinical characteristics were analyzed.

Results: A total of 67,709 females living with HIV were screened for hypertension during the study period. Among them, 4,213 (6.2%) were found to have elevated blood pressure, indicating hypertension. Of those diagnosed, 4,176 (99.1%) were successfully managed for hypertension within the ART department. The findings suggest a significant burden of hypertension among females receiving HIV care, particularly among older individuals and those with prolonged ART exposure. These results emphasize the need for routine blood pressure monitoring and early intervention within HIV care settings.

Conclusion: The co-existence of HIV and hypertension among females in Lusaka highlights the importance of integrated care models that address both infectious and non-communicable diseases. Strengthening routine hypertension screening, lifestyle counseling, and access to antihypertensive treatment within ART clinics can improve health outcomes. Further research is needed to assess the long-term impact of ART on hypertension risk and evaluate the effectiveness of integrated HIV-NCD management programs.

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Bridging the Gap: Understanding Intimate Partner Violence, Service Access, and Resource Challenges from Women Living with HIV and Healthcare Providers in Namibia (2022- 2024)

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Background: In Namibia, over 33% of women report experiencing intimate partner violence (IPV), with higher rates among women living with HIV (WLHIV). The integration of Partner Notification Services (PNS) and/or HIV recency surveillance testing with the return of results into HIV services raises concerns for exacerbating IPV. This qualitative study, part of a mixed-methods evaluation, explored experiences and perceptions of WLHIV and healthcare providers (HCPs) regarding IPV in the context of HIV services, and assessed access to and quality of available resources to address IPV.

Methods: From April 2022 to January 2024, we conducted in-depth interviews with 39 newly diagnosed WLHIV who agreed to recency surveillance testing and 41 HCPs experienced in PNS, recency surveillance testing, or social service provision across 37 health facilities in five high-volume districts throughout Namibia. Verbatim transcripts were double-coded by two

independent coders via structured codebook, followed by thematic analysis to explore experiences related to IPV risks within HIV services.

Results: Among the interviewed WLHIV, most were aged 20–24 years (28%), and 72% were never-married. Twelve women received their recency results at data collection, and five disclosed them. The HCP cohort included 24 nurses/health assistants, eight community-based counselors, and nine social service providers. Our analysis identified three key themes: 1) WLHIV and HCPs perceived IPV as a serious concern; 2) barriers existed for WLHIV accessing IPV services; and 3) HCPs faced challenges addressing IPV within HIV service delivery.

WLHIV, with or without receipt of their recency results, expressed anxiety about disclosing their test results due to fears of partner violence linked to blame for HIV transmission, particularly in power-imbalanced relationships. HCPs noted that IPV is often underreported due to fears of retribution, financial dependence, and cultural norms discouraging disclosure.

Existing IPV services were beneficial to women, yet those in remote areas faced structural barriers such as stigma and limited awareness of available services. Challenges included transportation issues, financial constraints, privacy concerns, and delays in receiving support. Consequently, some women sought help from family or community members instead of formal services.

HCPs wanted to address IPV, but their efforts were often hindered by inadequate training, particularly regarding Safe & Ethical Index Testing/PNS, limited access to social workers (SW), and a lack of standardized referral procedures. Transportation challenges for outreach efforts further restricted accessibility. Both WLHIV and HCPs emphasized the need for a multifaceted approach to effectively address IPV within HIV care, which included enhanced training for HCPs, improved service delivery, and community-based interventions to empower women.

Conclusions: This study highlighted areas where a comprehensive approach could strengthen Namibia's efforts to prevent and respond to IPV. Key recommendations suggested training to improve IPV screening for WLHIV and supportive services, including mental health resources. Additionally, structural barriers could be addressed through standardized procedures and improved resource allocation for additional SWs, private spaces, and transportation. Moreover, by addressing personal and cultural barriers through

community education and culturally sensitive counseling, significant strides can be made in reducing violence against WLHIV and enhancing their overall well-being.



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“I Didn't Think That I Would Have to Care About HIV”: Awareness and Acceptance of HIV PrEP Among Cisgender Women in Recovery

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Background: Multi-strategic evidenced-based programs to prevent HIV and improve the pre-exposure prophylaxis (PrEP) care continuum for Black cisgender women with co-occurring mental health and substance use disorders (SUD) are lacking. In partnership with a community-based service organization in Philadelphia and cisgender women enrolled in the organization's substance use treatment facilities, we performed a pre-implementation inquiry to prepare for, adapting and piloting an efficacious mental health intervention for Black women to include linkage to PrEP.

Methods: Guided by the Consolidated Framework for Implementation Science Research, we conducted semi-structured interviews with residents and a focus group with staff to assess feasibility of delivering an adapted mental health intervention, baseline knowledge, and acceptability of PrEP. Residents were eligible if they were ≥ 18 years, spoke English and identified as a cisgender woman. We aimed to primarily interview Black women but did not exclude women from other racial and ethnic backgrounds. Staff were eligible if they were ≥ 18 years, employed with the community service organization and engaged with day-to-day activities. Using a general inductive approach interviews were coded and analyzed into themes using NVivo Plus.

Results: Data collection began June 2024 and concluded October 2024. We spoke to twelve cisgender women residents identifying as Black (9), White (2) or Asian (1) The median age of residents and staff was 40 (IQR 12.5) and 47 (IQR 43),

respectively. Thirteen staff, including a director, recovery specialists and therapists participated in a focus group. Conversations with both residents and staff focused on the risk of HIV acquisition through unprotected sex and did not mention transmission through intravenous drug use. Interviews revealed most residents did not believe they were vulnerable to HIV acquisition and identified gay men as the population most vulnerable. Prior to interacting with this study's researchers, neither residents nor staff knew about PrEP. Multiple residents reflected on seasons in their life when PrEP would have been beneficial and were angered that they were unaware of the option. Residents and staff were uniformly in favor of the proposed program. However, staff questioned if a new program should be created or should be integrated into an existing program, citing concerns about time and competing priorities.

Conclusions: Despite living in an Ending the HIV Epidemic priority jurisdiction, having a higher likelihood of co-occurring mental health disorders and thus increased vulnerability to HIV, cisgender women receiving treatment for SUD were unaware of PrEP. However, multiple women identified times in their life when PrEP would have been beneficial and were keenly aware of missed opportunities for PrEP engagement. Lastly, acceptance of an adapted mental health intervention to include linkage to PrEP was high among both residents and staff. Residents and staff at this community-based service organization recognized the need and showed overwhelming support for tailored PrEP implementation interventions to address breakdowns in the PrEP care continuum for cisgender women.

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Women Living with HIV: How Far from Fulfilling the Gap?

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Background: The aim of this study was to define the clinical profile of women living with HIV (WLWH) to find potential gaps in care and to implement strategies for retention and improving quality of life.

Materials and methods: Retrospective study including cisgender WLWH who attended HIV Clinic in Modena from 1st Jan 1996 to 31st Jan 2024. Women were stratified according to geographical origin and follow up (FU) status. Demographic characteristics, data related to HIV and comorbidities were compared according the two main prevalent ethnic groups in WLWH in active FU. Active FU was defined as the presence of at least one visit after 1st Jan 2023.

Results: Nine-hundred-sixty-four women had at least one access in HIV Clinic since 1996: 67.6% Caucasian, 28% African, 1% Asiatic and 3% Central/South-American. Among those, 284(29.5%) were lost to FU (40.5% and 55% of them were African and Caucasian, respectively), 49(5.1%) moved to other centre, 117(12.2%) deceased. Among 491 women in active FU, 368(72%) and 123(24%) were Caucasian and African, respectively. Caucasian women were overall older than African ones at last FU (57[IQR 34-70] vs 46[IQR 37-71] years, $p<0.01$). The prevalence of HBV was higher in African women (10.6% vs 2.4%, $p=0.001$), while HCV was more prevalent in Caucasian WLWH(37.8% vs 1.6%, $p<0.001$). Heterosexual intercourse was the main HIV risk factors in both groups; intravenous drug use was, indeed, more frequent in Caucasian women (28.0% vs 0.8%, $p<0.001$). African women had lower CD4 count at HIV diagnosis(326[IQR 42-715] vs 458[IQR 39-1232], $p<0.001$) and also at last FU (702.9[IQR 251.5-1290] vs 789[IQR 288-1512], $p=0.046$); moreover, African WLWH experienced more frequently episodes of virological failure (0[IQR 0-

4] vs 0[IQR 0-2], $p=0.021$), defined as HIV RNA>200 copies/ml on antiretroviral therapy (ART) and/or no visit for more than 18 months. Regarding current ART, African WLWH were more frequently on three-drug regimen (3DR) (80.5% vs 46.5%, $p<0.001$). The main use of NNRTI/TFX/XTC in single-tablet regimen was prevalent in African women than Caucasian ones (50% vs 38%, $p=0.012$), while 2nd generation INSTI were less used ($p<0.01$).

Concerning comorbidities, Caucasian WLWH were more frequently smokers (39.9% vs 5.7%, $p=0.000$) and dyslipidemic (67.9% vs 48.8%, $p<0.01$), while African women were more frequently obese (29.3% vs 12.2%, $p<0.001$) and diabetic (15.4% vs 7.1%, $p=0.005$). Osteoporosis (24.5% vs 6.5%, $p=0.015$) and menopause (53.2% vs 14.6%, $p<0.001$) were more prevalent in Caucasian women; although screening and detection of any cancer was more frequent in Caucasian WLWH, prevalence of anal cancer was higher in African WLWH (25% vs 6%).

Conclusions: African WLWH were generally less adherent, with higher rate of loss to follow-up and virological failure. Moreover, they were characterised by higher burden of comorbidities. That led to multiple vicious circles, enhanced by different cultural, social and economic determinants: treatment choice of 3DR versus dual regimen, difficulties in screening and management of comorbidities, lower rate of cancer screening. More efforts are needed to fulfil the gap among African WLWH, adopting different retention-in-care, screening and preventive strategies in order to improve their quality of life.

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Stigmatized Attitude of Healthcare Providers as a Barrier to Delivering Services to Women Vulnerable to HIV in Kazakhstan

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Background: Kazakhstan is one of the few countries in Eastern Europe and Central Asia (EECA) experiencing a rising incidence of HIV. Women at high risk for HIV face significant stigma and unmet health needs. Stigma from healthcare providers (HCP) is a major obstacle to HIV prevention and care. According to the Index stigma report, 31% of women who exchange sex in Kazakhstan avoid seeking medical care due to stigma.

Women experience nearly twice the level of stigma compared to men in the country. Women living with HIV and from key populations report denial of healthcare services (23.1%), gossip by staff (46.2%), verbal abuse (23.1%), and non-consensual disclosure of HIV status (30.8%). Addressing stigma is essential for improving HIV-related health outcomes. Evidence demonstrates that stigma reduction interventions focused on shifting awareness, behaviors, and clinic norms can enhance healthcare engagement. Community-driven approaches involving those directly affected by HIV have proven effective. The Orleu Project addresses these challenges through a multilevel, intersectional anti-stigma intervention targeting women at risk and HCPs in Kazakhstan.

Methods: From July to September 2024, we recruited 150 women at risk across 18 regions of Kazakhstan through partnerships with regional NGOs, Friendly clinics, community leaders, and snowball sampling methods. Participants completed an online baseline survey. The survey collected data on sociodemographic characteristics, healthcare access, stigma experiences, and medical mistrust.

Results: The survey revealed significant barriers to healthcare access among women at risk. In the past six months, 41% of participants were unable to access necessary health services, and 34% reported experiencing poor treatment from HCPs due to sex exchange and/or drug use, and 32% of participants expressed mistrust of providers. These stigmatizing encounters contributed to widespread medical mistrust and reduced engagement in HIV services.

To address these barriers, the Orleu Project engaged both women and HCPs in a collaborative process to co-design and implement a stigma reduction intervention. Leveraging crowdsourcing and message-testing strategies, we developed a clinic-level messaging campaign and a training program tailored to reducing stigma among HCPs. This intervention is currently being pilot tested in 10 clinics across Kazakhstan with the aim of improving patient-provider relationships, increasing trust, and enhancing access to HIV services.

Conclusion: Community-driven, participatory interventions co-designed with the community have the potential to significantly reduce stigma in healthcare settings and improve engagement in HIV services. Findings from the Orleu Project highlight the importance of addressing provider stigma to enhance the HIV care continuum for stigmatized women leading to better health outcomes and reducing the HIV burden in the region. The project's participatory approach and preliminary successes in pilot testing support the scaling up of anti-stigma training programs for healthcare providers in Kazakhstan and the broader EECA region.

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Transforming HIV Care for Adolescent Girls and Young Women: A Holistic Approach to ART Adherence and Mental Health Under the DREAMS (Determined, Resilient, Empowered, Aids Free, Mentored and Safe) Initiative in Kapiri Mposhi, Central Zambia.

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Background: Adolescent girls and young women (AGYW) living with HIV in Zambia face intersecting challenges, including stigma, mental health conditions, and socio-economic instability, which significantly hinder adherence to antiretroviral therapy (ART) and overall well-being. To overcome these barriers, an integrated and holistic care model addressing psychological, social, and economic needs alongside medical treatment is essential.

Materials & Methods: As part of the USAID Controlling HIV Epidemic for Key and Underserved Populations (CHEKUP II) Activity, implemented under the DREAMS Initiative, a multi-faceted intervention was carried out targeting AGYW aged 10–24 living with HIV in Kapiri Mposhi, Zambia. The program offered psychological first aid (PFA), peer mentorship, therapy sessions, and economic strengthening activities such as savings groups. Caregiver engagement was prioritized to enhance family support. Mental health was assessed using validated tools including the PHQ-9 for depression, CAGE for substance use, and Suicide Ideation assessments. ART adherence, mental health outcomes, and economic stability indicators were monitored over 12 months and analyzed descriptively using DHIS2 data systems.

Results: Out of 6,084 AGYW screened for mental health challenges, 35 were confirmed living with

HIV and enrolled in the intervention. Therapy sessions achieved 100% participation, and all participants received PFA. Economic strengthening activities such as savings groups resulted in improved financial independence, enabling participants to meet transport costs for clinic visits and medications. ART adherence rates increased from 90% to 100%, while depression and anxiety scores declined significantly. Intimate partner violence (IPV) screening was successfully conducted for all participants, identifying and addressing safety concerns. Increased caregiver support and strengthened social connectedness were notable outcomes.

Conclusions: This intervention demonstrated the effectiveness of integrating mental health, social, and economic support into ART adherence programs for AGYW living with HIV. The findings highlight the importance of addressing broader determinants of health to achieve sustainable adherence and well-being. This holistic care model presents a scalable and impactful approach for improving outcomes among AGYW in resource-limited settings, offering a blueprint for replication in similar contexts.

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Stigmatization Among MSM and FSW: A Systematic Review on the Leading Cause of Decline in the Access to and Use of Prep in Sub-Saharan Africa

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Background: Sub-Saharan Africa has the highest burden of HIV worldwide. Hence the need for adequate PrEP delivery and progress towards achieving UNAIDS 2030 goals in this region. Key populations; men who have sex with men (MSM) and female sex workers (FSW) are associated with sexual behaviors often judged negatively by society hence leading to stigmatization. This study aims to evaluate the impact of stigmatization on the access to and use of PrEP in this region.

Method: A systematic review, following the PRISMA guidelines was conducted in December 2024. PubMed, Google Scholar, ScienceDirect and Scopus databases were searched with terms such as: "stigmatization," "FSW," "MSM," "Sub-Saharan Africa," "PrEP," "HIV Prevention," and "Barriers to PrEP Use". Full peer-reviewed articles published January 2014 - December 2024 in English were retrieved for the review, considering the eligibility criteria. Quality assessment was conducted utilizing the AMSTAR-2 Tool. Thematic analysis and categorization techniques were performed to discern recurring patterns and themes.

Result: Out of 719 screened studies, twenty-two studies met the inclusion criteria. Ten (45%) and Fifteen (68%) studies covered the MSM and FSW population respectively. Thirteen studies (59%)

mentioned awareness of PrEP among these populations. Findings from nineteen studies (86.36%) indicated high levels of stigmatization as significant barriers reducing uptake, adherence and retention of PrEP. From the reviewed studies, healthcare providers (40%), community (72.7%) and Family (31.8%) were mentioned as sources of stigmatization. Fourteen studies (63.6%) reported perceived stigma while eight studies (36%) reported enacted stigma. From the intersecting impact of Stigma and PrEP use in these populations, PrEP was mostly viewed as Anti-retroviral therapy (ART) taken by people living with HIV (PLWHIV) (78.9%) and as drugs used in sex work (21%).

Conclusion: MSM and FSW in Sub-Saharan Africa experience stigmatization, hence reducing PrEP use. Multi-level interventions like community-based education programs reducing PrEP use misconceptions and training of healthcare professionals to deliver non-judgmental care are recommended to address stigma. This provides suitable environment for PrEP access and utilization, hence maximizing the preventive potential of PrEP in key populations.

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Long-Acting Lenacapavir Versus Cabotegravir: A Comparative Cross-Sectional Assessment of the Awareness, Acceptability, and Willingness to Pay for Pre-exposure Prophylaxis among Young Sports Women of Reproductive Ages in a Nigerian Community

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Background: Young sports women of reproductive age are at increased risk of HIV due to heightened exposure to sexual violence and harassment. Long-acting Pre-exposure Prophylaxis (LA-PrEP) offer improved adherence, yet the acceptance and willingness to pay (WTP) for LA-PrEP among young sports women has not been assessed. This study assessed the awareness, acceptability and WTP for long-acting injectable Lenacapavir (LEN-LA) and Cabotegravir (CAB-LA) among young sports women of reproductive ages in a Nigerian Community.

Method: A cross-sectional design was adopted to obtain responses from women aged 18-35years in Lagos, Nigeria in 2024 after Institutional Review Board approval. The awareness of PrEP was assessed before an educational intervention, then the acceptability and WTP for LEN-LA and CAB-LA of 122 randomly sampled respondents were assessed using a 30-item validated questionnaire. WTP was obtained in Naira (N) using a contingent valuation (\$1=N1749.51). Appropriate descriptive and inferential analysis were conducted on the data, with significance set at $p < 0.05$.

Results: A total of 86 (70.8%) respondents returned validly completed questionnaires. About half of the respondents, [42 (48.8%)], were aged 18-24 years, with 73 (84.9%) being unmarried.

About half [50 (58.1%)], of the respondents knew their HIV status while 41 (47.7%) respondents were unaware of their sex partner's HIV status. More than half, [53 (61.6%)], respondents have never heard of PrEP for HIV prevention, and 74 (86.0%) are unaware of injectable PrEP options. LEN-LA and CAB-LA were the preferred PrEP choices of 39 (45.3%) and 20 (23.3%) respondents respectively while 27 (31.4%) preferred neither of the LA-PrEP. Respondents who preferred to take LA-PrEP every month, every six months and yearly were 12 (14.0%), 24 (27.9%) and 50 (58.1%) respectively. Respondents that indicated a positive WTP for LEN-LA and CAB-LA were 38 (44.2%) and 27 (31.4%) respectively. Affordability [13 (15.1%)] and sourcing the medication from government [28 (32.6%)] informed the respondents' WTP choices ($p < 0.001$). The mean WTP amount for each PrEP was N14552.63±17363.67 (LEN-LA) and N87269.23±49681.03 (CAB-LA); $t(df) = -7.511(21)$ $p < 0.001$

Conclusion: The young sports women had low awareness of PrEP options although they preferred LEN-LA over CAB-LA after education intervention, more half were not WTP for the options due to its affordability. Those WTP indicated values that were below the market prices of the two. It is recommended that public health education should be employed to increase the awareness and acceptance of LA-PrEP among young women in Nigeria.

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Black Transgender and Cisgender Women's Experiences with PrEP and Reasons for Choosing Injectable PrEP

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Background: Black women account for ~50% of new HIV diagnoses among transgender women (TGW) and cisgender women (CGW) in the United States (US). Notably, uptake of HIV PrEP has been low among Black women; therefore, understanding their motivation for initiation is key to improving engagement. We present differences in perceptions of PrEP and reasons for choosing long-acting injectable cabotegravir (CAB LA) in Black TGW and CGW prior to initiation.

Materials and Methods: EBONI is the first industry-led, gender-concordant, Phase 4 hybrid implementation study evaluating the implementation of CAB LA delivery to Black TGW and CGW across US "Ending the HIV Epidemic" jurisdictions. From November 2022 to September 2024, 151 women enrolled from 20 clinics and completed baseline surveys. A purposive sample of 40 women completed interviews that were transcribed. Descriptive statistics and representative quotes are presented.

Results: Overall, 111 (74%) participants were CGW, 40 (26%) were TGW, and 6 (4%) were Hispanic. Mean age was 36 years (standard deviation [SD]: 10.3). Additionally, 75% (TGW: 95% vs. CGW: 68%) and 52% (TGW: 63% vs. CGW: 49%) had heard of oral PrEP and CAB LA, respectively, and 36% (TGW: 10% vs. CGW: 46%) had never taken PrEP. Overall, 26% of women were unaware of their partner's HIV status. A lower proportion of

CGW reported perceiving positive community attitudes toward PrEP compared with TGW (40% vs. 87%). Two common reasons reported for choosing CAB LA were wanting a prevention option that is more convenient (TGW: 45%; CGW: 42%; "It's a great match for me. I'm a business owner, I have a family...And also I had a son who had a medical issue...switching to long-acting PrEP has really made my peace of mind just a lot better...I can make time to schedule to do that, versus having to do something daily." [CGW]) and often forgetting to take pills (TGW: 43%; CGW: 37%; "and you maybe forgot your pills, but once you know you got that shot in you, it's a great feeling to know that you didn't miss that one pill a day." [TGW]). Key differences in motivations by gender identity included having never tried PrEP before but wanting protection from HIV (TGW: 20% vs. CGW: 43%), not having to worry about HIV every day (TGW: 20% vs. CGW: 32%), and CAB LA being suggested by their doctor (TGW: 30% vs. CGW: 15%). Most women (87%) reported having no concerns about CAB LA and found it appropriate (mean/total possible score [SD]: 4.4/5.0 [0.73]) and feasible (mean/total possible score [SD]: 4.4/5.0 [0.69]).

Conclusions: A total of 36% of Black women in the study were new PrEP users, suggesting that CAB PrEP is expanding prevention coverage among this population. At initiation, TGW and CGW believed CAB LA was appropriate and feasible for their lives. There were notable differences in community attitudes towards PrEP, awareness of PrEP, and reasons for choosing CAB LA by gender identity. Equipping providers with nuanced PrEP discussion strategies that are sensitive to gender identity could support PrEP uptake among Black women.

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Assessment of Vertical HIV

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Introduction: In Mozambique, approximately 2.4 million people are living with HIV, including 116,000 HIV-positive pregnant women (2023, Spectrum V. 6.32). The country faces one of the highest rates of new HIV infections in children, the majority of which result from vertical transmission, with an estimated rate of 10% (2022, Spectrum V. 6.29). Despite preventive interventions, persistent positive PCR results in children over 2 months of age are often attributed to failures in antiretroviral treatment (ART) adherence by mothers and transmission during the breastfeeding period, which remains a critical time for preventing vertical HIV transmission.

Methodology: In 2023, data from 1,692 health units in Mozambique providing PMTCT services were analysed, using conventional Infection Diagnosis (EID) through dried blood spot (DBS) samples or the Transmission Rapid Diagnostic Test (TSD) with the M-PIMA platform. The PCR coverage was 88%, although PCR testing in children under 2 months of age remains insufficient in some provinces.

Results: During the analysed period, 11% of children tested over 2 months old had a positive PCR result. The positivity rate was significantly higher in children tested at 2 months of age or older (11%), compared to those tested under 2 months (2%). These results suggest that transmission predominantly occurs during the breastfeeding period, which is the time of greatest exposure to HIV due to its extended duration. Factors such as low adherence to healthcare services (HS), high mobility in the postpartum period, long distances to health units, and late return for PCR testing contributed to these results.

Interventions: Following the identification of gaps, actions were implemented to improve follow-up for mothers and exposed children, including: strengthening counselling for ART adherence during breastfeeding, improvements in EID for exposed children, and reducing the time between

sample collection and PCR result delivery. Additionally, a linkage tool for mentoring mothers was used, quarterly retesting for HIV-negative mothers, and the offering of PrEP for additional prevention. As a result, the PCR positivity rate in children over 2 months old was reduced to 12% after one year.

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Gaps and Solutions for Educating and Engaging Providers in Delivering HIV PrEP to Cisgender Women: A Scoping Review

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Background: There is an underutilization of HIV pre-exposure prophylaxis (PrEP) among women globally. We conducted a scoping review to identify provider-level educational needs, curricula, or interventions for prescribing PrEP to women.

Methods: We searched 4 databases (PubMed, CINAHL Plus, SCOPUS, Web of Science) (2012 – 03SEPT2024), using MeSH terms: [{"HIV" OR "human immunodeficiency virus" OR "HIV infection"} AND {"pre-exposure prophylaxis" OR "PrEP"} AND {"Education" OR "Training" OR "Curriculum" OR "Teaching" OR "Teach**" OR "Educat**"} AND {"women" OR "woman" OR "female"}]. We excluded: grey literature, dissertations, non-English articles, clinical-only studies, or articles on training only Infectious Diseases providers. We performed data extraction guided by the Arksey & O'Malley scoping review framework.

Results: We included 32 articles (identified 2888 articles, removed 1296 duplicates, excluded 1473 via title and abstract screening, excluded 88 via full-text screening, and added one companion article). Eight studies were from Africa, 23 from the USA, and 1 from Australia. Twenty of 32 articles were interventional (3 protocols), and 12 were non-interventional. Seven articles focused on PrEP for adolescent girls and young women. Twelve studies discussed unique educational interventions (audio/video recordings, lectures, expert training, case-based scenarios, role-playing, standardized patients, problem-solving workshops,

education on counseling/motivational interviewing, animation storyboards, shadowing). Eight studies highlighted decision-support tools (contacting PrEP experts, Extension for Community Healthcare Outcomes, on-site/technical support, templates, electronic prompts, "smart-phrases," coaching, and provider feedback). Nine studies identified provider challenges (misconceptions, knowledge gaps, discussing topics such as sex work and intimate partner violence) and training needs (cultural competency, flow diagrams for prescribing/monitoring, and ongoing training). Sixteen studies emphasized the integration of PrEP with other services (family planning, contraception, perinatal care, harm reduction, and sexual health care).

Discussion: There is a rich diversity of provider-level educational interventions for PrEP delivery to women, often harmonized with existing services but in limited geographic locations. Provider support should include algorithms and could form the basis of future implementation trials for HIV PrEP for women.

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Willingness to Accept Dapivirine-Levonorgestrel Vaginal Ring and Reasons for Hesitancy among Females in a Nigerian University.

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Introduction: The Dapivirine-Levonorgestrel Vaginal Ring combination for HIV prevention and contraception, although still undergoing clinical trials offers more benefits over the preventive monotherapies. These multi prevention technologies for sexual reproductive health will be beneficial for female Africans due to the high rate and association between maternal mortality and HIV. Female undergraduates are also predisposed to sexual activities, therefore there is need to assess any hesitancy as regards its use.

Objectives: This study evaluated the level of willingness and reasons for hesitancy with the use of the Dapivirine-Levonorgestrel Vaginal Ring among female undergraduates at University of Nigeria, Nsukka.

Methods: A cross-sectional design was carried out to obtain from female undergraduates at the University in 2024 using 22-item, 4-Section validated questionnaire. Descriptive and inferential statistics (Chi-square test) were used to analyze the data with the significance level set at $p \leq 0.05$. Dapivirine-levonorgestrel Vaginal Ring Use Hesitancy was defined as the percentage of participants who expressed unwillingness to use the ring.

Results: Of 189 respondent, Most were aged 18 - 24 (n=150, 79.4%) and (n = 186, 98.4%) unmarried. (n=69, 36.5%) did not know their HIV status. One respondent (n=1, 0.5%) indicated her partner was Living with HIV. Majority of the respondent (n=164, 86.8%) were unwilling to use the vaginal ring. Reasons for hesitancy among respondent to use the vaginal ring included Perceived discomfort with use (n=42, 22.2%), Bleeding as a stated side effect n=42, 22.2%), and other perceived side effects (n=62,32.8%). No

factors were significantly associated with the respondent's hesitancy.

Conclusions: There was high level of hesitancy and unwillingness to use the Novel Dapivirine-Levonorgestrel Vaginal Ring which was associated with perceived high risk to benefit ratio. Public health intervention should be employed to communicate the safety and self reported outcomes of the phases of clinical trials for the Vaginal Ring.

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Understanding the Drivers of Depression among Elderly Women Living with HIV in Ghana: A Cross-Sectional Study

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Introduction: Depression is a common mental health condition affecting approximately 40% of elderly women living with HIV (EWLHIV), impacting their overall well-being. In Ghana, this population faces several challenges, including social isolation and the dual burdens of aging and chronic illness. Identifying factors associated with depression is essential for targeted interventions. This cross-sectional study examines the socio-demographic, clinical, and psychosocial factors contributing to depression among EWLHIV in Ghana.

Methods: This cross-sectional study was conducted from September to December 2023 in three high-burden antiretroviral therapy (ART) facilities in the Greater Accra region of Ghana. Elderly women living with HIV (EWLHIV), aged 50 years and above and receiving ART for at least six months, were recruited using a multi-stage sampling technique. Data were collected via a structured questionnaire covering socio-demographic characteristics, clinical history, and psychosocial factors. Depression was assessed using the Patient Health Questionnaire-9 (PHQ-9). The dependent variable was depression, while independent variables included socio-demographic, clinical, and psychosocial factors. Data analysis was performed using STATA version 17.0, involving descriptive statistics, and multivariable logistic regression to identify predictors of depression. All variables were considered statistically significant at the 95% confidence interval ($p < 0.005$).

Results: The prevalence of depression among elderly women living with HIV/AIDS was 57.4%. Elderly women living with HIV/AIDS who were widowed [aOR =2.51; 95% CI=1.17-5.37], had primary education [aOR =4.07; 95% CI=1.70-9.75], had JHS/MSLC [aOR =2.31; 95% CI=1.09-4.90] and

currently living with someone [aOR =2.24; 95% CI=1.21-4.18] were more likely to be depressed.

Conclusion: The study demonstrates that personal factors health, and lifestyle activities influences the depression level among elderly women living with HIV. Policymakers should target women who are widowed, have primary and secondary education designing interventions to reduce their depression level.

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Community Perceptions of Long-Acting Lenacapavir as an Early Alternative to HIV Vaccine among Cisgender Female Sex Workers in Abuja, Nigeria

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Background: Cisgender female sex workers in Nigeria face significant barriers to HIV prevention, highlighting the need for innovative solutions. Long-acting lenacapavir offers a promising early alternative to an HIV vaccine, addressing gaps in adherence and access. This study assessed how cisgender female sex workers view the use of Lenacapavir for HIV prevention and the barriers or facilitators to its adoption.

Methods: This study adopted a cross-sectional design to obtain responses from 150 randomly sampled cisgender female sex workers in Abuja, Nigeria using a validated 24-item questionnaire. Their awareness of long acting lenacapavir, perception and beliefs as well as possible barriers, challenges and preferred rollout strategies was assessed. Frequencies and percentages were used to summarize the study's findings. Ethical approval was obtained from the Institutional review board.

Results: A total of 110 cisgender female sex workers responded to the questionnaire (73.3% response rate) with 67 (60.9%) being single and 45(40.9%) been a sex worker for 1-5 years. The Majority, 108(98.2%) have not heard about lenacapavir as a long-acting HIV prevention method. Only 22 (20%) believe lenacapavir could serve as an effective early alternative to an HIV vaccine with only 3(2.7%) very confident in lenacapavir's ability to prevent HIV over six months. Almost half 52 (47.3%) cited cost as a possible challenge that might prevent them from using lenacapavir and 78 (70.9%) think the community will accept lenacapavir. The majority, 94(85.5%) think their community would be open

to trying Lenacapavir as an early alternative to vaccine.

Conclusion: The majority of cisgender female sex workers have not heard of long acting lenacapavir for HIV prevention. Only a few of the sex workers are very confident in lenacapavir's ability to prevent HIV over 6 months with most citing cost as a possible barrier that might prevent them from using. Stakeholders should ensure more resources are focused on enlightening key populations like sex workers on long acting lenacapavir and should address the perceived barrier of cost by making it affordable.

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Evaluating the Potential of Lenacapavir and Doxy-PEP as a Game-Changer in HIV and STI Prevention for High Risk Populations in Abuja, Nigeria

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Background: High-risk populations like female sex workers in Nigeria face a dual burden of HIV and sexually transmitted infections (STIs), necessitating innovative prevention strategies. Lenacapavir, a long-acting HIV pre-exposure prophylaxis, and Doxycycline Post-Exposure Prophylaxis (Doxy-PEP) hold promise as transformative tools in reducing transmission in high risk populations. This study how this combined intervention could transform prevention strategies, improve health outcomes, and guide resource allocation to address HIV and STI risks effectively.

Methods: This study adopted a cross-sectional design to obtain responses from 150 randomly sampled female sex workers in Abuja, Nigeria using a validated 29-item questionnaire. Their knowledge, attitudes, perceptions, preferences for service delivery, barriers to use were assessed. Frequencies and percentages were used to summarize the study's findings. Ethical approval was obtained from the Institutional review board.

Results: A total of 114 female sex workers responded to the questionnaire (76 % response rate) with 51(44.7%) being single and 56(49.1%) have been a sex worker for 1-5 years. Over half, 72(63.2%) and 78 (68.4%) have not heard of lenacapavir and Doxy-PEP respectively. Just over half, 58(50.9%) are willing to use lenacapavir if available. The majority, 87(76.3%) do not believe these medications can improve HIV and STI prevention outcomes with 86(75.4%) concerned about potential side effects. A total of 75(65.8%) prefer long-acting injectables for prevention and 60(52.6%) citing effectiveness as the most important factor when deciding to use a new prevention method.

Conclusion: There is a significant gap in awareness of Lenacapavir and Doxy-PEP among high-risk populations, particularly female sex workers. Despite concerns over side effects, there is a clear preference for long-acting injectable methods emphasizing the need for tailored educational and outreach programs to address misconceptions and increase knowledge of these innovative prevention options. Stakeholders should ensure more resources are focused on educational interventions for high-risk populations like female sex workers

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Strengthening Community and Resilience: Addressing Mental Health and Stigma for Women with Perinatally Acquired HIV

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Individuals with perinatally acquired HIV (PHIV), or Lifetime Survivors, face distinct challenges that set them apart from those who acquire HIV later in life. These challenges arise from the circumstances of vertical transmission, the complexities of growing up with HIV, and the uncertain transition into adulthood. While progress in preventing vertical transmission has reduced the number of individuals born with HIV, this success has inadvertently led to their integration into the broader adult HIV community. Unfortunately, this integration often results in a unique isolation, as many Lifetime Survivors have not encountered others who share their experience. This lack of representation within the larger HIV community leaves them vulnerable to social isolation and stigma.

This session, facilitated entirely by women Lifetime Survivors, will explore the challenges and opportunities faced by this population. Drawing from research data from the Women's Research Initiative (The Well Project) and the O'Neill Institute briefing, the session will combine research findings with case studies and personal stories. The discussion will center on the mental health impacts of isolation, including trauma, stigma, and loss, and the importance of building meaningful social connections for improving mental well-being.

Lifetime Survivors face unique mental health challenges that are not always addressed within general HIV care and programming. The stigma associated with their diagnosis, compounded by the loss of one or both parents and the trauma surrounding their HIV diagnosis, contributes to a sense of isolation. This group often lacks

specialized services designed to meet their specific needs, leaving them with few resources to cope with these compounded difficulties. Despite their integration into the broader HIV community, Lifetime Survivors remain largely invisible and disconnected, further exacerbating their mental health challenges.

This session will highlight the transformative power of community and connection in mitigating the mental health impacts of isolation. Building supportive social networks is crucial in counteracting the feelings of loneliness and disconnection that many Lifetime Survivors experience. The presenters will discuss the need for targeted programming and services to meet the unique needs of this population. By emphasizing the importance of social connectedness, the session aims to advocate for the creation of programs that focus on the specific mental health challenges faced by Lifetime Survivors.

In conclusion, this session seeks to raise awareness about the mental health needs of Lifetime Survivors, emphasizing the importance of community, support, and connection in addressing their isolation. By fostering networks of solidarity, we can strengthen resilience and improve the overall well-being of individuals born with HIV.

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Peer Driven Mobilization and Sharing of Experiences amongst Women Living With HIV Improved Access and Acceptability to Cervical Cancer Screening and Management at Two Large Volume HIV Specialized Clinics in Eastern Uganda

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Introduction/Background: In 2019/20, Uganda adapted the revised Cervical cancer screening and management of pre-cancerous lesions guidelines to include the new WHO recommendations on screening and management of women 25-49 years. In 2020/21, The Ministry of Health Uganda, AIDS Control program laid out a roll Out Plan of the guidelines for Cervical Cancer screening and management of pre-cancerous lesions in Uganda. Women Living with HIV are at a higher risk thus need screening (25-49years) however uptake of the service at two HIV Specialized Clinics (TASO Mbale and Family Hope Centre Jinja) supported by the USAID Funded Local Service Delivery for HIV Aids Activity (LSDA) remained low at 15% and 12% screening for eligible Women living with HIV by end of project year 2022. A root cause analysis done in 2022 revealed the main gaps as fear of the screening procedure, Myths and misconceptions among the clients, some knowledge gap among service providers and Eligible clients with MMD not turning up for screening and inconsistent commodity availability.

Methodology/Description: Trained nurses who were designated as focal persons to coordinate cervical cancer screening and management at the two respective clinics. Eighteen (18) Women living with HIV who had undergone Cervical Cancer screening (Champions) were identified, trained in basic counselling, attached to the respective Clinic focal persons and

engaged to share testimonies, mobilize and encourage women to take up screening through phone calls prior to the clinic appointments, group counselling and conducting health talks emphasizing importance of screening and addressing fears and myths, and conducting community follow up of the positive cases hence improved uptake and acceptability.

Results/Experiences: Over the past two years over, two thousand one hundred sixty-four (2164) Women Living with HIV have been screened for Cervical cancer at the two HIV specialized Clinics. 184 women with precancerous lesions have been identified, 180 have been successfully treated and the 4 cases have been referred at the National referral hospital for further management.

Discussion: Women Living with HIV (Cervical cancer champions) Peer driven mobilization and health education sessions have a higher acceptability because they demystify stigma and fear about the screening procedure which improves access and acceptability (uptake) of the service. The champions also played a pivotal role in task shifting, offering peer counselling and community follow up of the positive cases hence improved patient centred care.

Conclusion/Recommendations: 1. There is need to integrate cervical cancer champions (Women Living with HIV networks) as part of the health team to improve acceptability and access to cervical cancer screening and management.
2. Facilities should adopt focal persons who work hand in hand with client peers (cervical cancer champions) to support awareness, mobilization and follow up for treatment.
3. Cervical cancer champions should be empowered through refresher trainings in order to support task shifting during health talks and awareness campaigns.

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The FIND+ Study (CTN 046): Preliminary Results on the Fertility Desires and Intentions Women with HIV Since Childhood

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Background: Supporting youth with HIV since childhood has shifted to wellness, highlighting fertility as a relevant issue. Research shows HIV may modify, but not eliminate, the desire for children. Understanding these desires among women living with HIV since childhood in high resource settings remains limited and at least one relevant study has indicated reduced fertility potential in female participants. The FIND+ Study (CTN 046) is a multi-provincial Canadian study investigating the fertility desires and intentions (aim 1), as well as the impact of chronic HIV (aim 2) on the fertility potential of people living with HIV since childhood.

Methods: FIND+ is a cross-sectional study with a target enrollment of 100 participants, recruiting from clinics in two provinces (British Columbia and Ontario), and nationally through word-of-mouth. Aim 1 participants are completing a 162-item self-administered survey on REDcap. The survey is a modified version of "The HIV Pregnancy Planning Questionnaire" (Loutfy et al); the survey is being validated for use with the current study population. We present descriptive results for all participants who identified as women to date.

Results: Twenty-six (18 cis-women/8 cis-men) participants have completed the survey. Female participants were 16 to 40 (mean = 27.5) years of age. Of the 18 women, 13 indicated they acquired HIV perinatally, three were unsure, and two did not respond. Eight (44.4%) were born in Canada and sub-Saharan Africa respectively, one (5.5%) in

the Caribbean, and one (5.5%) in the United Kingdom. Most of the participants (11; 61.1%) had transitioned from pediatric to adult care, were straight (14; 77.7%), single (10; 55.5%), and either working or in school (14; 77.7%). All participants were currently engaged in care. 72.2% (13) agreed that parenting was important to them; 83.3% (15) desired parenting in the future. 11/18 (61.1%) agreed that treatment improvements impacted their fertility desires. Most participants (14/18; 77.7%) intended to parent in the future; with plans to have between one and three children. 10/18 (55.5%) worried their child would be born with HIV.

Conclusion: Fertility desires and parenting intentions among women living with HIV since childhood are higher than those reported in studies of women living with HIV in other high resource settings. The second objective of the FIND+ study will assess biological fertility potential to explore what reproductive health supports may be needed in the future. This work has implications for care and policy, with a focus on enhancing reproductive health outcomes and informing family planning for those who have lived with HIV since childhood.

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HIV Pre-Exposure Prophylaxis Uptake and Adherence amongst Adolescent Girls and Young Women in the DREAMS Urban Model Program in Wakiso, Uganda.

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Introduction: Adolescent girls and young women (AGYW) have the highest HIV incidence in Uganda. Determined Resilient Empowered AIDS-free Mentored Safe (DREAMS) is an HIV prevention program aimed at reducing HIV infection among AGYW. We present the experiences and lessons learned from providing preexposure prophylaxis (PrEP)-an HIV prevention strategy- to AGYWs most at risk of acquiring HIV in Masaka Wakiso region of Uganda.

Methods and program description: The program was implemented from October 2023 to September 2024 in 11 districts. AGYWs aged 15-24 years considered most at risk of HIV acquisition (those with irregular condom use, multiple sexual partners, engaged in transactional sex, those with recurrent sexually transmitted diseases (STIs), or those with history of pregnancy) were screened for HIV, STIs and PrEP eligibility using the relevant screening tools. All that fulfilled the eligibility criteria were invited to take up PrEP. Those who accepted were initiated onto PrEP at either the health facility, community safe spaces or during community outreaches. The aim of the program was to ensure 100% PrEP uptake among eligible AGYW.

Interventions to improve uptake and adherence were peer to peer support and reminders, use of PrEP ambassadors, health educations/sensitization, home delivery, male partner engagement, and keeping PrEP drugs at the safe spaces for those who feared intimate partner violence. Follow up for continuity and initiation was done monthly by the PrEP champion through phone calls and home visits. Data was stored in the Uganda DREAMS Tracking system and analysed in Ms Excel.

Results: A total of 21,938 AGYW were enrolled, 14,789 (85%) were screened and tested for HIV and 1414 (9.6%) were eligible for PrEP with more than one risk. Of these, 521 (37%) were engaged in transactional sex, 242 (17%) had multiple sexual partners, 446 (32%) had ever had an STI, 181 (13%) had irregular condom use, and 603 (43%) had history of pregnancy.

Of the 989 (70%) initiated on PrEP, 591 (63%) continued with PrEP. The rest discontinued PrEP due to reduced risks, behavioural change, fear of daily pill burden and side effects from the drugs.

Conclusions: PrEP uptake was high among eligible AGYWs although many dropped off the program. There is need to intensify adherence counselling and to support AGYW appreciate their risks to stay on PrEP.